

MOTOR	TYPE TIPO	WIPER ANGLE ÁNG. BARRIDO (MIN.)	WIPER ANGLE ÁNG. BARRIDO (MAX.)	SHAFT Nr. Nº ESPIGAS	SHAFT END EJE	COVER CUBIERTA	INTERMITTENCE INTERMITENCIA	REFS. GUIDE GUIA REFS.
111	R	-	-	-	M8	X	-	●
	O1	50	110	1	M8	X	●	●
	O2	50	90	2	M8	X	●	●
	O3	50	90	2	M8	X	●	●
315	O1	55	88	2	M8	●	●	●
	O2	110	175	2	M8	●	●	●
316	R	-	-	-	∅ 9,3	X	-	●
	O1	60	110	2	M8	<i>opc. = 346</i>	●	●
	O2	125	175	2	M8	<i>opc. = 346</i>	●	X
346	O1	see/ver 316 O1			M8	●	○	X
	O2	see/ver 316 O2			M8	●	○	X
317	R	-	-	-	∅ 9,3	X	-	●
	O1	60	110	2	M8	<i>opc. = 347</i>	●	●
	O2	125	175	2	M8	<i>opc. = 347</i>	●	X
347	O1	see/ver 317			M8	●	○	X
	O2	see/ver 317			M8	●	○	X
319	R	-	-	-	∅ 9,3 M8 M10	X	-	●
	O	40	90	2	M8	X	●	●
349	C	40	90	2	M8	X	●	X
258	R	-	-	-	∅ 9,3 ∅ 13,26 M10	X	-	●
248	O1	140	165	1	M10 M12	X	●	X
	O2	35	90	2	M10	X	●	X
259	R	-	-	-	∅ 13,26 ∅ 15,70	X	-	●
249	O	50	90	2	∅ 16	X	-	X

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

5
Nm

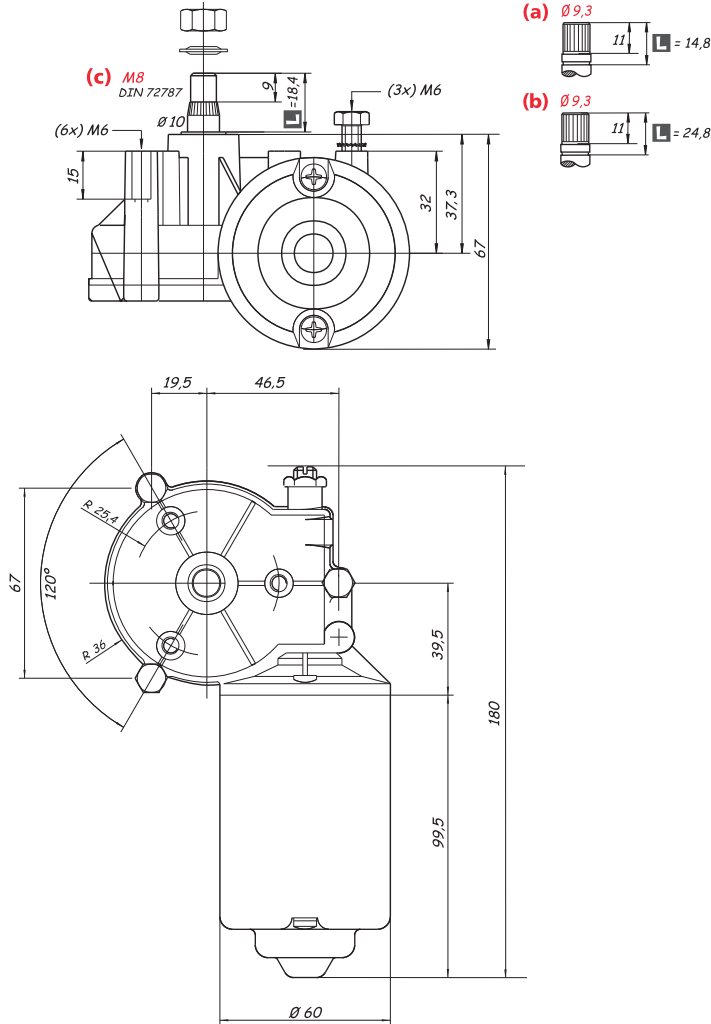
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

25
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

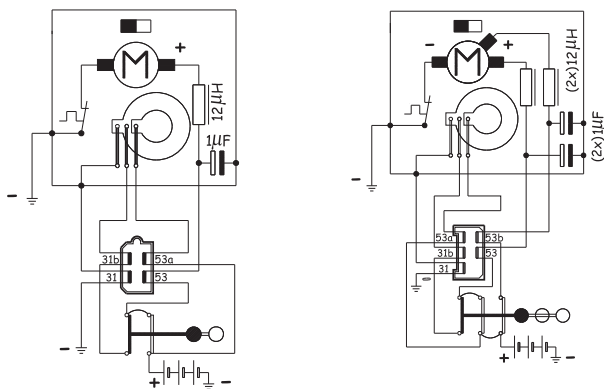
Ø 9,3

M8



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	50	34/52 40/58
EJE SHAFT AXE WELLE	Ø 9,3	Ø 9,3 M8
L mm	14,8	24,8 18,4
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER		✓
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER		✓
VOLTIOS VOLTS VOLTS VOLT	12	24
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	AMP 4	AMP 6 CUSTOMISED



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN

IMAGE 1



IMAGE 2



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

1 1 1 . A 7 B C D E . 0 0 E

A

MOTOR
 MOTOR
 MOTEUR
 MOTOR

"3" = image 1
 "4" = image 2

B

EJE
 SHAFT
 AXE
 WELLE

"1" = Ø 9,3 / 14,8mm
 "3" = Ø 9,3 / 24,8mm
 "5" = M8 / 18,4

C

VELOCIDADES
 SPEED
 VITESSES
 GESCHWINDIGKEITEN

"0" = 40/58 r.p.m.
 "2" = 34/52 r.p.m.
 "9" = 50 r.p.m.

D

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

E

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG
 "C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

**5
Nm**

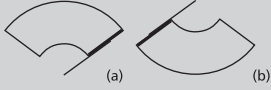
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

**25
Nm**

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M8

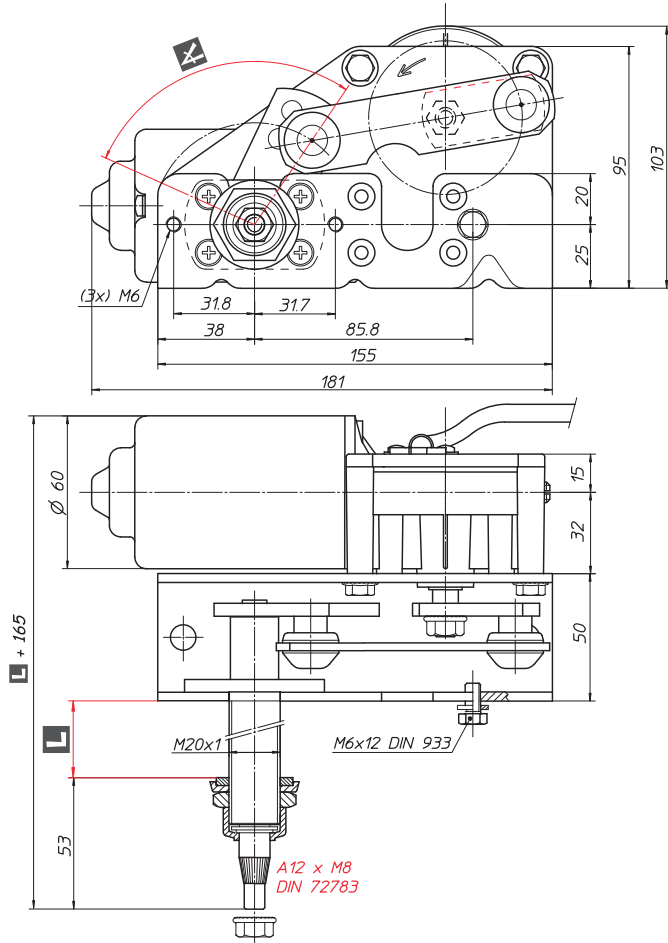
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



(a) max. 765 mm - 90°
(b) max. 900 mm - 110°



(a) max. 600 mm
(b) max. 650 mm



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	34	34/52
	50	40/58

EJE SHAFT AXE WELLE	M8	
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DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
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ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
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VOLTIOS VOLTS VOLTS VOLT	12	24
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L mm	5	30
	60	80

K	50°	60°	70°
	80°	90°	100°
	110°		

CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4	AMP 6
	option	CUSTOMISED	

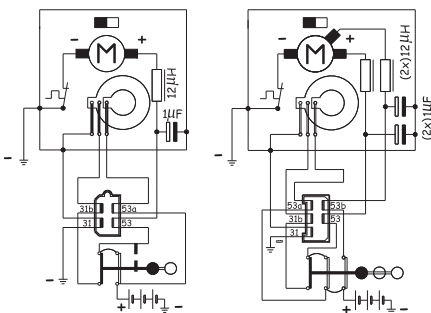
INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗
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INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
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POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS
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VISTA DESDE EL EXTERIOR DEL VEHÍCULO
VIEW FROM OUTSIDE THE VEHICLE
VUE DEPUIS L'EXTERIEUR DU VEHICULE
GEGEN DIE FAHRTRICHTUNG GESEHEN



AMP 4

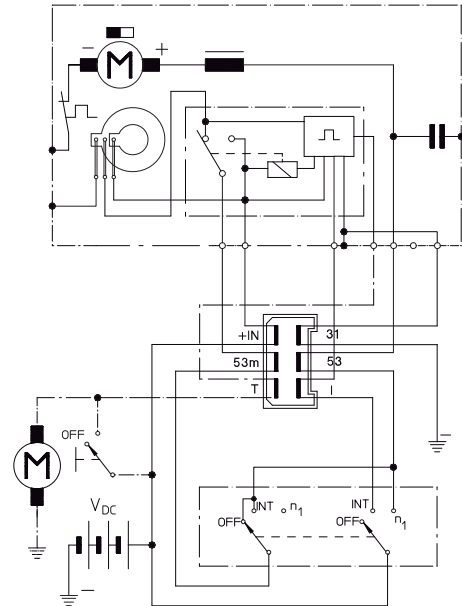
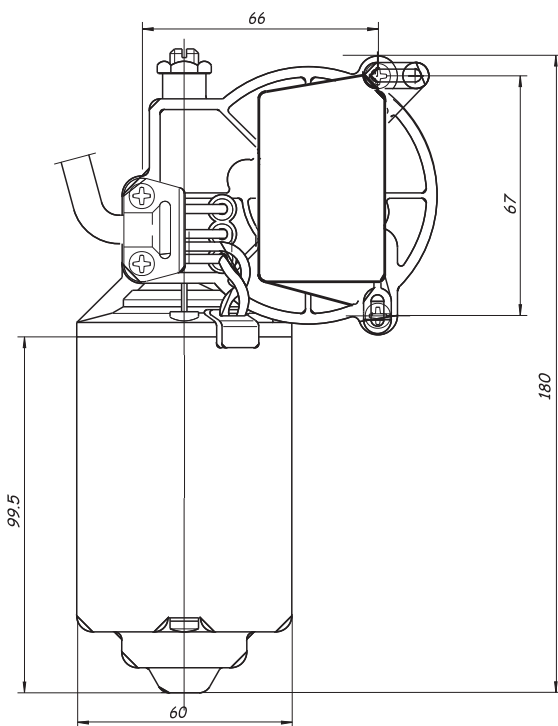
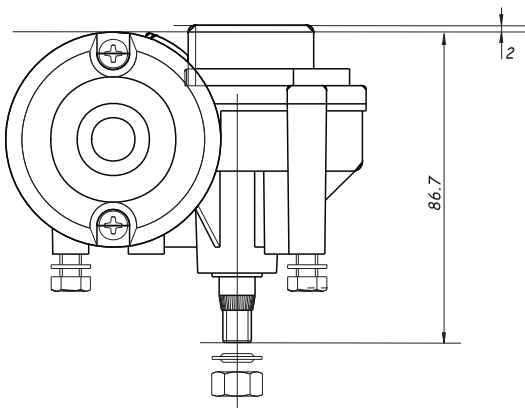
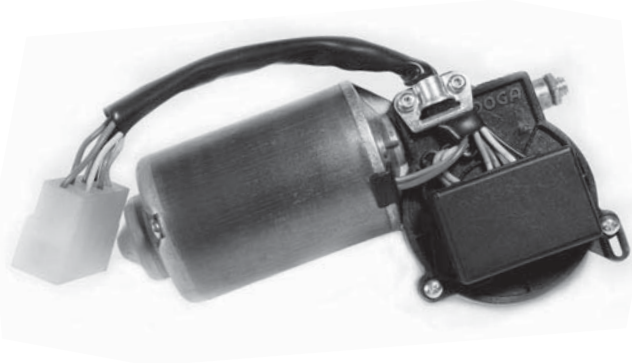
1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN

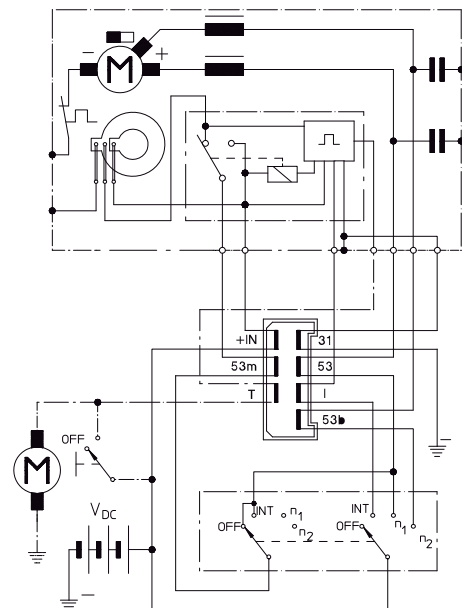


INTERMITENCIA INTEGRADA PARA MOTORES DEL GRUPO 111 01
INTEGRATED INTERMITTENT FOR 111 01 - TYPE MOTORS
INTERMITTENCE INTEGREE POUR MOTEURS DU GROUPE 111 01
INTEGRIERTER INTERVALLSCHALTUNG FÜR MOTOREN DER BAUREIHE 111 01



AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT



AMP 8

- 2 VELOCIDADES
- 2 SPEEDS
- 2 VITESSES
- 2 GESCHWINDIGKEITEN

MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

1 1 1 . 6 A B C . D E . F 0 . E G

A

ÁNGULO BARRIDO
WIPER ANGLE
ANGLE DE BALAYAGE
WISCHWINKEL

"0" = 50°
"1" = 60°
"2" = 70°
"3" = 80°
"4" = 90°
"5" = 100°
"6" = 110°

B

LONGITUD ESPIGA
LENGHT
LONGUEUR
LÄNGE

"0" = 5 mm
"2" = 30 mm
"4" = 60 mm
"6" = 80 mm

C

VELOCIDADES
SPEEDS
VITESSES
GESCHWINDIGKEITEN

"0" = 40/58
"2" = 34/52
"8" = 34
"9" = 50

D

TENSIÓN NOMINAL
NOMINAL VOLTAGE
TENSION NOMINALE
NENNSPANNUNG

"2" = 12V
"3" = 24V

E

EMBALAJE
PACKAGING
EMBALLAGE
VERPACKUNG

"B" EMBALAJE UNITARIO
INDIVIDUAL PACKING
EMBALLAGE UNITAIRE
EINZELVERPACKUNG

"C" EMBALAJE MÚLTIPLE
MULTIPLE PACKING
EMBALLAGE MULTIPLE
MEHRFACHPACKUNG

F

POSICIÓN DE PARO
PARK POSITION
POSITION D'ARRÊT
PARKSTELLUNG



"I" PARO IZQUIERDA
LEFT PARK
ARRÊT À GAUCHE
PARKSTELLUNG LINKS

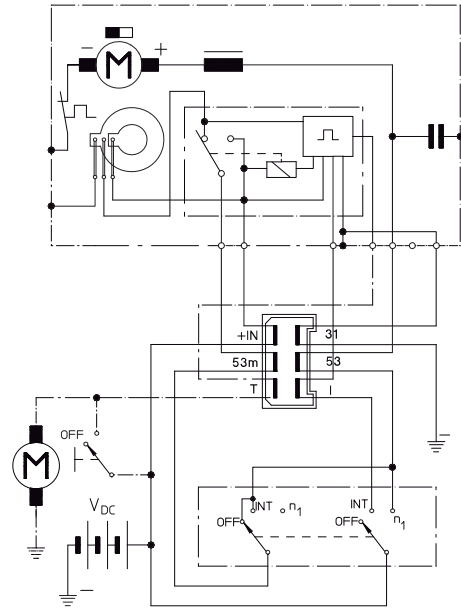
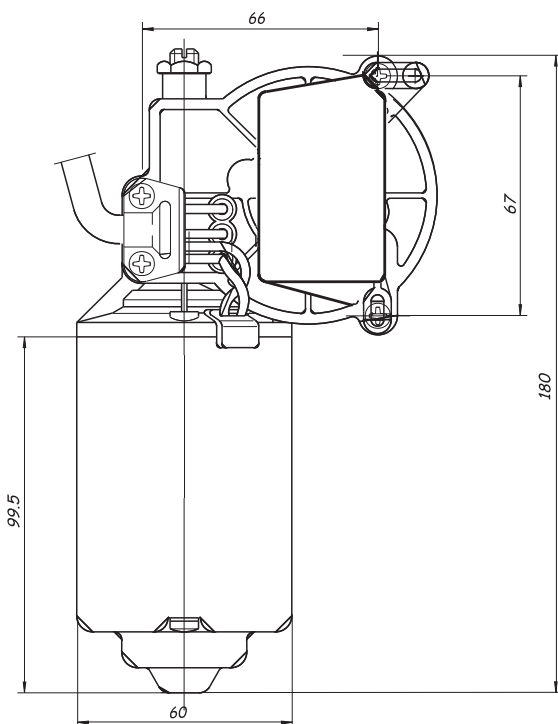
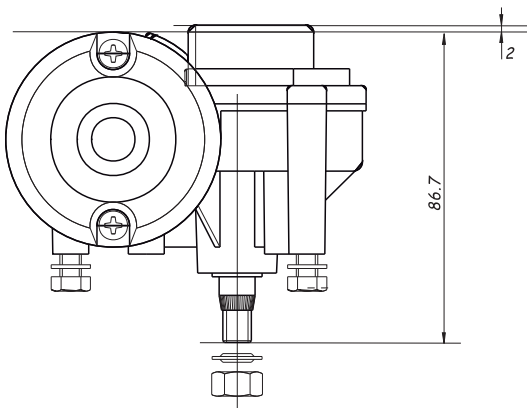
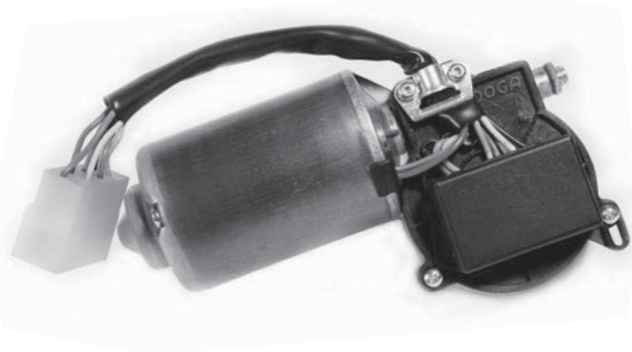
"D" PARO DERECHA
RIGHT PARK
ARRÊT À DROITE
PARKSTELLUNG RECHTS

G

ACCESORIOS
ACCESSORIES
ACCESSOIRES
ZUBEHÖR

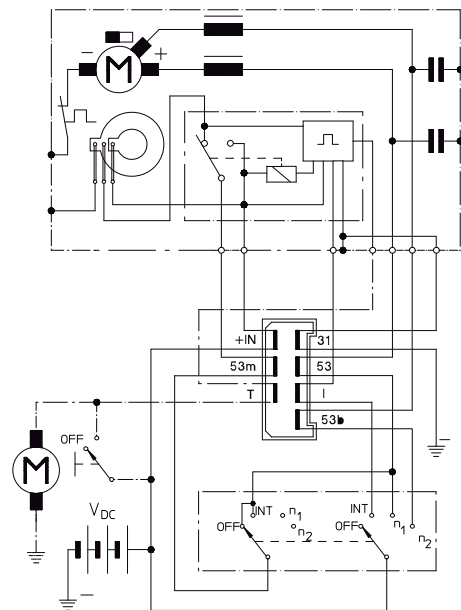
"T" CON INTERMITENCIA INTEGRADA
WITH INTEGRATED INTERMITTENT
AVEC INTERMITTENCE INTÉGRÉE
MIT INTEGRIERTER INTERVALLSCHALTUNG

INTERMITENCIA INTEGRADA PARA MOTORES DEL GRUPO 111 02
INTEGRATED INTERMITTENT FOR 111 02 - TYPE MOTORS
INTERMITTENCE INTEGREEE POUR MOTEURS DU GROUPE 111 02
INTEGRIERTER INTERVALLSCHALTUNG FÜR MOTOREN DER BAUREIHE 111 02



AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT



AMP 8

- 2 VELOCIDADES
- 2 SPEEDS
- 2 VITESSES
- 2 GESCHWINDIGKEITEN

MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

1 1 1 . A B C D . E F . G 0 . E H

A EJE
SHAFT
AXE
WELLE
"7" = 2x (A12 x M8)
"8" = 1x (A12 x M8) / 1x (A10 x M8)

B ÁNGULO BARRIDO
WIPER ANGLE
ANGLE DE BALAYAGE
WISCHWINKEL
"0" = 50°
"1" = 60°
"2" = 70°
"3" = 80°
"4" = 90°

C LONGITUD ESPIGA
LENGHT
LONGUEUR
LÄNGE
"2" = 30 mm
"4" = 60 mm
"6" = 80 mm
"7" = 90 mm

D VELOCIDADES
SPEEDS
VITESSES
GESCHWINDIGKEITEN
"0" = 40/58
"2" = 34/52
"8" = 34
"9" = 50

E TENSIÓN NOMINAL
NOMINAL VOLTAGE
TENSION NOMINALE
NENNSPANNUNG
"2" = 12V
"3" = 24V

F EMBALAJE
PACKAGING
EMBALLAGE
VERPACKUNG
"B" EMBALAJE UNITARIO
INDIVIDUAL PACKING
EMBALLAGE UNITAIRE
EINZELVERPACKUNG
"C" EMBALAJE MÚLTIPLE
MULTIPLE PACKING
EMBALLAGE MULTIPLE
MEHRFACHPACKUNG

G POSICIÓN DE PARO
PARK POSITION
POSITION D'ARRÊT
PARKSTELLUNG



"I" PARO IZQUIERDA
LEFT PARK
ARRÊT À GAUCHE
PARKSTELLUNG LINKS

"D" PARO DERECHA
RIGHT PARK
ARRÊT À DROITE
PARKSTELLUNG RECHTS

H ACCESORIOS
ACCESSORIES
ACCESSOIRES
ZUBEHÖR
"T" CON INTERMITENCIA INTEGRADA
WITH INTEGRATED INTERMITTENT
AVEC INTERMITTENCE INTÉGRÉE
MIT INTEGRIERTER INTERVALLSCHALTUNG

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

**5
Nm**

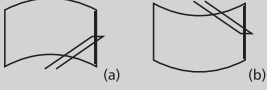
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

**25
Nm**

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M8

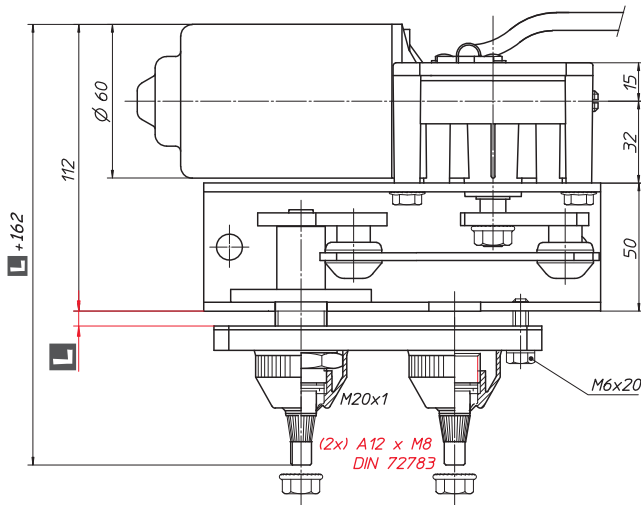
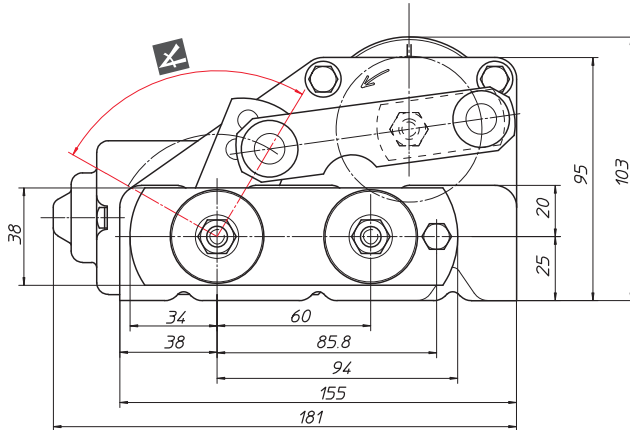
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



(a) max. 950 mm - 80°
(b) max. 1050 mm - 90°



(a) max. 650 mm
(b) max. 700 mm



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	34	34/52
	50	40/58

EJE SHAFT AXE WELLE	M8
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DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓
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ANTIPIRASITADO RFI ANTIPIRASITÉ ENTSTÖRFILTER	✓
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VOLTIOS VOLTS VOLTS VOLT	12	24
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L mm	5
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K	50°	60°	70°
	80°	90°	

CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4	AMP 6
	option	CUSTOMISED	

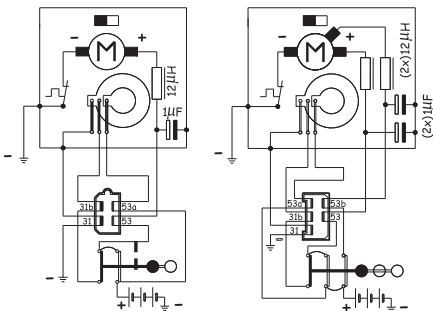
INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗
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INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
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POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS
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VISTA DESDE EL EXTERIOR DEL VEHÍCULO
VIEW FROM OUTSIDE THE VEHICLE
VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE
GEGEN DIE FAHRTRICHTUNG GESEHEN

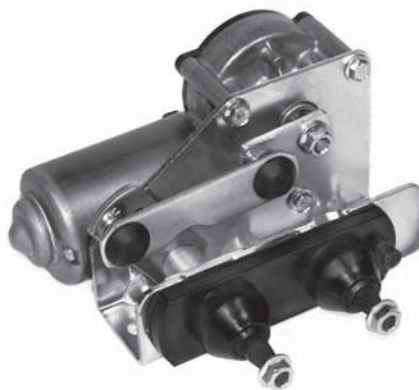


AMP 4

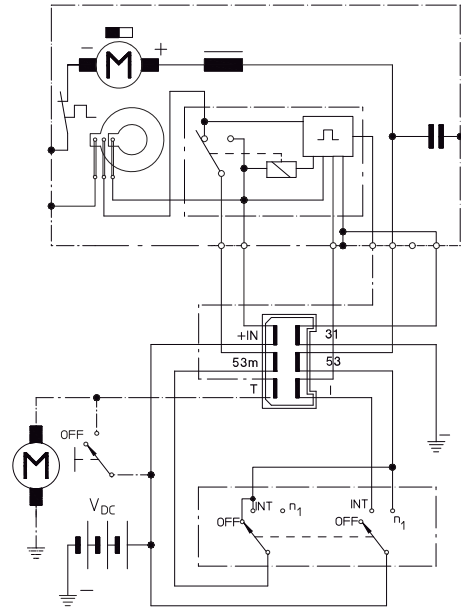
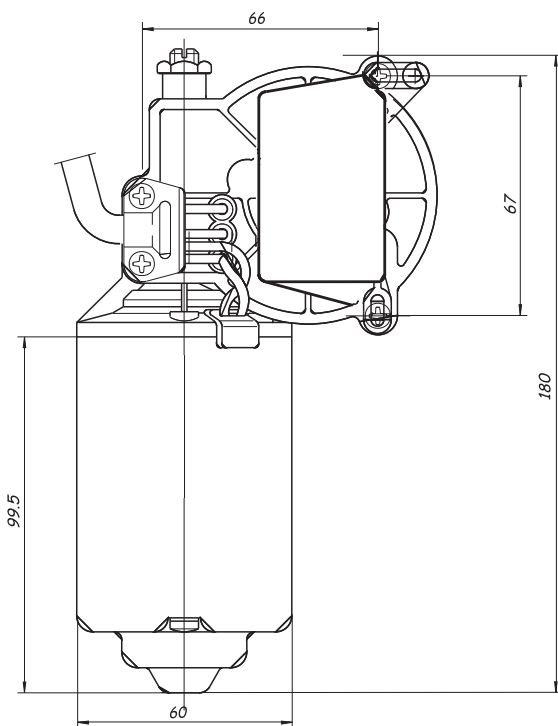
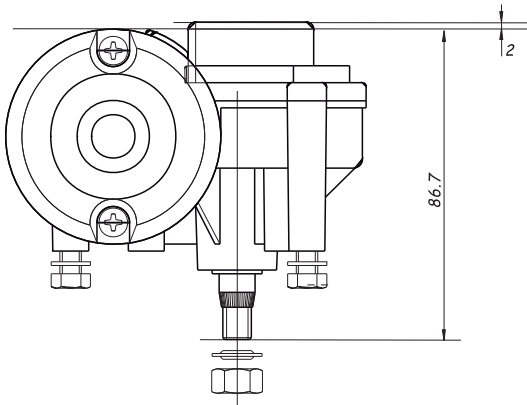
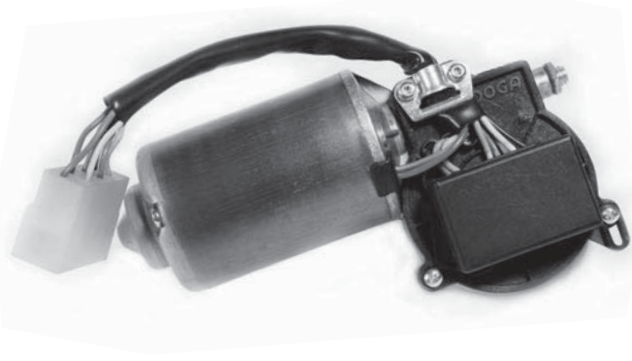
1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN

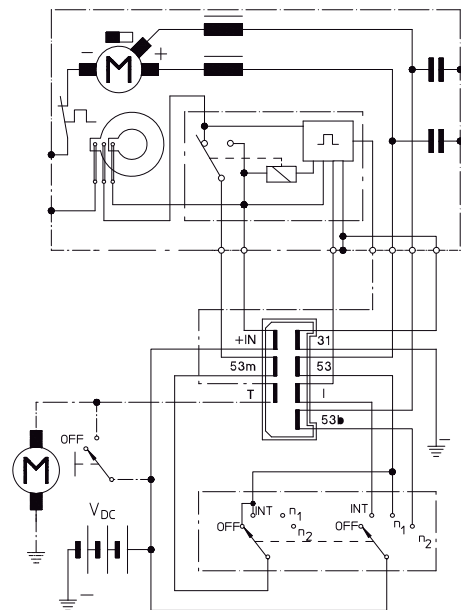


INTERMITENCIA INTEGRADA PARA MOTORES DEL GRUPO 111 03
INTEGRATED INTERMITTENT FOR 111 03 - TYPE MOTORS
INTERMITTENCE INTEGREEE POUR MOTEURS DU GROUPE 111 03
INTEGRIERTER INTERVALLSCHALTUNG FÜR MOTOREN DER BAUREIHE 111 03



AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT



AMP 8

- 2 VELOCIDADES
- 2 SPEEDS
- 2 VITESSES
- 2 GESCHWINDIGKEITEN

MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

1 1 1 . 7 A 0 B . C D . E 0 . E F

A

ÁNGULO BARRIDO
 WIPER ANGLE
 ANGLE DE BALAYAGE
 WISCHWINKEL

"0" = 50°
 "1" = 60°
 "2" = 70°
 "3" = 80°
 "4" = 90°

B

VELOCIDADES
 SPEEDS
 VITESSES
 GESCHWINDIGKEITEN

"0" = 40/58
 "2" = 34/52
 "8" = 34
 "9" = 50

C

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

D

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG

"C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

E

POSICIÓN DE PARO
 PARK POSITION
 POSITION D'ARRÊT
 PARKSTELLUNG



"I" PARO IZQUIERDA
 LEFT PARK
 ARRÊT À GAUCHE
 PARKSTELLUNG LINKS

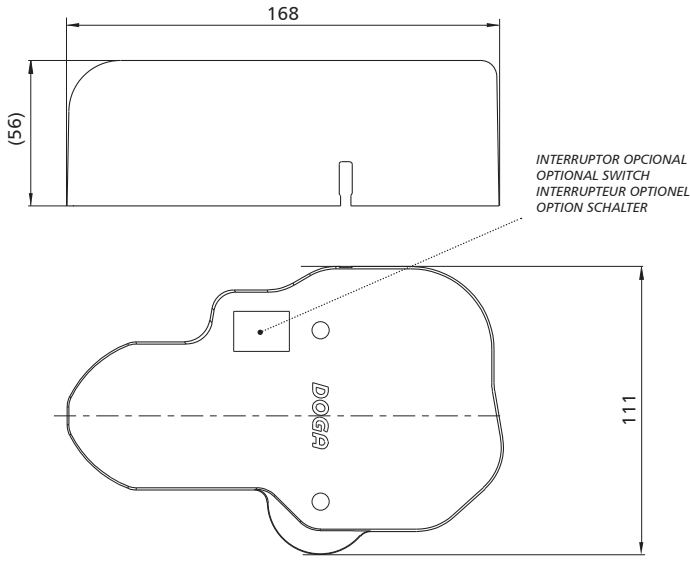
"D" PARO DERECHA
 RIGHT PARK
 ARRÊT À DROITE
 PARKSTELLUNG RECHTS

F

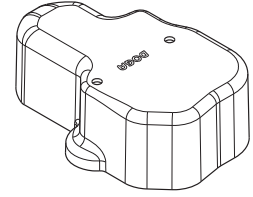
ACCESORIOS
 ACCESSORIES
 ACCESSOIRES
 ZUBEHÖR

"T" CON INTERMITENCIA INTEGRADA
 WITH INTEGRATED INTERMITTENT
 AVEC INTERMITTENCE INTEGRÉE
 MIT INTEGRIERTER INTERVALLSCHALTUNG

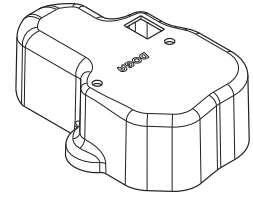
CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG



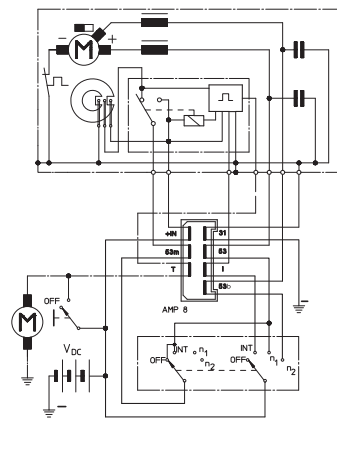
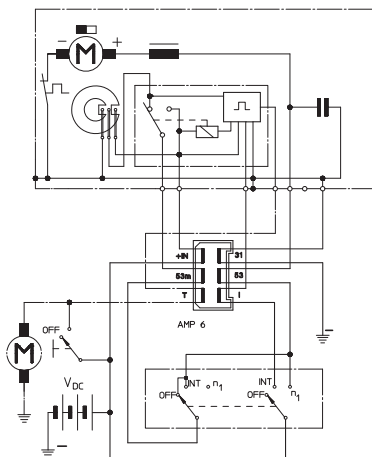
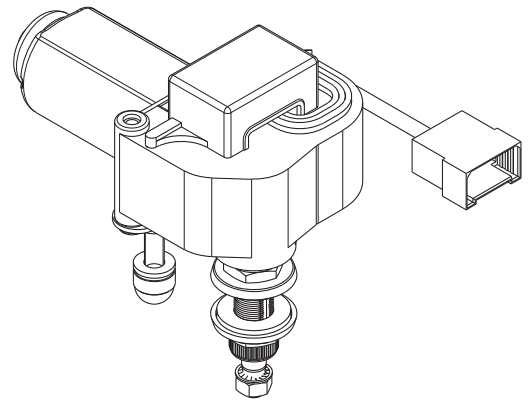
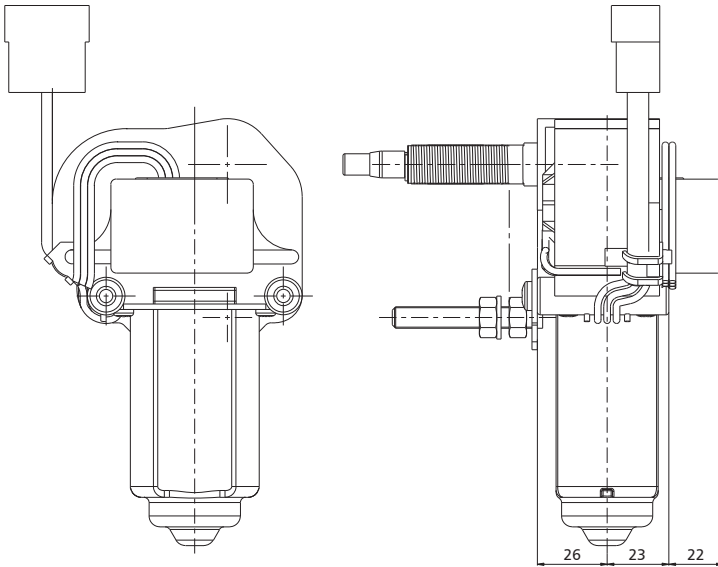
CUBIERTA
COVER
COUBERTE
MOTORABDECKUNG



CUBIERTA PARA INTERRUPTOR
COVER FOR SWITCH
COUBERTE POUR INTERRUPTEUR
MOTORABDECKUNG FÜR SCHALTER




INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGREE - INTEGRIERTER INTERVALLSCHALTUNG



MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

3 1 5 0 A B C D E F 0 G H

A	<p>ÁNGULO BARRIDO WIPER ANGLE ANGLE DE BALAYAGE WISCHWINKEL</p>	<p>"0" = 55° "1" = 60° "2" = 65° "3" = 70° "4" = 80° "5" = 88°</p>
B	<p>LONGITUD ESPIGA □L1 LENGTH □L1 LONGUEUR □L1 LNGE □L1</p>	<p>"0" = 23mm "1" = 35mm "2" = 48mm "3" = 60mm "4" = 70mm "5" = 104mm</p>
C	<p>VELOCIDADES □INTERRUPTOR SPEEDS □SWITCH VITESSES □INTERRUPTEUR GESCHWINDIGKEITEN □SCHALTER</p>	<p>"0" = (1) 38 r.p.m. YES "1" = (1) 38 r.p.m. NO "4" = (2) 38/56 r.p.m. NO</p>
D	<p>TENSIÓN NOMINAL NOMINAL VOLTAGE TENSION NOMINALE NENNSPANNUNG</p>	<p>"2" = 12V "3" = 24V</p>
E	<p>EMBALAJE PACKAGING EMBALLAGE VERPACKUNG</p>	<p>"B" EMBALAJE UNITARIO INDIVIDUAL PACKING EMBALLAGE UNITAIRE EINZELVERPACKUNG "C" EMBALAJE MÚLTIPLE MULTIPLE PACKING EMBALLAGE MULTIPLE MEHRFACHPACKUNG</p>
F	<p>POSICIÓN DE PARO PARK POSITION POSITION D'ARRÊT PARKSTELLUNG</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>"I" PARO IZQUIERDA LEFT PARK ARRÊT À GAUCHE PARKSTELLUNG LINKS "D" PARO DERECHA RIGHT PARK ARRÊT À DROITE PARKSTELLUNG RECHTS</p> </div> </div>
G H	<p>ACCESORIOS ACCESSORIES ACCESSOIRES ZUBEHÖR</p>	<p>"T" CON INTERMITENCIA INTEGRADA WITH INTEGRATED INTERMITTENT AVEC INTERMITTENCE INTEGRÉE MIT INTEGRIERTER INTERVALLSCHALTUNG "C" CON CUBIERTA MOTOR WITH MOTOR COVER AVEC COUVERTE MOTEUR MIT MOTORABDECKUNG</p>

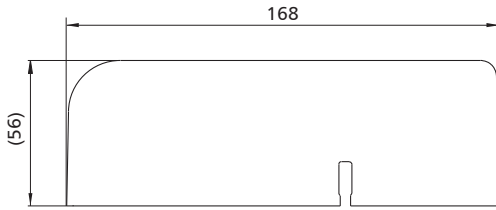
ACCESORIOS DE MONTAJE
FITTING ACCESSORIES
ACCESSOIRES DE MONTAGE
MONTAGEZUBEHÖR



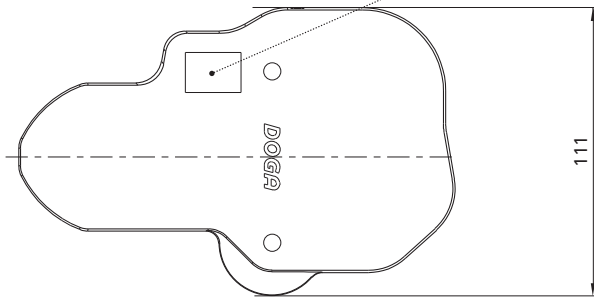
L1	23 mm	35 mm	48 mm	60 mm	70 mm	104 mm
ACCESORIOS ESPIGA SPINDLE ACCESSORIES ACCESSOIRES CHEVILLE SPINDEL ZUBEHÖR	100.5378.09.00					100.5401.09.00
ACCESORIOS ANTIGIRO BRACKET ACCESSORIES ACCESSOIRES ANTI-RETOUR BRACKET ZUBEHÖR	100.5379.09.00					100.5368.09.00

CONSULTAR PARA OTRAS OPCIONES
ASK FOR OTHER OPTIONS
CONSULTER AUTRES OPTIONS
FÜR ANDERE OPTIONEN NACHFRAGEN

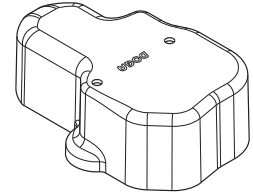
CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG



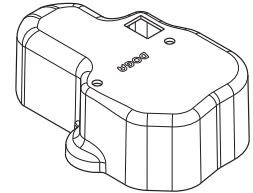
INTERRUPTOR OPCIONAL
OPTIONAL SWITCH
INTERRUPTEUR OPTIONEL
OPTION SCHALTER



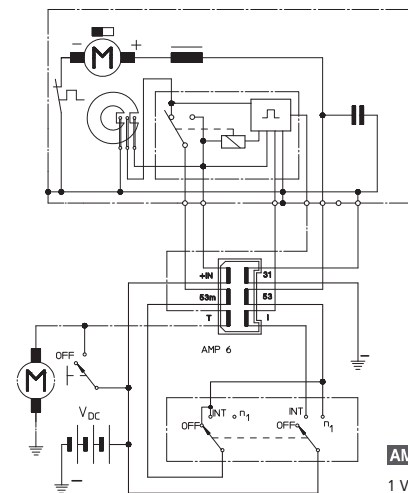
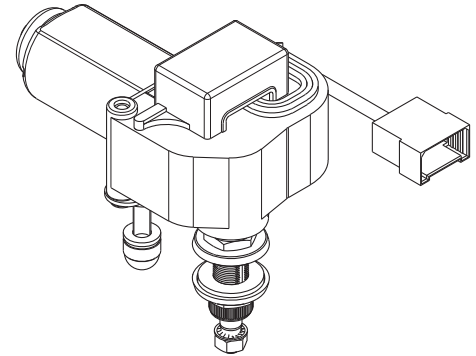
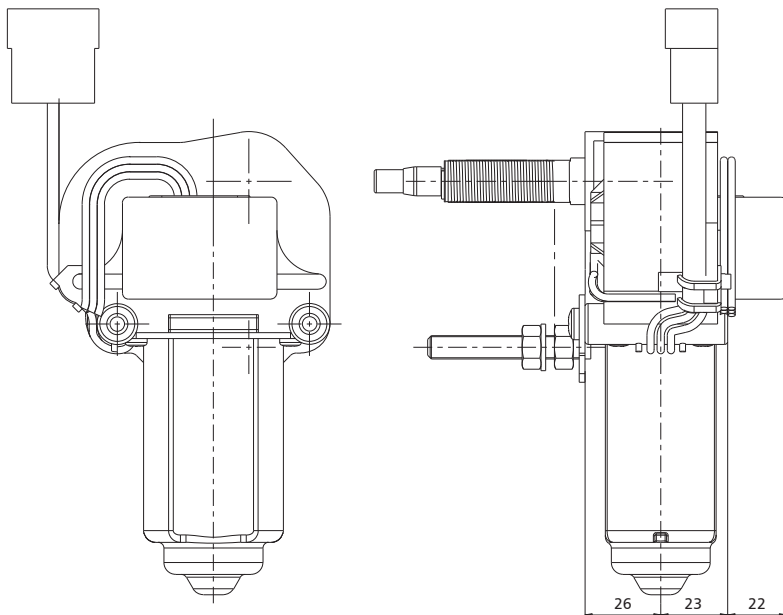
CUBIERTA
COVER
COUBERTE
MOTORABDECKUNG



CUBIERTA PARA INTERRUPTOR
COVER FOR SWITCH
COUBERTE POUR INTERRUPTEUR
MOTORABDECKUNG FÜR SCHALTER



INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGEE - INTEGRIERTER INTERVALLSCHALTUNG




AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT

MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

3 1 5 2 A B C D E F 0 G H

A	ANGULO BARRIDO WIPER ANGLE ANGLE DE BALAYAGE WISCHWINKEL	"0" = 110° "1" = 120° "2" = 130° "3" = 140° "4" = 160° "5" = 175°
B	LONGITUD ESPIGA □L1 LENGTH □L1 LONGUEUR □L1 LÄNGE □L1	"0" = 23mm "1" = 35mm "2" = 48mm "3" = 60mm "4" = 70mm "5" = 104mm
C	INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	"0" = YES "1" = NO
D	TENSION NOMINAL NOMINAL VOLTAGE TENSION NOMINALE NENNSPANNUNG	"2" = 12V "3" = 24V
E	EMBALAJE PACKAGING EMBALLAGE VERPACKUNG	"B" EMBALAJE UNITARIO INDIVIDUAL PACKING EMBALLAGE UNITAIRE EINZELVERPACKUNG "C" EMBALAJE MÚLTIPLE MULTIPLE PACKING EMBALLAGE MULTIPLE MEHRFACHPACKUNG
F	POSICIÓN DE PARO PARK POSITION POSITION D'ARRÊT PARKSTELLUNG	 "I" PARO IZQUIERDA LEFT PARK ARRÊT À GAUCHE PARKSTELLUNG LINKS "D" PARO DERECHA RIGHT PARK ARRÊT À DROITE PARKSTELLUNG RECHTS
G H	ACCESORIOS ACCESSORIES ACCESSOIRES ZUBEHÖR	"T" CON INTERMITENCIA INTEGRADA WITH INTEGRATED INTERMITTENT AVEC INTERMITTENCE INTÉGRÉE MIT INTEGRIERTER INTERVALLSCHALTUNG "C" CON CUBIERTA MOTOR WITH MOTOR COVER AVEC COUVERTE MOTEUR MIT MOTORABDECKUNG

ACCESORIOS DE MONTAJE
 FITTING ACCESSORIES
 ACCESSOIRES DE MONTAGE
 MONTAGEZUBEHÖR



L1	23 mm	35 mm	48 mm	60 mm	70 mm	104 mm
ACCESORIOS ESPIGA SPINDLE ACCESSORIES ACCESSOIRES CHEVILLE SPINDEL ZUBEHÖR	100.5378.09.00				100.5401.09.00	
ACCESORIOS ANTIGIRO BRACKET ACCESSORIES ACCESSOIRES ANTI-RETOUR BRACKET ZUBEHÖR	100.5379.09.00				100.5368.09.00	

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

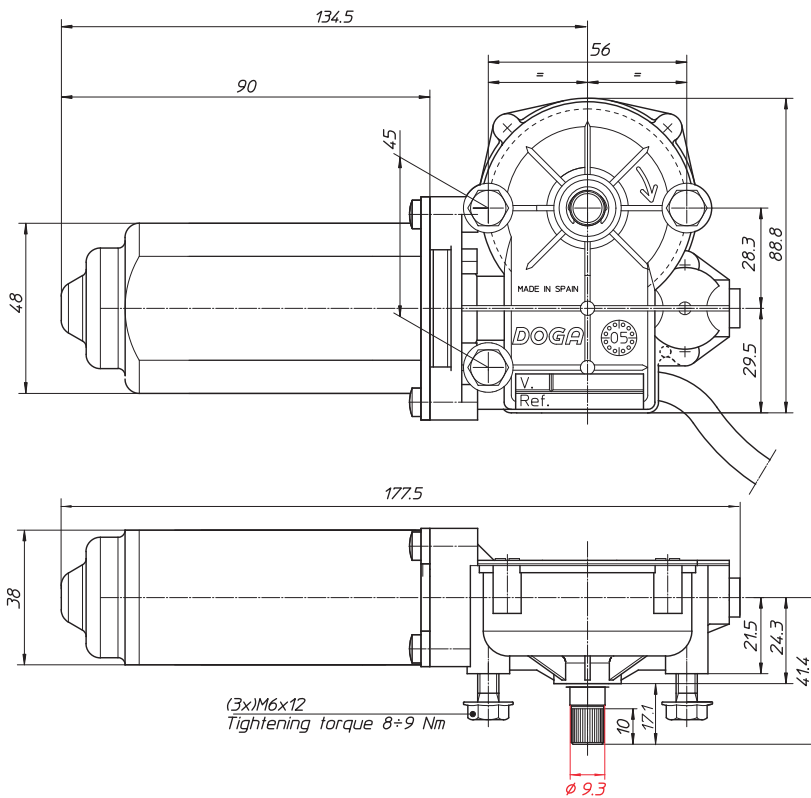
1,8
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

10
Nm

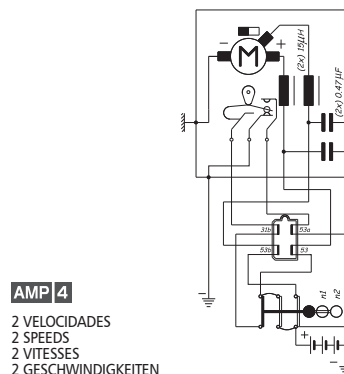
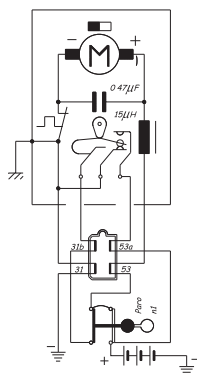
EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

Ø 9,3



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	44	44/65
EJE SHAFT AXE WELLE	Ø 9,3	
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
VOLTIOS VOLTS VOLTS VOLT	12	24
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard option	AMP 4 CUSTOMISED



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

3 1 6 . A 7 1 B . C D . 0 0 E

A

VELOCIDADES
 SPEEDS
 VITESSES
 GESCHWINDIGKEITEN

"2" = 44
 "3" = 44 / 65

B

VELOCIDADES / PARO / INTERRUPTOR
 SPEEDS / PARK / SWITCH
 VITESSES / ARRÊT / INTERRUPTEUR
 GESCHWINDIGKEITEN / PARKSTELLUNG / SCHALTER

"0" = 2 / Yes / No
 "9" = 1 / Yes / No

C

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

D

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG

"C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

**1,8
Nm**

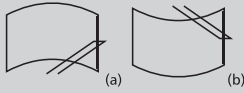
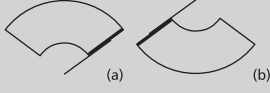
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

**10
Nm**

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M8

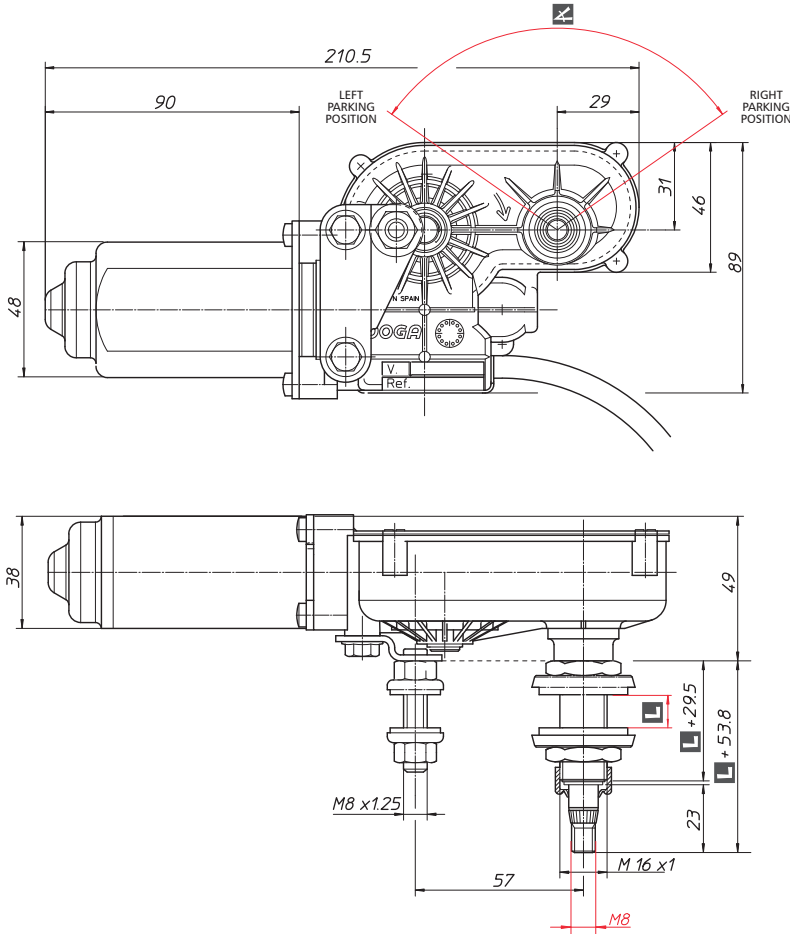
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



(a) max. 750 mm (90°)
(b) max. 850 mm (110°)



(a) max. 500 mm (90°)
(b) max. 500 mm (110°)



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	44	44/65
--	----	-------

EJE SHAFT AXE WELLE	M8	
------------------------------	----	--

DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
--	---	--

ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
--	---	--

VOLTIOS VOLTS VOLTS VOLT	12	24
-----------------------------------	----	----

L mm	3,5	18,5	48,5
------	-----	------	------

	60°	70°	80°
	85°	90°	95°
	105°	110°	

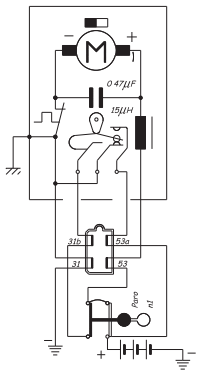
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4
	option	CUSTOMISED

INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗
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INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
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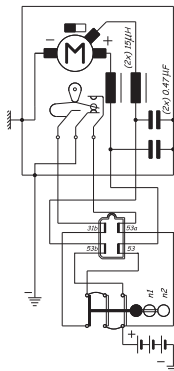
CUBIERTA MOTOR MOTOR COVER COUVERTE MOTEUR MOTORABDECKUNG	✓	✗
--	---	---

POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS
--	--------------------------------------	--------------------------------------



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT



AMP 4

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN



CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG

EL MOTOR 316 CON CUBIERTA CORRESPONDE A LA SERIE 346.
316 MOTOR WITH COVER CORRESPONDS TO 346 SERIE MOTOR.
LE MOTEUR 316 AVEC COUVERTE CORRESPOND AU MOTEUR 346.
DER MOTOR 316 MIT GEHÄUSE ENTSPRICHT DEM MOTOR 346.



ref. 316.5001.18.C0

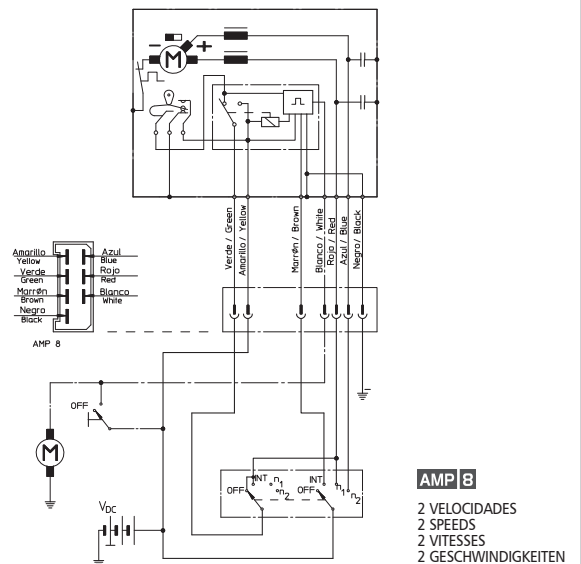
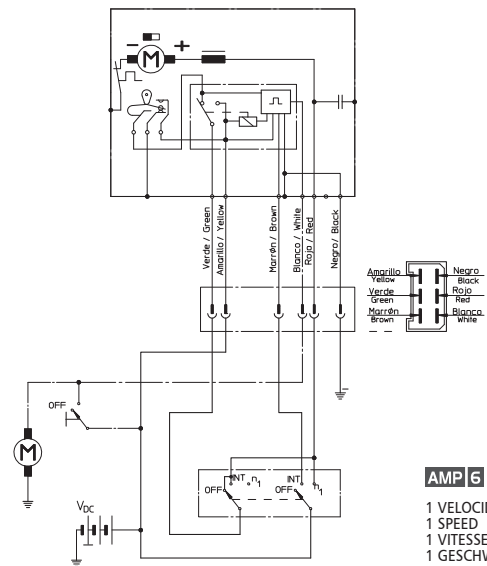
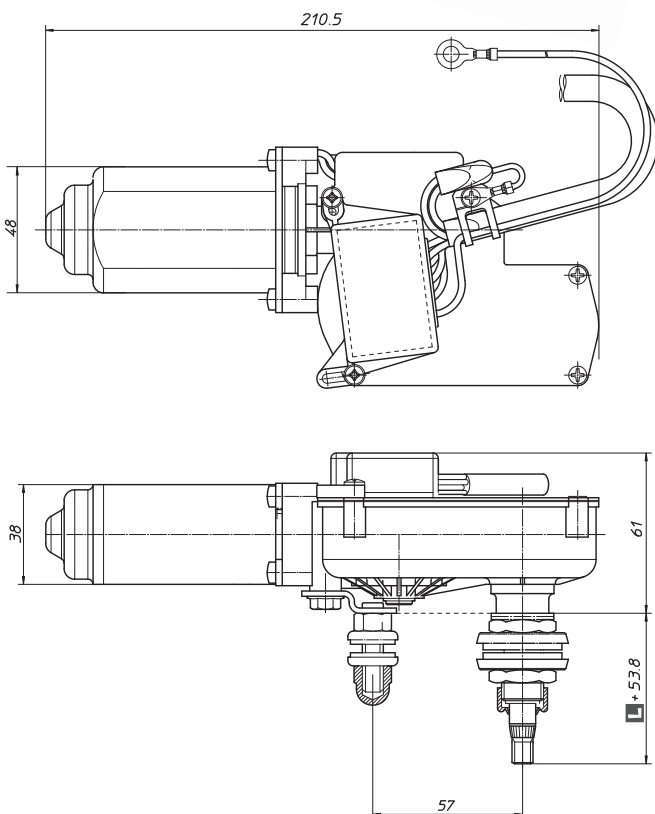
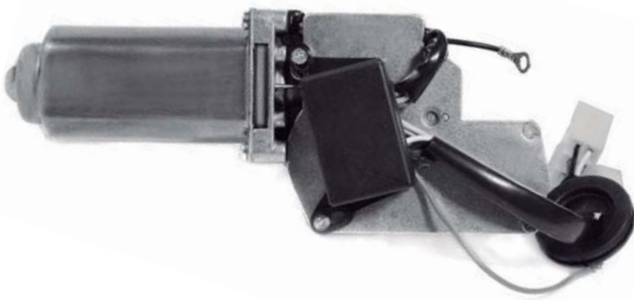


ref. 140.0015.18.00




ref. 140.5211.04.04

INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGREE - INTEGRIERTER INTERVALLSCHALTUNG



MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

3 1 6 . A B C D E F G 0 E H

A	VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	"0" = 44 / 65 "4" = 44
B	ÁNGULO BARRIDO WIPER ANGLE ANGLE DE BALAYAGE WISCHWINKEL	"0" = 60° "1" = 70° "2" = 80° "3" = 85° "4" = 90° "5" = 95° "6" = 105° "8" = 110°
C	LONGITUD ESPIGA LENGHT LONGUEUR LÄNGE	"5" = 3,5mm "6" = 18,5mm "8" = 48,5mm
D	VELOCIDADES / PARO / INTERRUPTOR SPEED / PARK / SWITCH VITESSES / ARRÊT / INTERRUPTEUR GESCHWINDIGKEITEN / PARKSTELLUNG / SCHALTER	"0" = 2 / Yes / No "3" = 1 / No / Yes "7" = 1 / Yes / Yes "8" = 1 / No / No "9" = 1 / Yes / No
E	TENSIÓN NOMINAL NOMINAL VOLTAGE TENSION NOMINALE NENNSPANNUNG	"2" = 12V "3" = 24V
F	EMBALAJE PACKAGING EMBALLAGE VERPACKUNG	"B" EMBALAJE UNITARIO INDIVIDUAL PACKING EMBALLAGE UNITAIRE EINZELVERPACKUNG "C" EMBALAJE MÚLTIPLE MULTIPLE PACKING EMBALLAGE MULTIPLE MEHRFACHPACKUNG
G	POSICIÓN DE PARO PARK POSITION POSITION D'ARRÊT PARKSTELLUNG	 <p>"1" PARO IZQUIERDA LEFT PARK ARRÊT À GAUCHE PARKSTELLUNG LINKS "D" PARO DERECHA RIGHT PARK ARRÊT À DROITE PARKSTELLUNG RECHTS</p>
H	ACCESORIOS ACCESSORIES ACCESSOIRES ZUBEHÖR	"T" CON INTERMITENCIA INTEGRADA WITH INTEGRATED INTERMITTENT AVEC INTERMITTENCE INTÉGRÉE MIT INTEGRIERTER INTERVALLSCHALTUNG

EL MOTOR 316 CON CUBIERTA CORRESPONDE A LA SERIE 346.
 316 MOTOR WITH COVER CORRESPONDS TO 346 SERIE MOTOR.
 LE MOTEUR 316 AVEC COUVERTE CORRESPOND AU MOTEUR 346.
 DER MOTOR 316 MIT GEHÄUSE ENTSPRICHT DEM MOTOR 346.

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

1,8
Nm

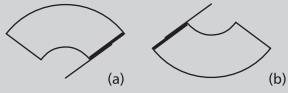
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

10
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M8

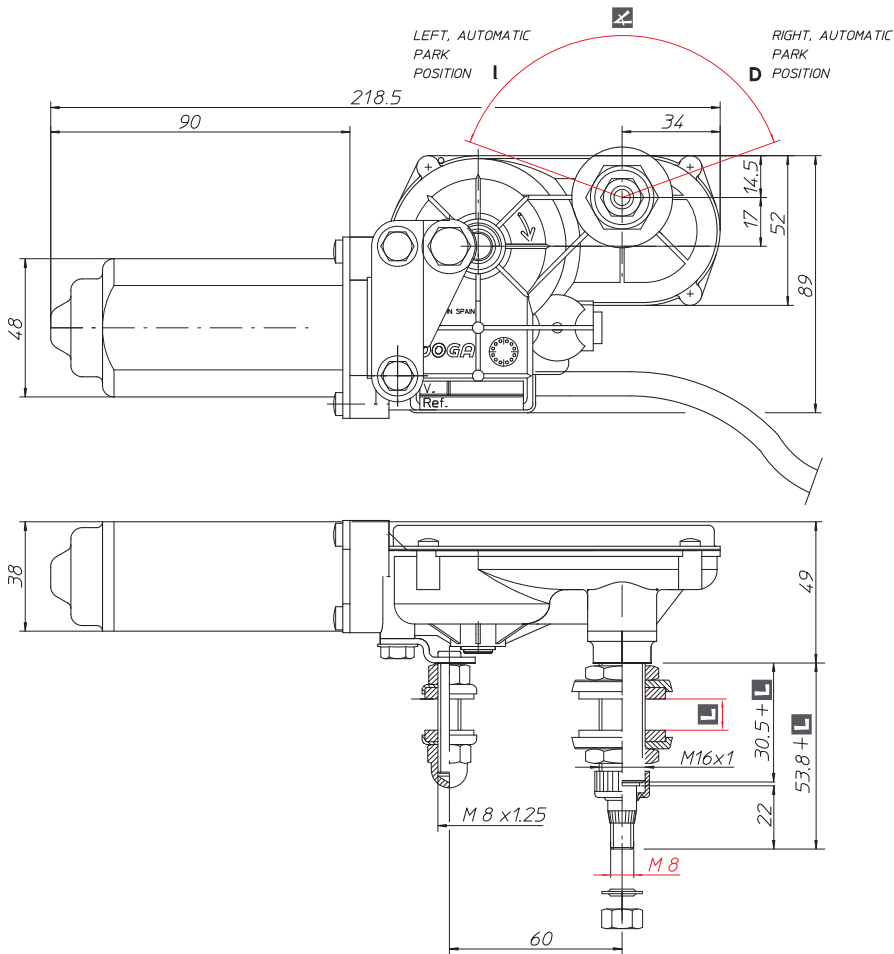
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



(a) max. 650 mm
(b) max. 700 mm

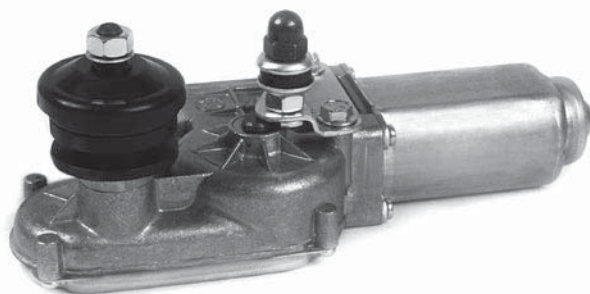
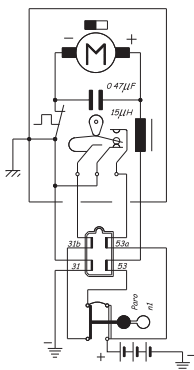


(a) max. 400 mm
(b) max. 450 mm



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	44		
EJE SHAFT AXE WELLE	M8		
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓		
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓		
VOLTIOS VOLTS VOLTS VOLT	12	24	
L mm	standard	3,5	
	option	CUSTOMISED	
K	125°	130°	135°
	140°	160°	175°
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4	
	option	CUSTOMISED	
INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗	
INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗	
CUBIERTA MOTOR MOTOR COVER COUVERTE MOTEUR MOTORABDECKUNG	✓	✗	
POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS	
<p>VISTA DESDE EL EXTERIOR DEL VEHÍCULO VIEW FROM OUTSIDE THE VEHICLE VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE GEGEN DIE FAHRTRICHTUNG GESEHEN</p>			



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG

EL MOTOR 316 CON CUBIERTA CORRESPONDE A LA SERIE 346.
316 MOTOR WITH COVER CORRESPONDS TO 346 SERIE MOTOR.
LE MOTEUR 316 AVEC COUVERTE CORRESPOND AU MOTEUR 346.
DER MOTOR 316 MIT GEHÄUSE ENTSpricht DEM MOTOR 346.



ref. 316.5001.18.CO

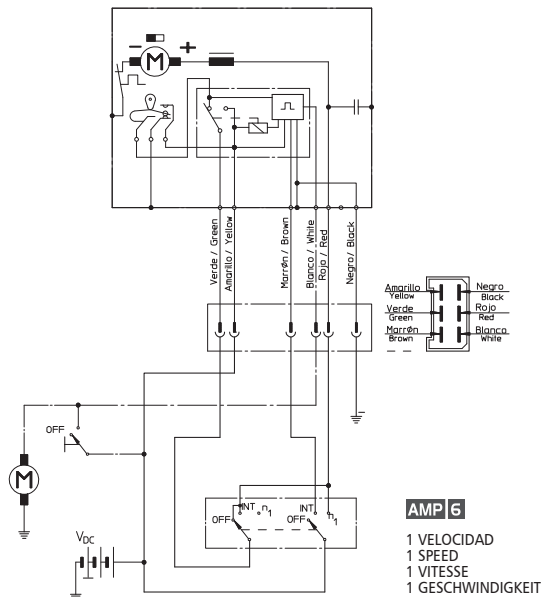
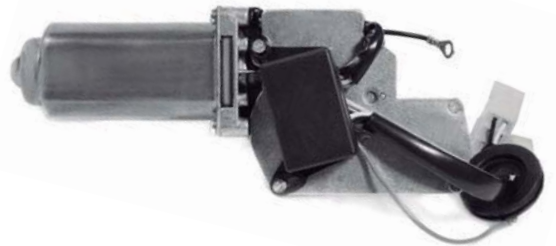
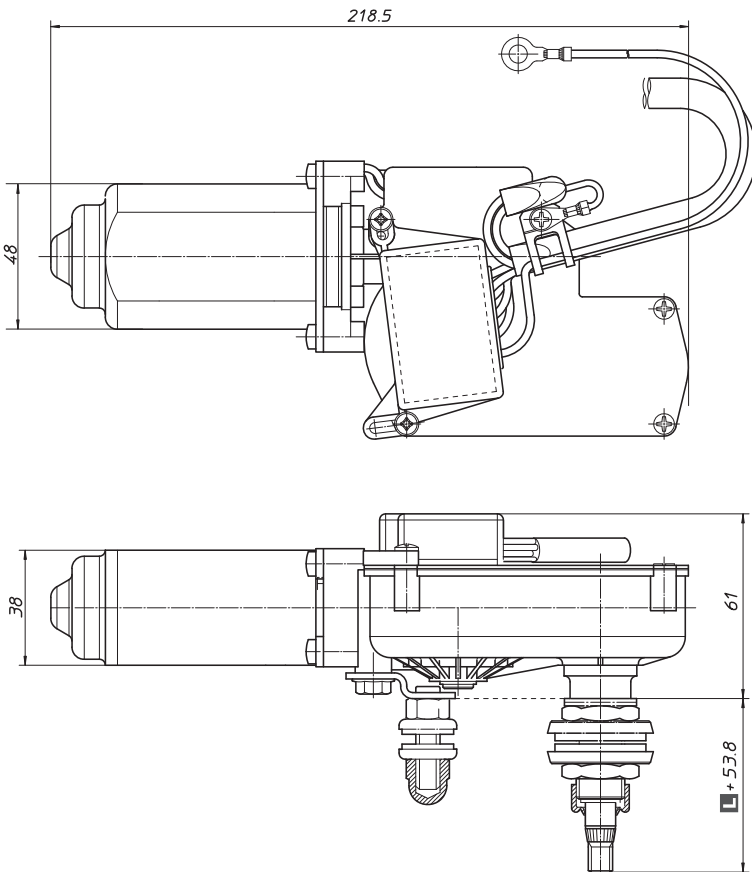


ref. 140.0015.18.00



ref. 140.5211.04.04

INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGREE - INTEGRIERTER INTERVALLSCHALTUNG



PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

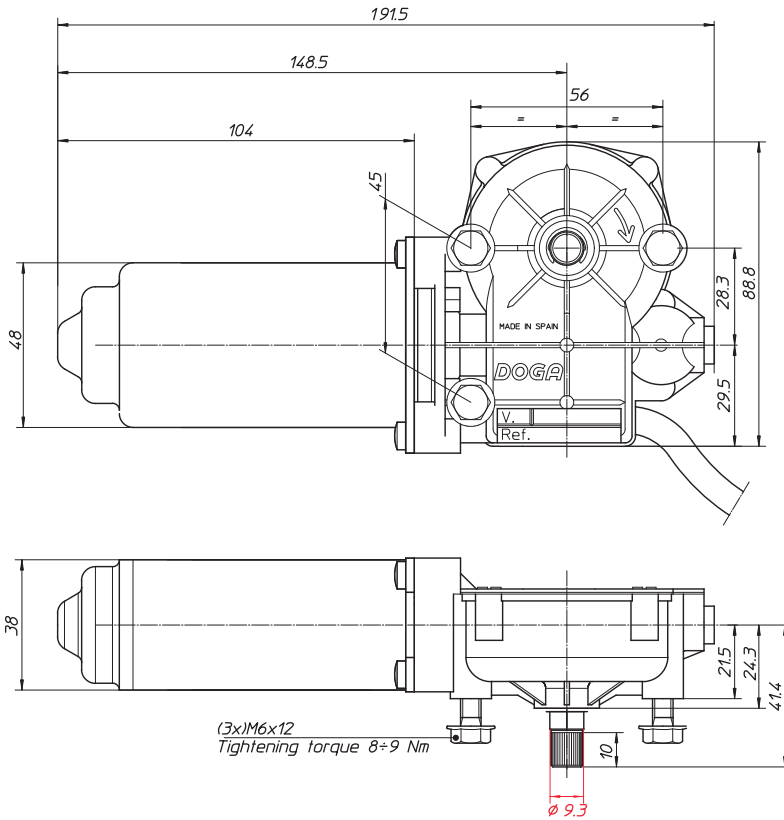
2,5
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

12
Nm

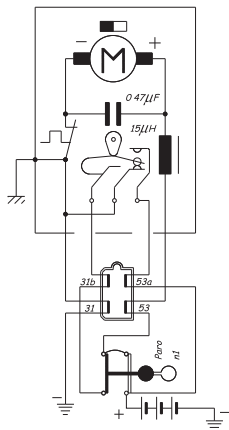
EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

Ø 9,3



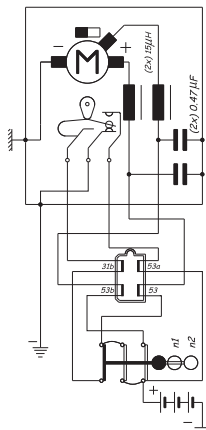
opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	35	35/52
EJE SHAFT AXE WELLE	Ø 9,3	
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
VOLTIOS VOLTS VOLTS VOLT	12	24
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard option	AMP 4 CUSTOMISED



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT



AMP 4

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

3 1 7 . A 7 1 B C D 0 0 E

A

VELOCIDADES
SPEEDS
VITESSES
GESCHWINDIGKEITEN"2" = 35
"3" = 35 / 52

B

CONECTOR
CONNECTOR
CONNECTEUR
ANSCHLUSS"0" = AMP / 2 VELOCIDADES - SPEEDS - VITESSES - GESCHWINDIGKEITEN
"9" = AMP / 1 VELOCIDAD - SPEED - VITESSE - GESCHWINDIGKEIT

C

TENSIÓN NOMINAL
NOMINAL VOLTAGE
TENSION NOMINALE
NENNSPANNUNG"2" = 12V
"3" = 24V

D

EMBALAJE
PACKAGING
EMBALLAGE
VERPACKUNG"B" EMBALAJE UNITARIO
INDIVIDUAL PACKING
EMBALLAGE UNITAIRE
EINZELVERPACKUNG"C" EMBALAJE MÚLTIPLE
MULTIPLE PACKING
EMBALLAGE MULTIPLE
MEHRFACHPACKUNGCONSULTAR PARA OTRAS OPCIONES
ASK FOR OTHER OPTIONS
CONSULTER AUTRES OPTIONS
FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
 NOMINAL TORQUE
 COUPLE NOMINAL
 NENNDREHMOMENT

2,5
 Nm

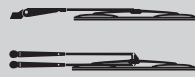
PAR DE ARRANQUE
 STALL TORQUE
 COUPLE DE DEMARRAGE
 ANZUGSMOMENT

12
 Nm

EJE - mm
 SHAFT - mm
 AXE - mm
 WELLE - mm

M8

APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN

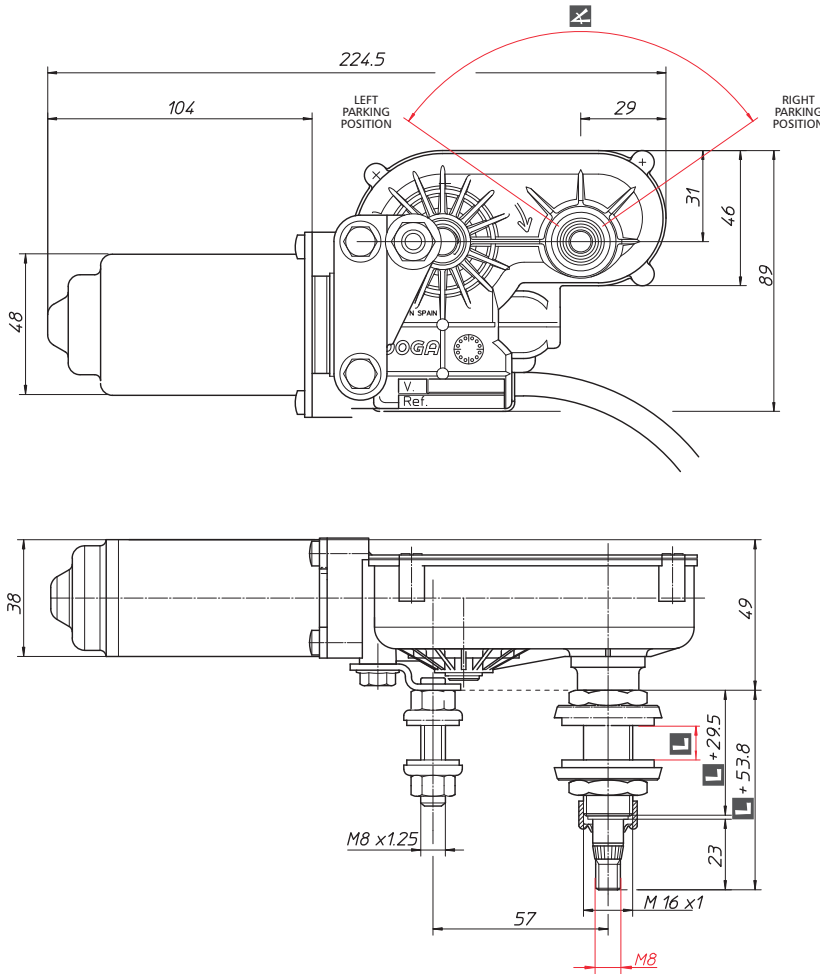


(a) 2 speeds: max. 850 mm (110°)

(b) 2 speeds: max. 900 mm (90°)



(a)-(b) max. 600 mm



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	35	35/52
--	----	-------

EJE SHAFT AXE WELLE	M8	
------------------------------	----	--

DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
--	---	--

ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
--	---	--

VOLTIOS VOLTS VOLTS VOLT	12	24
-----------------------------------	----	----

L mm	3,5	18,5	48,5
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↗	60°	70°	80°
	85°	90°	95°
	105°	110°	

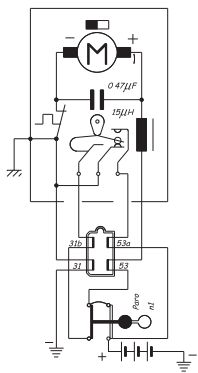
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4
	option	CUSTOMISED

INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗
---	---	---

INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
---	---	---

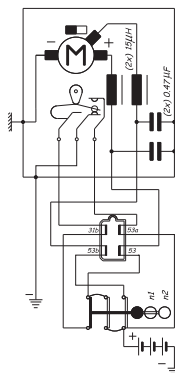
CUBIERTA MOTOR MOTOR COVER COUVERTE MOTEUR MOTORABDECKUNG	✓	✗
--	---	---

POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE	DERECHA RIGHT DROITE
--	-----------------------------	----------------------------



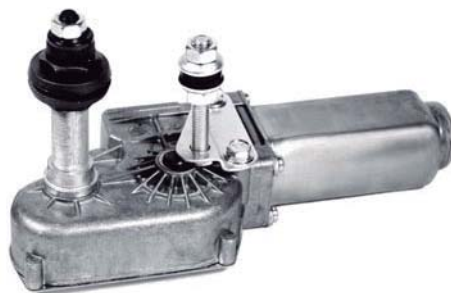
AMP 4

1 VELOCIDAD
 1 SPEED
 1 VITESSE
 1 GESCHWINDIGKEIT



AMP 4

2 VELOCIDADES
 2 SPEEDS
 2 VITESSES
 2 GESCHWINDIGKEITEN



CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG

EL MOTOR 317 CON CUBIERTA CORRESPONDE A LA SERIE 347.
317 MOTOR WITH COVER CORRESPONDS TO 347 SERIE MOTOR.
LE MOTEUR 317 AVEC COUVERTE CORRESPOND AU MOTEUR 347.
DER MOTOR 317 MIT GEHÄUSE ENTSPRICHT DEM MOTOR 347.



ref. 116.5005.18.C0

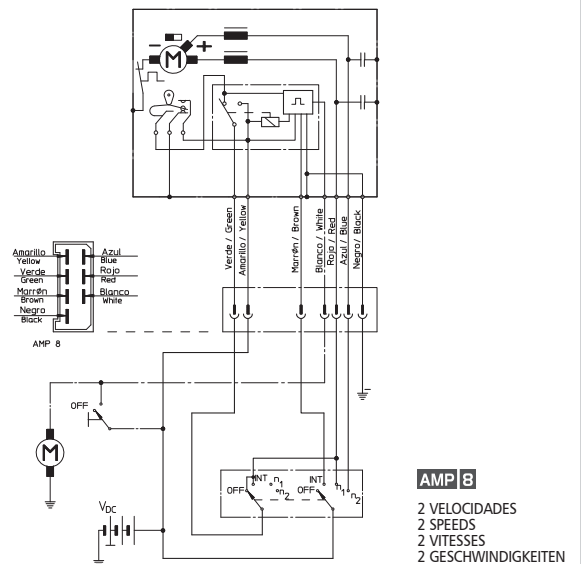
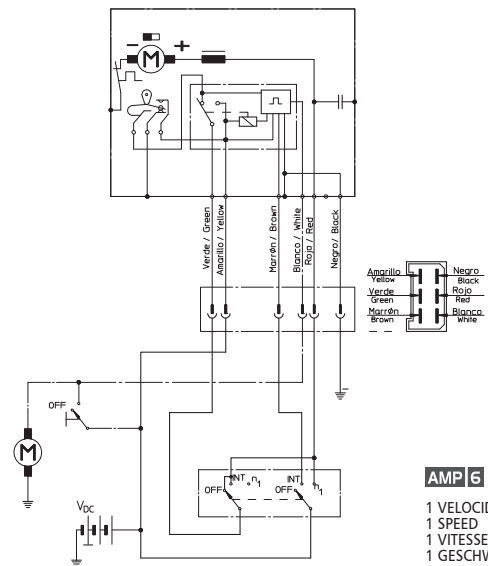
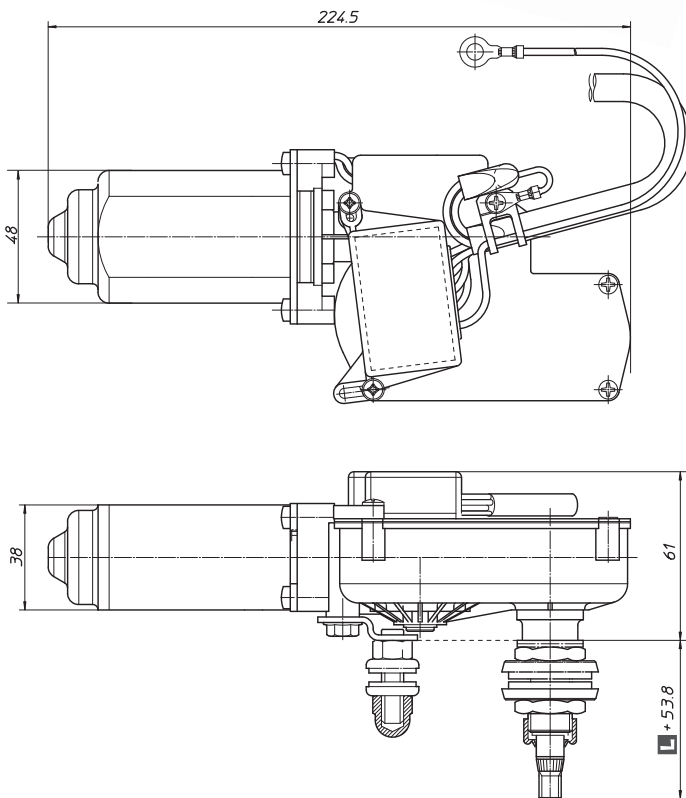
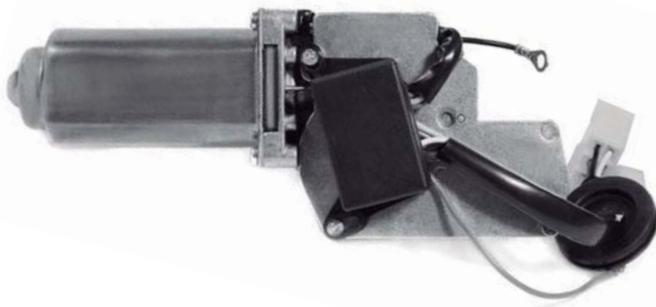


ref. 140.0015.18.00



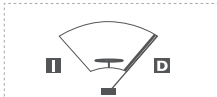
ref. 140.5211.04.04

INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGEE - INTEGRIERTER INTERVALLSCHALTUNG



MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

3 1 7 . A B C D E F G 0 E H

A	VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	"0" = 35 / 52 "4" = 35
B	ÁNGULO BARRIDO WIPER ANGLE ANGLE DE BALAYAGE WISCHWINKEL	"0" = 60° "1" = 70° "2" = 80° "3" = 85° "4" = 90° "5" = 95° "6" = 105° "8" = 110°
C	LONGITUD ESPIGA LENGHT LONGUEUR LÄNGE	"5" = 3,5 mm "6" = 18,5 mm "8" = 48,5 mm
D	VELOCIDADES / PARO / INTERRUPTOR SPEED / PARK / SWITCH VITESSES / ARRÊT / INTERRUPTEUR GESCHWINDIGKEITEN / PARKSTELLUNG / SCHALTER	"0" = 2 / Yes / No "3" = 1 / No / Yes "7" = 1 / Yes / Yes "8" = 1 / No / No "9" = 1 / Yes / No
E	TENSIÓN NOMINAL NOMINAL VOLTAGE TENSION NOMINALE NENNSPANNUNG	"2" = 12V "3" = 24V
F	EMBALAJE PACKAGING EMBALLAGE VERPACKUNG	"B" EMBALAJE UNITARIO INDIVIDUAL PACKING EMBALLAGE UNITAIRE EINZELVERPACKUNG "C" EMBALAJE MÚLTIPLE MULTIPLE PACKING EMBALLAGE MULTIPLE MEHRFACHPACKUNG
G	POSICIÓN DE PARO PARK POSITION POSITION D'ARRÊT PARKSTELLUNG	 <p>VISTA DESDE EL EXTERIOR DEL VEHÍCULO VIEW FROM OUTSIDE THE VEHICLE VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE GEGEN DIE FAHRRICHTUNG GESEHEN</p> <p>"I" PARO IZQUIERDA LEFT PARK ARRÊT À GAUCHE PARKSTELLUNG LINKS "D" PARO DERECHA RIGHT PARK ARRÊT À DROITE PARKSTELLUNG RECHTS</p>
H	ACCESORIOS ACCESSORIES ACCESSOIRES ZUBEHÖR	"T" CON INTERMITENCIA INTEGRADA WITH INTEGRATED INTERMITTENT AVEC INTERMITTENCE INTÉGRÉE MIT INTEGRIERTER INTERVALLSCHALTUNG

EL MOTOR 317 CON CUBIERTA CORRESPONDE A LA SERIE 347.
 317 MOTOR WITH COVER CORRESPONDS TO 347 SERIE MOTOR.
 LE MOTEUR 317 AVEC COUVERTE CORRESPOND AU MOTEUR 347.
 DER MOTOR 317 MIT GEHÄUSE ENTSpricht DEM MOTOR 347.

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

2,5
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

12
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

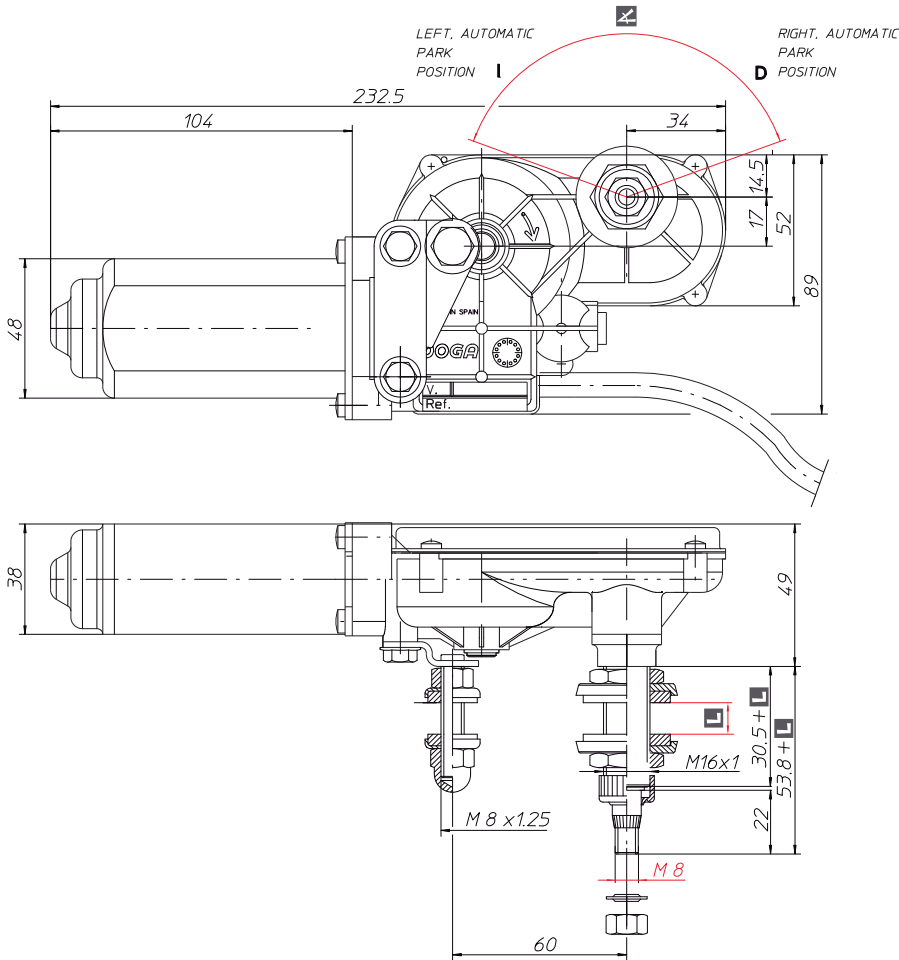
M8

APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



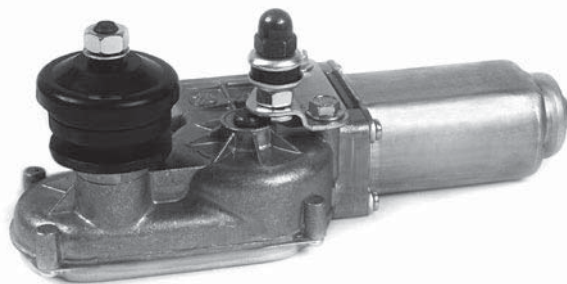
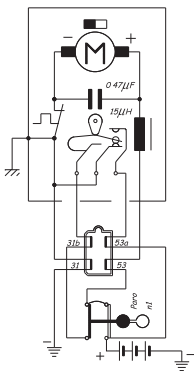
(a) max. 900mm (175°)

(a) max. 600mm (175°)



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	35		
EJE SHAFT AXE WELLE	M8		
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓		
ANTIPIRATADO RFI ANTIPIRATÉ ENTSTÖRFILTER	✓		
VOLTIOS VOLTS VOLTS VOLT	12	24	
L mm	standard	3,5	
	option	CUSTOMISED	
	125°	130°	135°
	140°	160°	175°
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4	
	option	CUSTOMISED	
INTERRUPTOR SWITCH INTERRUPTEUR SCHALTER	✓	✗	
INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗	
CUBIERTA MOTOR MOTOR COVER COUVERTE MOTEUR MOTORABDECKUNG	✓	✗	
POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS	
<p>VISTA DESDE EL EXTERIOR DEL VEHÍCULO VIEW FROM OUTSIDE THE VEHICLE VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE GEGEN DIE FAHRTRICHTUNG GESEHEN</p>			



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

CUBIERTA MOTOR OPCIONAL - MOTOR COVER OPTION - OPTION DE COUVERTE MOTEUR - MOTORABDECKUNG

EL MOTOR 317 CON CUBIERTA CORRESPONDE A LA SERIE 347.
317 MOTOR WITH COVER CORRESPONDS TO 347 SERIE MOTOR.
LE MOTEUR 317 AVEC COUVERTE CORRESPOND AU MOTEUR 347.
DER MOTOR 317 MIT GEHÄUSE ENTSPRICHT DEM MOTOR 347.



ref. 116.5005.18.C0

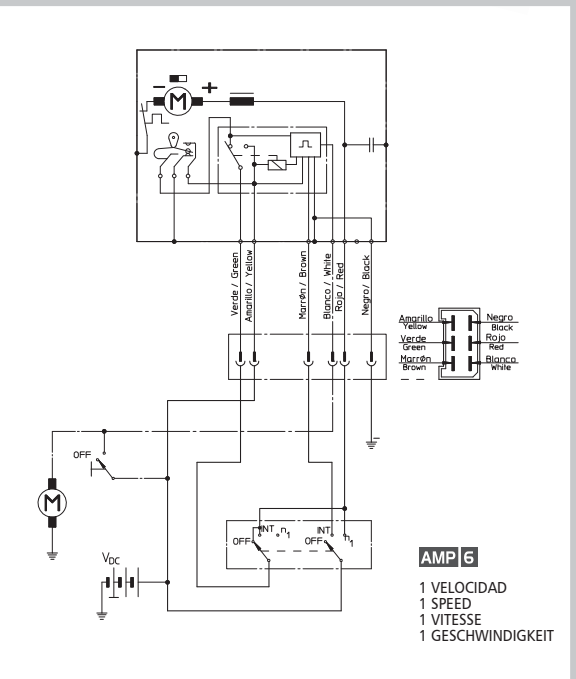
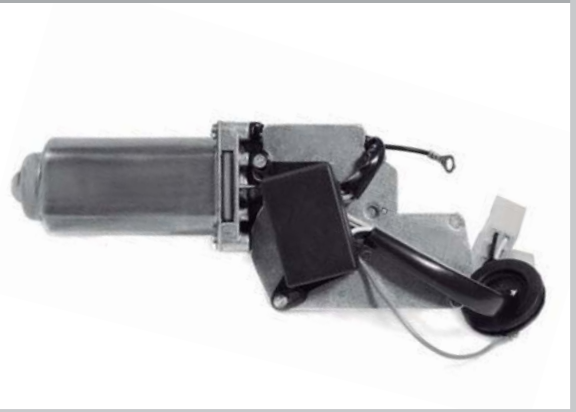
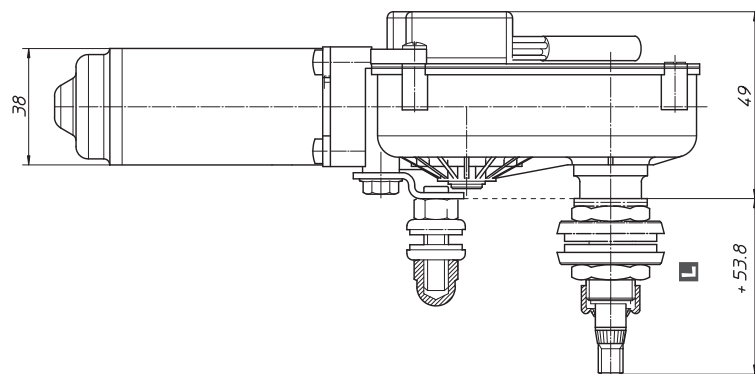
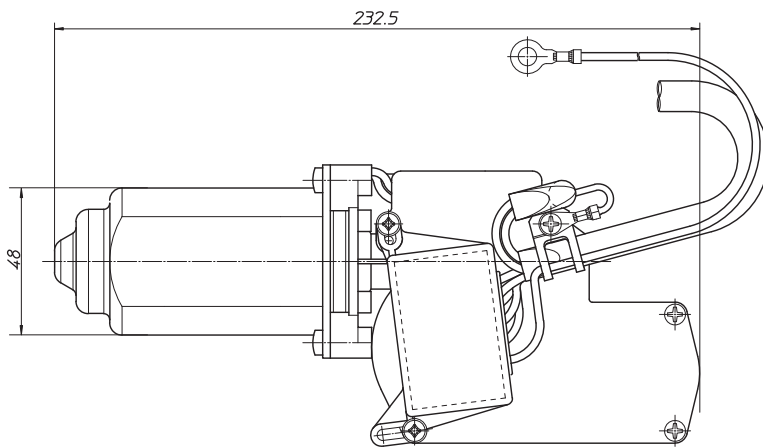


ref. 140.0015.18.00



ref. 140.5211.04.04

INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGEE - INTEGRIERTER INTERVALLSCHALTUNG



PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

8
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

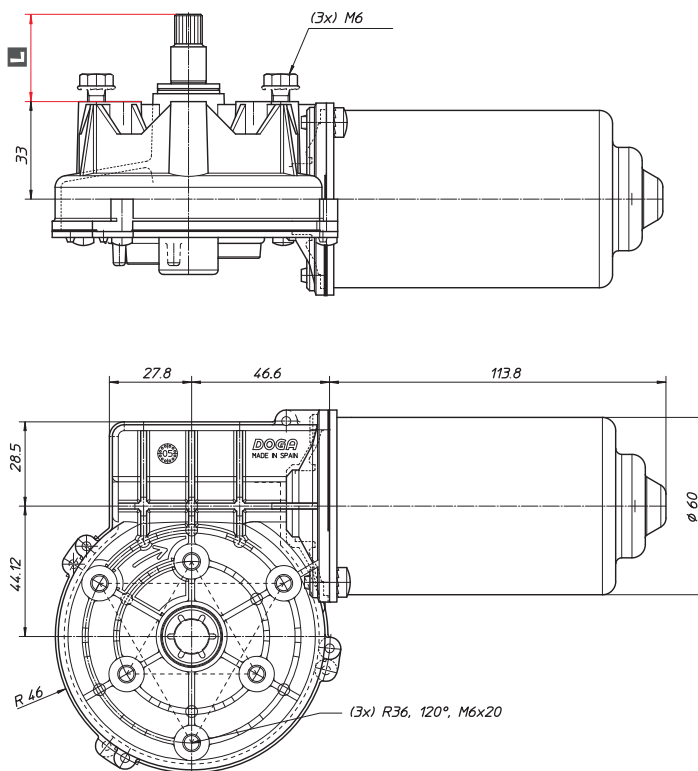
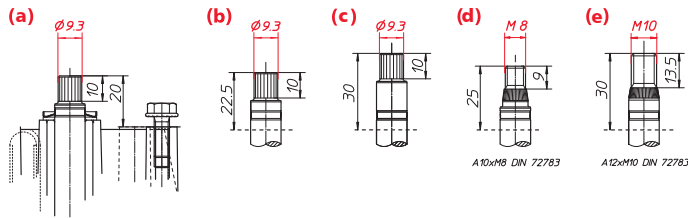
50
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

Ø 9,3

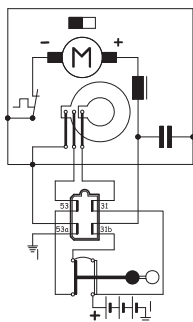
M8

M10



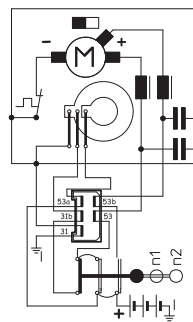
opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	34	34/52
	40	40/63
	50	
EJE SHAFT AXE WELLE	Ø 9,3	M8 M10
L mm	20	
	22,5	25
	30	30
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
VOLTIOS VOLTS VOLTS VOLT	12	24
	CUSTOMISED	
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	AMP 4	AMP 6
	CUSTOMISED	



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT



AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

3 1 9 . 0 7 A B C D 0 0 E

A

EJE
 SHAFT
 AXE
 WELLE

"1" = Ø 9,3 / 20mm
 "2" = Ø 9,3 / 22,5mm
 "3" = Ø 9,3 / 30mm
 "4" = M8 / 25mm
 "5" = M10 / 30mm

B

VELOCIDADES
 SPEEDS
 VITESSES
 GESCHWINDIGKEITEN

"3" = 34 r.p.m.
 "4" = 34/52 r.p.m.
 "5" = 40 r.p.m.
 "6" = 40/63 r.p.m.
 "7" = 50 r.p.m.

C

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

D

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG
 "C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

8
Nm

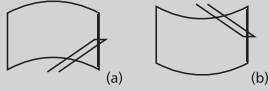
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

50
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M8

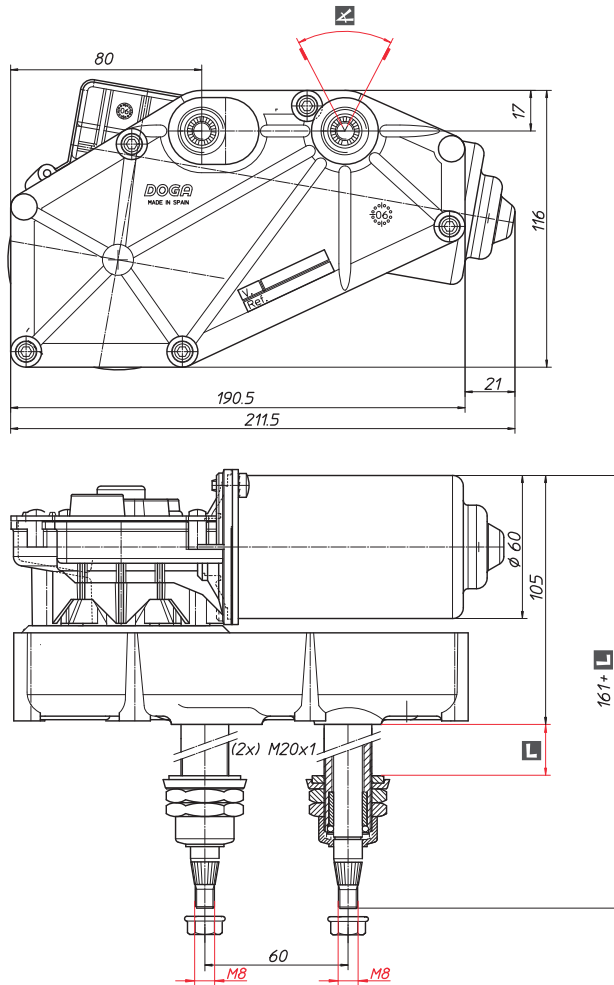
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



(a) max. 1200 mm (72°)
(b) max. 1300 mm (80°)

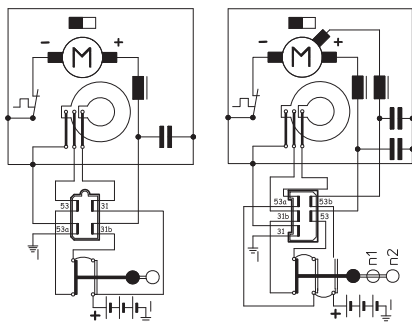


(a) max. 800 mm (72°)
(b) max. 900 mm (80°)



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	34 40 50	34/52 40/63
EJE SHAFT AXE WELLE	M8	
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
VOLTIOS VOLTS VOLTS VOLT	12	24
L mm	28	48 68
	40° 60° 80°	50° 65° 90°
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard option	AMP 4 AMP 6 CUSTOMISED
INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT

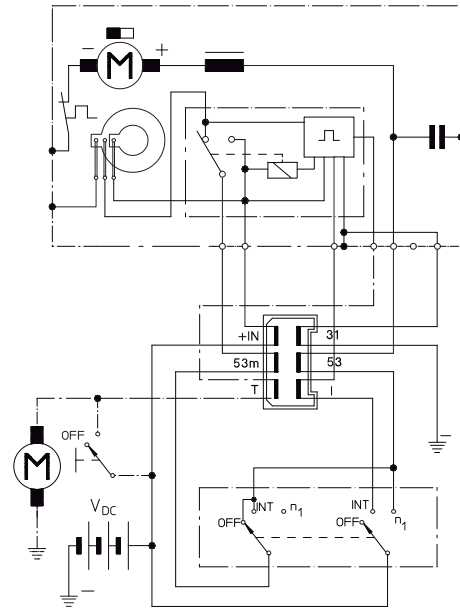
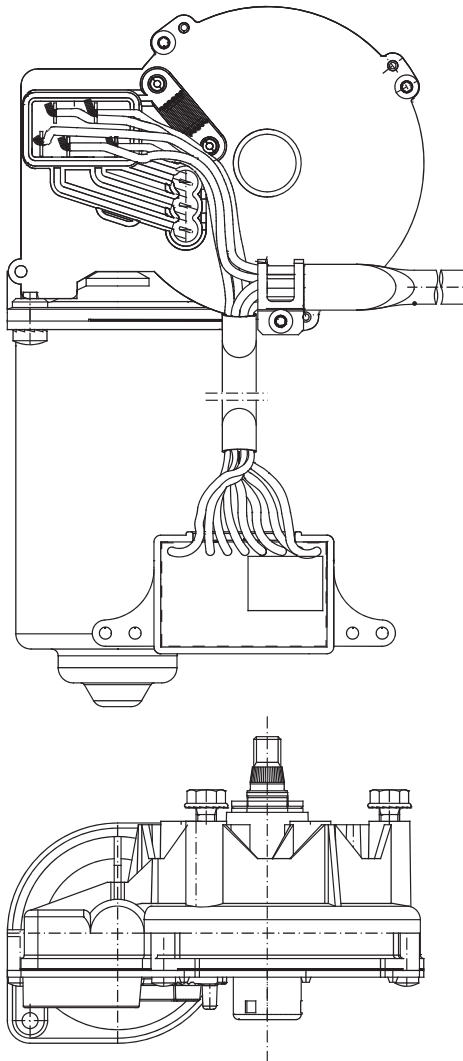
AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN



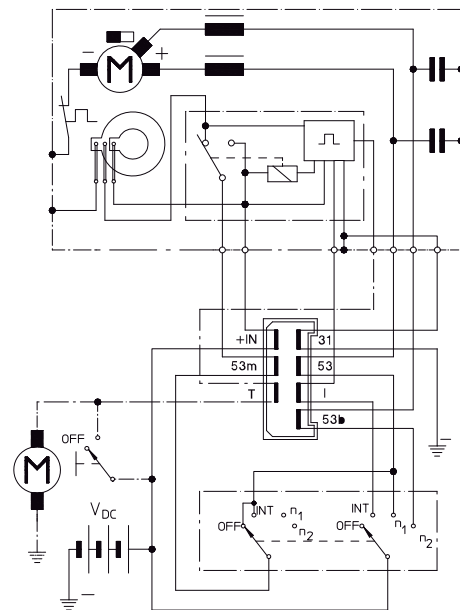
VISTA DESDE EL EXTERIOR DEL VEHÍCULO
VIEW FROM OUTSIDE THE VEHICLE
VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE
GEGEN DIE FAHRRICHTUNG GESEHEN

INTERMITENCIA INTEGRADA - INTEGRATED INTERMITTENT - INTERMITTENCE INTEGREE - INTEGRIERTER INTERVALLSCHALTUNG



AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT




AMP 8

- 2 VELOCIDADES
- 2 SPEEDS
- 2 VITESSES
- 2 GESCHWINDIGKEITEN

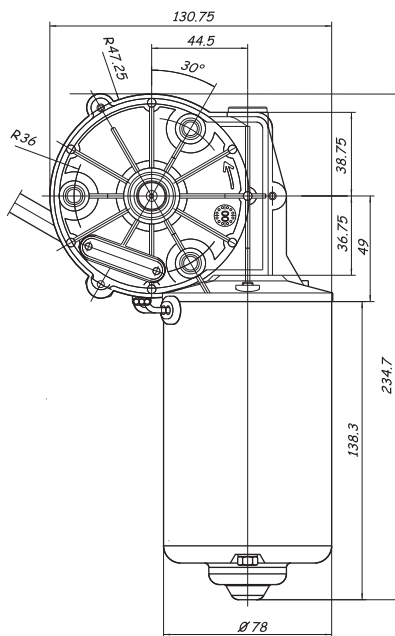
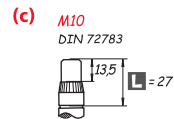
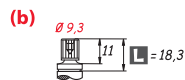
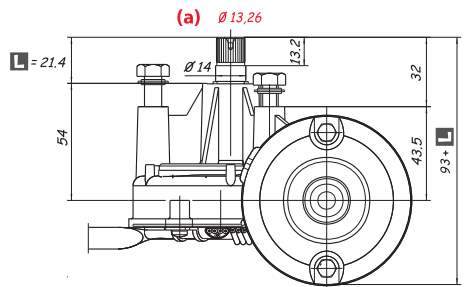
MOTOR OSCILANTE - OSCILLATING MOTOR - MOTEUR OSCILLANT - PENDELMOTOR

3 1 9 0 A B C D E F 0 G

A	<p>ÁNGULO BARRIDO WIPER ANGLE ANGLE DE BALAYAGE WISCHWINKEL</p>	<p>"0" = 40° "1" = 50° "2" = 60° "3" = 72° "4" = 80° "5" = 55° "6" = 65° "9" = 90°</p>	
B	<p>LONGITUD ESPIGA LENGHT LONGUEUR LÄNGE</p>	<p>"5" = 28mm "6" = 48mm "8" = 68mm</p>	
C	<p>VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN</p>	<p>"3" = 34 "4" = 34/52 "5" = 40 "6" = 40/63 "7" = 50</p>	
D	<p>TENSIÓN NOMINAL NOMINAL VOLTAGE TENSION NOMINALE NENNSPANNUNG</p>	<p>"2" = 12V "3" = 24V</p>	
E	<p>EMBALAJE PACKAGING EMBALLAGE VERPACKUNG</p>	<p>"B" EMBALAJE UNITARIO INDIVIDUAL PACKING EMBALLAGE UNITAIRE EINZELVERPACKUNG "C" EMBALAJE MÚLTIPLE MULTIPLE PACKING EMBALLAGE MULTIPLE MEHRFACHPACKUNG</p>	
F	<p>POSICIÓN DE PARO PARK POSITION POSITION D'ARRÊT PARKSTELLUNG</p>		<p>"I" PARO IZQUIERDA LEFT PARK ARRÊT À GAUCHE PARKSTELLUNG LINKS "D" PARO DERECHA RIGHT PARK ARRÊT À DROITE PARKSTELLUNG RECHTS</p>
G	<p>ACCESORIOS ACCESSORIES ACCESSOIRES ZUBEHÖR</p>	<p>"T" CON INTERMITENCIA INTEGRADA WITH INTEGRATED INTERMITTENT AVEC INTERMITTENCE INTÉGRÉE MIT INTEGRIERTER INTERVALLSCHALTUNG</p>	

CONSULTAR PARA OTRAS OPCIONES
ASK FOR OTHER OPTIONS
CONSULTER AUTRES OPTIONS
FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL NOMINAL TORQUE COUPLE NOMINAL NENNDREHMOMENT	15 Nm	PAR DE ARRANQUE STALL TORQUE COUPLE DE DEMARRAGE ANZUGSMOMENT	80 Nm	EJE - mm SHAFT - mm AXE - mm WELLE - mm	Ø9,3	Ø13,26	M10
---	-----------------	--	-----------------	--	-------------	---------------	------------



opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	32	32/50
	40	40/62
	50	

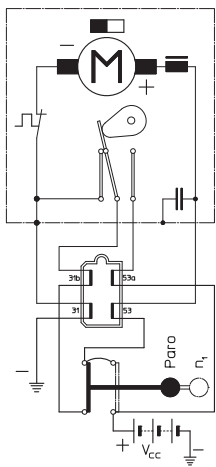
EJE SHAFT AXE WELLE	Ø9,3	Ø13,26	M10
L mm	18,3	21,4	27

DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓
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ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓
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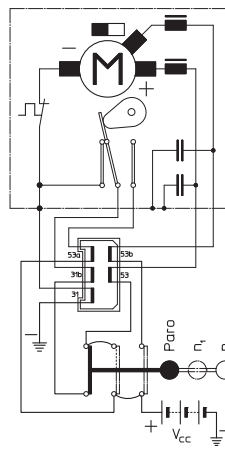
VOLTIOS VOLTS VOLTS VOLT	12	24
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CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	AMP 4	AMP 6
	CUSTOMISED	



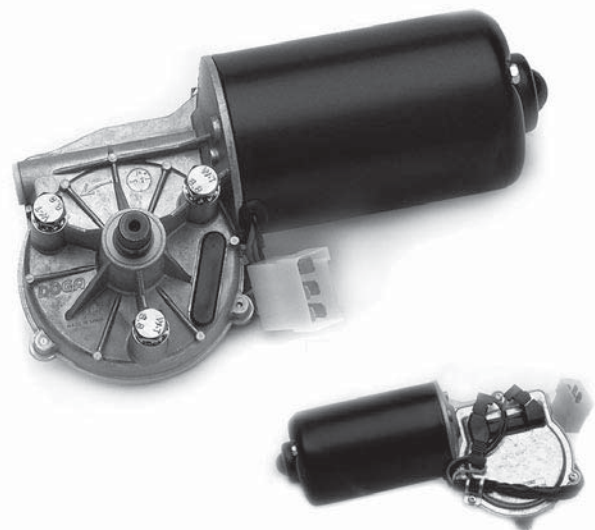
AMP 4

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT



AMP 6

- 2 VELOCIDADES
- 2 SPEEDS
- 2 VITESSES
- 2 GESCHWINDIGKEITEN



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

2 5 8 0 7 A B C D 0 0

A

EJE
 SHAFT
 AXE
 WELLE

"3" = Ø 9,3
 "4" = Ø 13,26
 "6" = M10

B

VELOCIDADES
 SPEEDS
 VITESSES
 GESCHWINDIGKEITEN

"3" = 32 r.p.m.
 "4" = 32/50 r.p.m.
 "5" = 40 r.p.m.
 "6" = 40/62 r.p.m.
 "7" = 50 r.p.m.

C

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

D

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG
 "C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN

PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

15
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

80
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

M10

M12

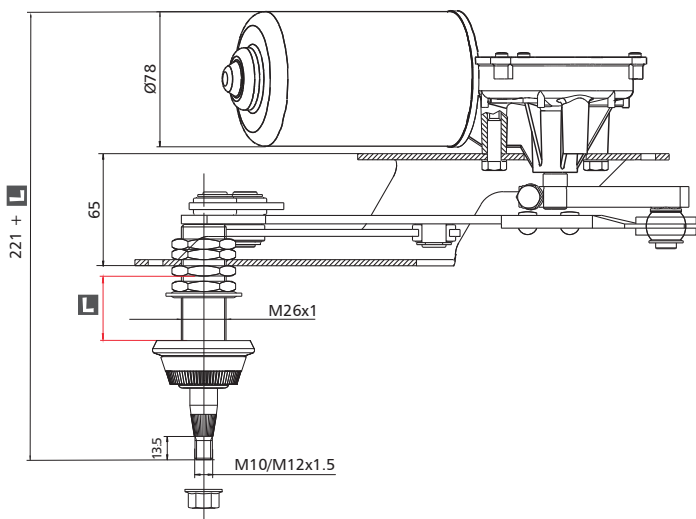
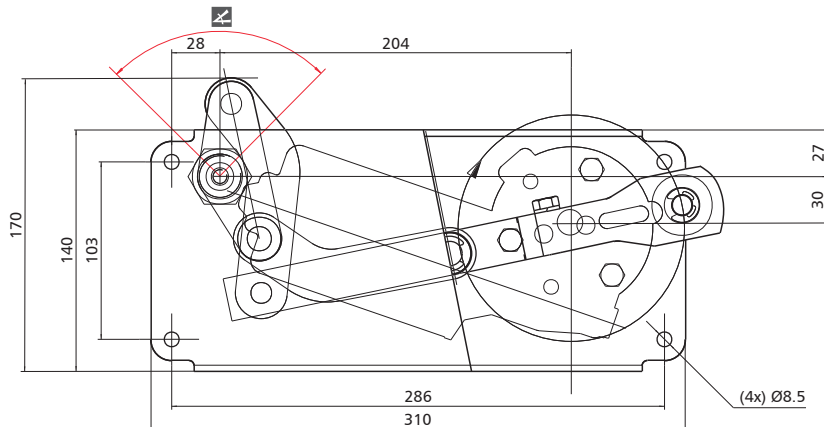
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



max. 1200 mm (140°)
max. 1100 mm (165°)



max. 1000 mm (140°)
max. 800 mm (165°)



EL MOTOR 248 CORRESPONDE A LA SERIE 258 CON SOPORTE Y TRANSMISIÓN.

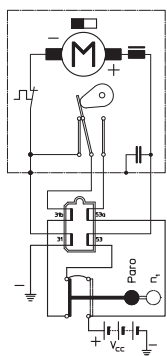
248 MOTOR CORRESPONDS TO 258 SERIE MOTOR WITH SUPPORT AND LINKAGE.

LE MOTEUR 248 EST SIMILAIRE À NOTRE SÉRIE MOTEUR 258 AVEC POUR SIMPLE DIFFÉRENCE LE SUPPORT ET LA TRANSMISSION INCORPORÉS.

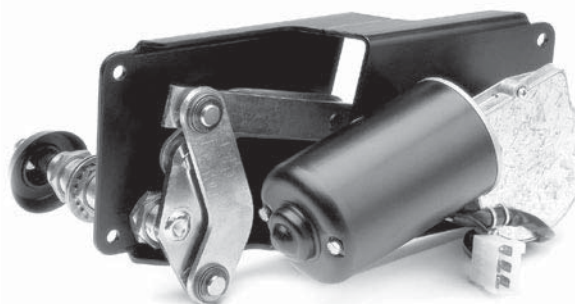
DER MOTOR 248 ENTSPRICHT DEM MOTOR DER SERIE 258, BEI DEM HALTERUNG UND GETRIEBEBEBEL SCHON VORMONTIERT SIND.

opciones - options - optionen

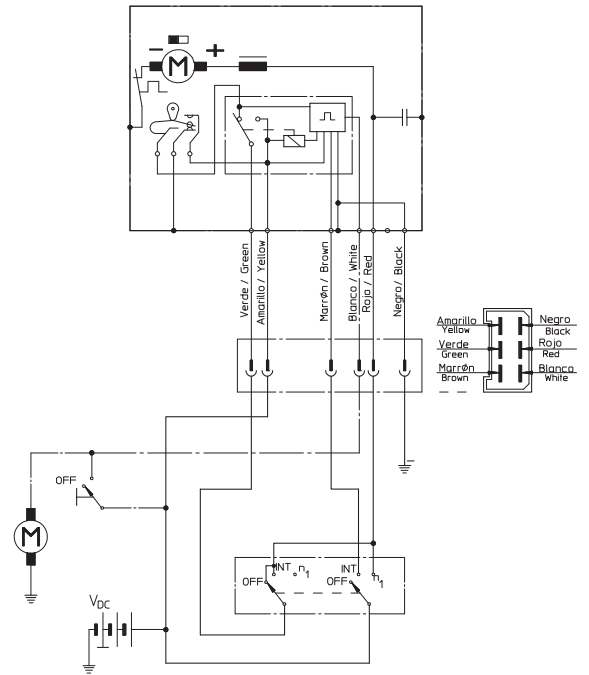
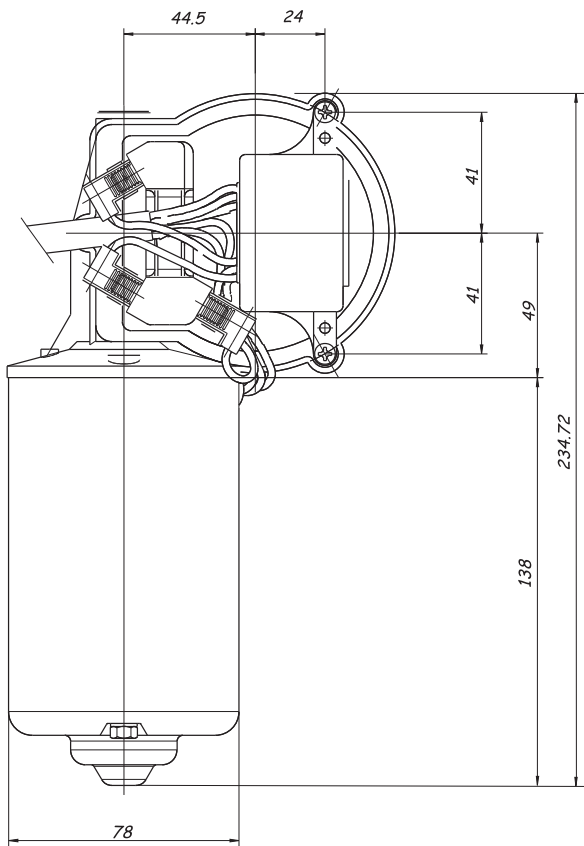
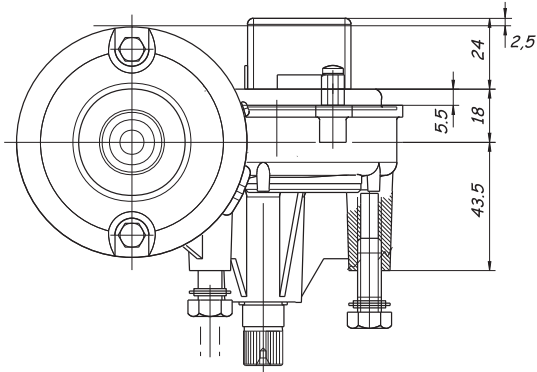
VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	50	
EJE SHAFT AXE WELLE	M10	M12
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓	
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓	
VOLTIOS VOLTS VOLTS VOLT	12	24
L mm MAX.	70	120
	140°	165°
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4
	option	CUSTOMISED
INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✓	✗
POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS
 VISTA DESDE EL EXTERIOR DEL VEHÍCULO VIEW FROM OUTSIDE THE VEHICLE VUE DEPUIS L'EXTÉRIEUR DU VÉHICULE GEGEN DIE FAHRRICHTUNG GEGEHEN		



AMP 4
1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT



INTERMITENCIA INTEGRADA PARA MOTORES DEL GRUPO 248 01
INTEGRATED INTERMITTENT FOR 248 01 - TYPE MOTORS
INTERMITTENCE INTEGREE POUR MOTEURS DU GROUPE 248 01
INTEGRIERTER INTERVALLSCHALTUNG FÜR MOTOREN DER BAUREIHE 248 01



AMP 6

- 1 VELOCIDAD
- 1 SPEED
- 1 VITESSE
- 1 GESCHWINDIGKEIT

PAR NOMINAL
 NOMINAL TORQUE
 COUPLE NOMINAL
 NENNDRHEMMENT

15
 Nm

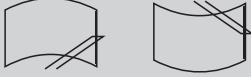
PAR DE ARRANQUE
 STALL TORQUE
 COUPLE DE DEMARRAGE
 ANZUGSMOMENT


80
 Nm


EJE - mm
 SHAFT - mm
 AXE - mm
 WELLE - mm

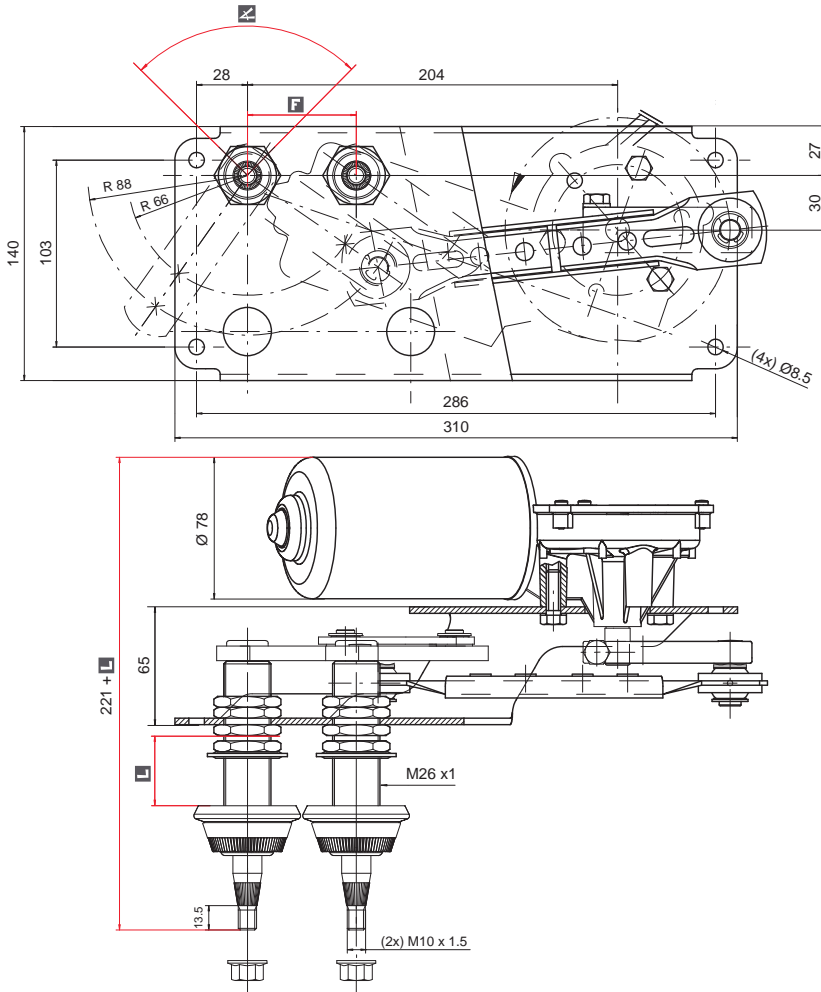
M10

APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



 1 speed: max. 1500mm (80°)

 1 speed: max. 1000 mm (80°)



EL MOTOR 248 CORRESPONDE A LA SERIE 258 CON SOPORTE Y TRANSMISIÓN.

248 MOTOR CORRESPONDS TO 258 SERIE MOTOR WITH SUPPORT AND LINKAGE.

LE MOTEUR 248 EST SIMILAIRE À NOTRE SÉRIE MOTEUR 258 AVEC POUR SIMPLE DIFFÉRENCE LE SUPPORT ET LA TRANSMISSION INCORPORÉS.

DER MOTOR 248 ENTSPRICHT DEM MOTOR DER SERIE 258, BEI DEM HALTERUNG UND GETRIEBEBEBEL SCHON VORMONTIERT SIND.

opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	32	32/50
--	----	-------


EJE SHAFT AXE WELLE	M10 / M10
------------------------------	-----------

DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	<input checked="" type="checkbox"/>
--	-------------------------------------

ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	<input checked="" type="checkbox"/>
--	-------------------------------------

VOLTIOS VOLTS VOLTS VOLT	12	24
-----------------------------------	----	----

L mm MAX.	F= 60	40	55	65
	F= 65	70	100	100
		40	75	100

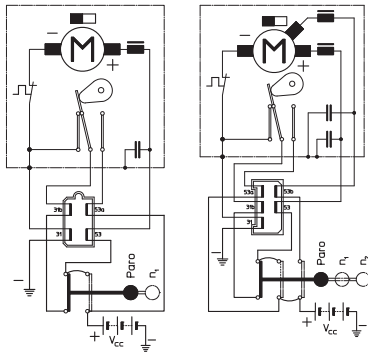
	35°	45°	50°	55°
	60°	65°	70°	80°
	85°	90°		

F	60	65
---	----	----

CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	AMP 4	AMP 6
	option	CUSTOMISED	

INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
---	-------------------------------------	-------------------------------------

POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS
--	--------------------------------------	--------------------------------------

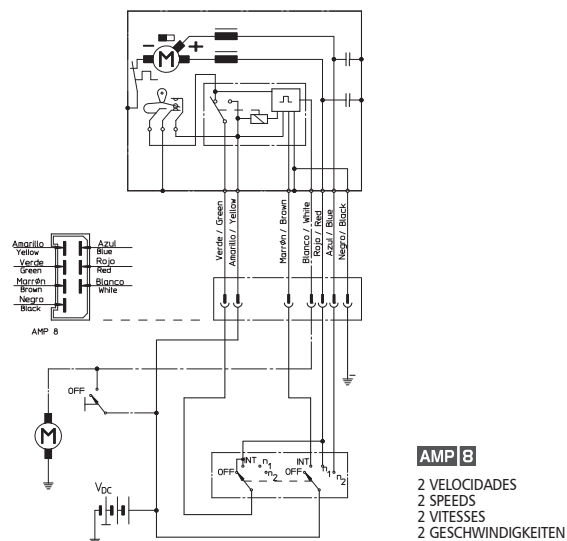
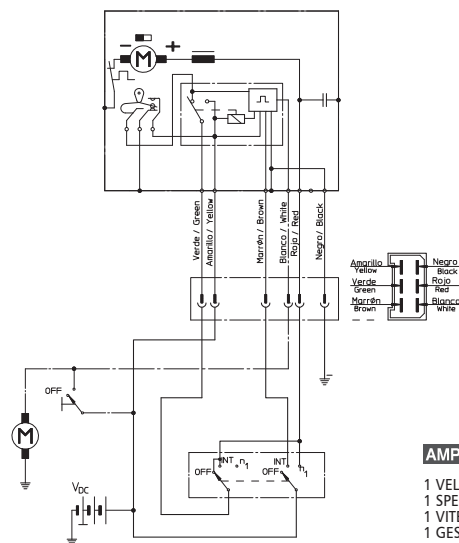
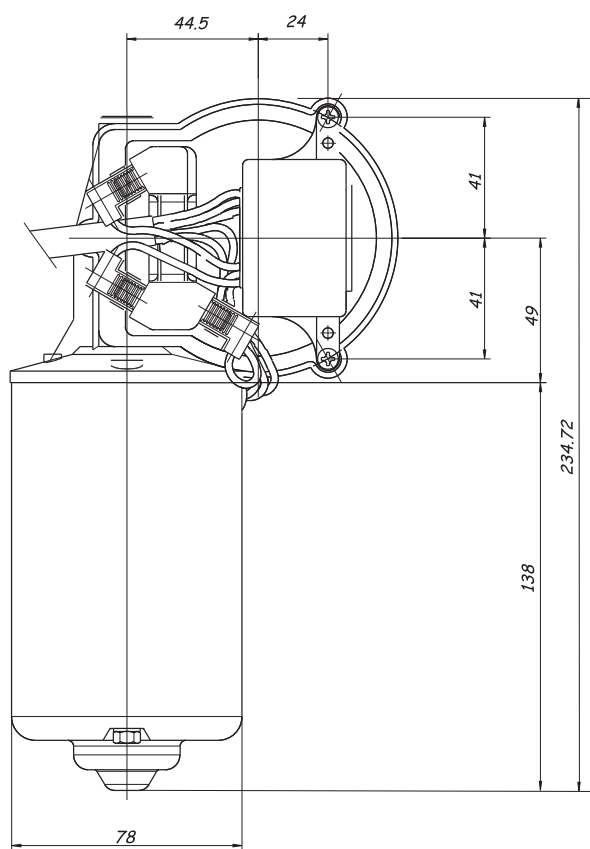
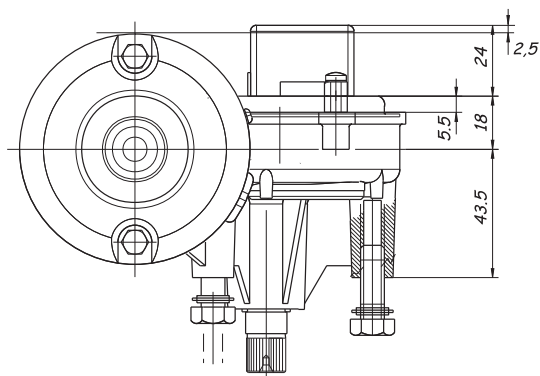


AMP 4
 1 VELOCIDAD
 1 SPEED
 1 VITESSE
 1 GESCHWINDIGKEIT

AMP 6
 2 VELOCIDADES
 2 SPEEDS
 2 VITESSES
 2 GESCHWINDIGKEITEN



INTERMITENCIA INTEGRADA PARA MOTORES DEL GRUPO 248 02
INTEGRATED INTERMITTENT FOR 248 02 - TYPE MOTORS
INTERMITTENCE INTEGREE POUR MOTEURS DU GROUPE 248 02
INTEGRIERTER INTERVALLSCHALTUNG FÜR MOTOREN DER BAUREIHE 248 02



PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDREHMOMENT

20
Nm

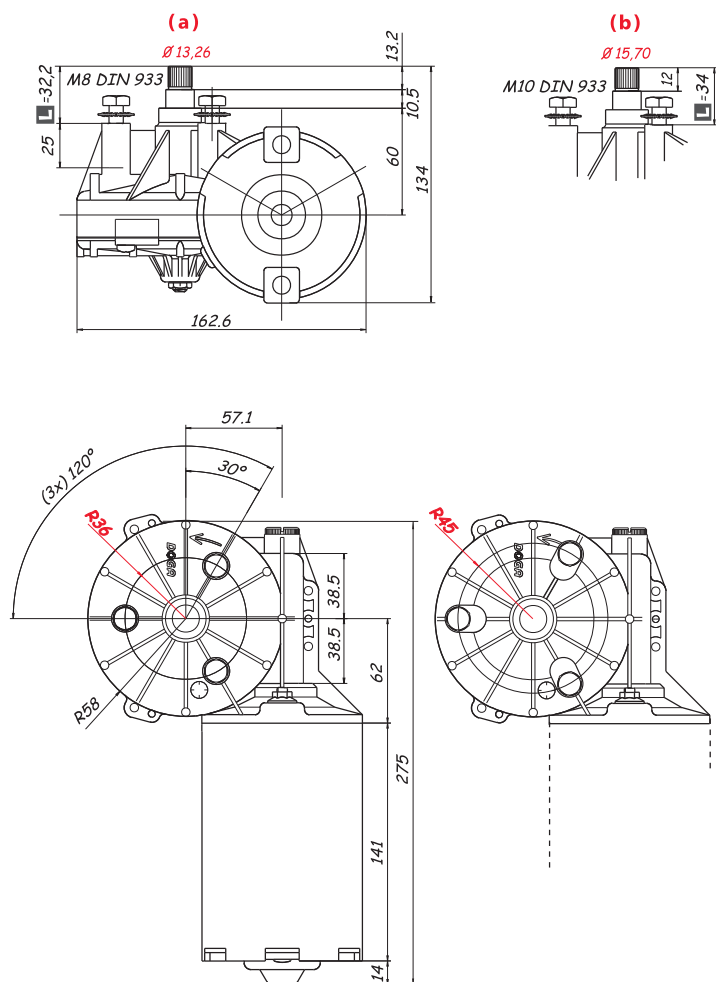
PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

130
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

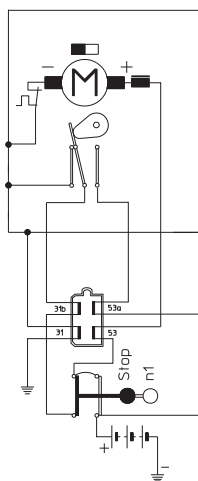
Ø13,26

Ø15,70



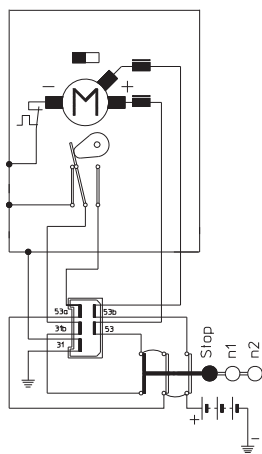
opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	30	30/45
EJE SHAFT AXE WELLE	Ø13,26	Ø15,70
L mm	32,2	34
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER		✓
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER		✓
VOLTIOS VOLTS VOLTS VOLT	12	24
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	AMP 4	AMP 6
	CUSTOMISED	



AMP 4

1 VELOCIDAD
1 SPEED
1 VITESSE
1 GESCHWINDIGKEIT



AMP 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN



MOTOR ROTATIVO - ROTATING MOTOR - MOTEUR ROTATIF - ROTATIONS MOTOR

2 5 9 . A 7 B C . D E . 0 0

A

PUNTOS DE FIJACIÓN
 MOUNTING POINTS
 FIXATION
 FIXIERUNG

"2" = R45 3xM10 DIN933
 "3" = R36 3xM8 DIN933

B

EJE
 SHAFT
 AXE
 WELLE

"0" = Ø 13,26
 "2" = Ø 15,70

C

VELOCIDADES
 SPEEDS
 VITESSES
 GESCHWINDIGKEITEN

"8" = 30/50 r.p.m.
 "9" = 30 r.p.m.

D

TENSIÓN NOMINAL
 NOMINAL VOLTAGE
 TENSION NOMINALE
 NENNSPANNUNG

"2" = 12V
 "3" = 24V

E

EMBALAJE
 PACKAGING
 EMBALLAGE
 VERPACKUNG

"B" EMBALAJE UNITARIO
 INDIVIDUAL PACKING
 EMBALLAGE UNITAIRE
 EINZELVERPACKUNG

"C" EMBALAJE MÚLTIPLE
 MULTIPLE PACKING
 EMBALLAGE MULTIPLE
 MEHRFACHPACKUNG

CONSULTAR PARA OTRAS OPCIONES
 ASK FOR OTHER OPTIONS
 CONSULTER AUTRES OPTIONS
 FÜR ANDERE OPTIONEN NACHFRAGEN



PAR NOMINAL
NOMINAL TORQUE
COUPLE NOMINAL
NENNDRHEMMENT

20
Nm

PAR DE ARRANQUE
STALL TORQUE
COUPLE DE DEMARRAGE
ANZUGSMOMENT

130
Nm

EJE - mm
SHAFT - mm
AXE - mm
WELLE - mm

Ø16

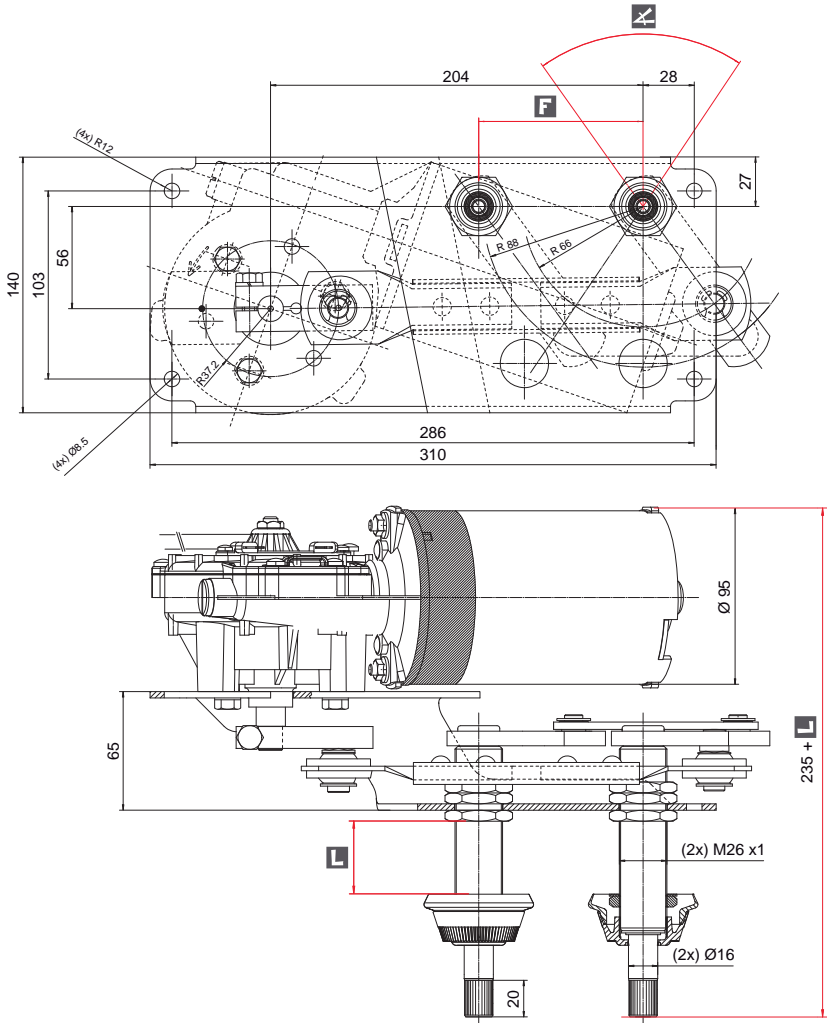
APLICACIONES ORIENTATIVAS - SUGGESTED APPLICATIONS - APPLICATIONS POUR INFORMATION - MÖGLICHE ANWENDUNGEN



max. 1500 mm



max. 1000 mm



EL MOTOR 249 CORRESPONDE A LA SERIE 259 CON SOPORTE Y TRANSMISIÓN.

249 MOTOR CORRESPONDS TO 259 SERIE MOTOR WITH SUPPORT AND LINKAGE.

LE MOTEUR 249 EST SIMILAIRE À NOTRE SÉRIE MOTEUR 259 AVEC POUR SIMPLE DIFFÉRENCE LE SUPPORT ET LA TRANSMISSION INCORPORÉS.

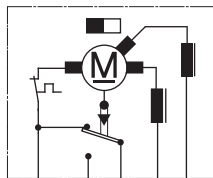
DER MOTOR 249 ENTSPRICHT DEM MOTOR DER SERIE 259, BEI DEM HALTERUNG UND GETRIEBEBEBEL SCHON VORMONTIERT SIND.

opciones - options - optionen

VELOCIDADES SPEEDS VITESSES GESCHWINDIGKEITEN	32 / 50		
EJE SHAFT AXE WELLE	Ø16		
DISYUNTOR THERMOSWITCH DISJONCTEUR THERMOSCHALTER	✓		
ANTIPARASITADO RFI ANTIPARASITÉ ENTSTÖRFILTER	✓		
VOLTIOS VOLTS VOLTS VOLT	12	24	
L mm	5	25	
	40	65	
↗	50°	60°	70°
	75°	85°	90°
F	90		
CONECTOR CONNECTOR CONNECTEUR ANSCHLUSS	standard	DEUTSCH 6	
	option	CUSTOMISED	
INTERMITENCIA INTERMITTENT OPTION INTERMITTENCE INTERVALLSCHALTUNG	✗ CUSTOMISED		
POSICIÓN PARO PARK POSITION POSITION ARRÊT PARKSTELLUNG	IZQUIERDA LEFT GAUCHE LINKS	DERECHA RIGHT DROITE RECHTS	



IP 54



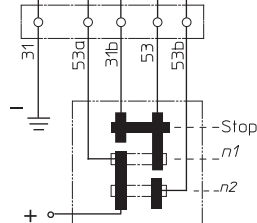
TRAINS



DEUTSCH 6

2 VELOCIDADES
2 SPEEDS
2 VITESSES
2 GESCHWINDIGKEITEN

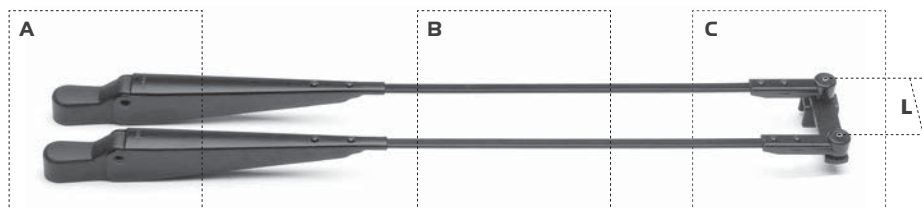
MASA AISLADA
INSULATED GROUND
MASSE ISOLÉE
MASSE ISOLIERT



VISTA DESDE EL EXTERIOR DEL VEHÍCULO
VIEW FROM OUTSIDE THE VEHICLE
VUE DEPUIS L'EXTERIEUR DU VEHICULE
GEGEN DIE FAHRRICHTUNG GESEHEN



TYPS DOGA

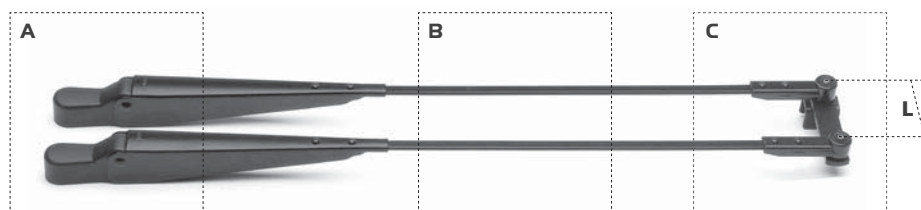


TYP	A		B		C	L
121/09	M8	M8	bar	9x3		9x2,5 L 57
121/11	M8	M8	bar	9x3		9x2,5 L 57
122/05	M8	M8	bar	8X4 8x2,5		9x2,5 L 57
122/06	M8	M8	bar	8X4 8x2,5		9x2,5 L 57
123/07	M8	M8	bar	8x4		Ø5 (2x) L 55
124/02	Ø16	Ø16	bar	10x10		26,5 L 65
124/06	Ø12	Ø12	bar	10x10		26,5 L 60
127/04	M8	M8	bar	8x4		Ø5 (2x) L 60
127/06	M8	M8	bar	8x4		9x2,5 L 60
127/07	M8	M8	bar	10x4		16,5 L 60
127/09	M8	M8	bar	10x4		16,5 L 60
127/10	M8	M8	bar	8x4		9x2,5 L 60
127/11	M8	M8	bar	8X4 8x2,5		9x2,5 L 60

* only for spare part



TYPS DOGA

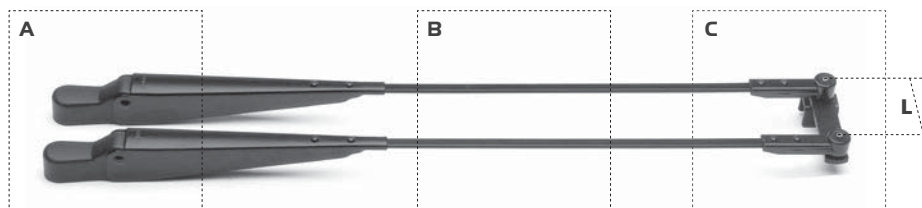


TYP	A		B		C	L	
127/12	M8	M8	bar	9x3		9x2,5 L 60	
127/13*	M8	M8	<i>for special applications</i>				L 70
127/14*	M8	M8	<i>for special applications</i>				L 95
127/15	M8	M8	bar (x2)	8x4	8x2,5	9x2,5 L 60	
127/16*	M8	M8	<i>for special applications</i>				L 110
127/17	M8	M8	bar	8x4		16,5 L 60	
127/20*	Ø12	Ø12	<i>for special applications</i>				L 60
127/22	Ø12	Ø12	bar	10x4		16,5 L 60	
127/23	Ø12	Ø12	bar	10x4		16,5 L 95	
127/24*	M8	M8	bar	8x4		8x4 L 60	
127/25*	M8	M8	<i>for special applications</i>				L 70
127/26	M8	M8	bar	9x3		9x2,5 L 60	
128/02	M8	M8	bar	10x10		Ø5 (2x) L 60	

* only for spare part



TYPS DOGA

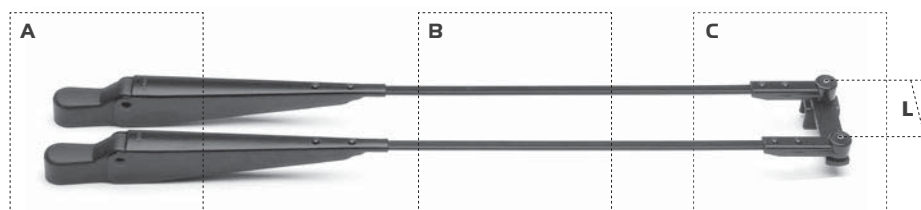


TYP	A		B		C	L
128/03	M8	M8	bar	10x10		26,5 L 60
128/04	M8	M8	bar	10x4		Ø5 (2x) L 60
128/05	M8	M8	bar	10x10		26,5 L 60
128/06	M8	M8	bar	10x10		26,5 L 60
128/07*	M8	M8	bar	10x10		26,5 L 60
128/08	M8	M8	bar	10x4		26,5 L 60
128/09	M10	M8	bar	10x4		26,5 L 60
128/10	M8	M8	bar	10x10		16,5 L 60
128/12	M10	M10	bar	10x10		26,5 L 60
128/13	M8	M8	bar	10x10		26,5 L 60
128/16	M8	M8	bar	10x10		16,5 L 60
128/17	M10	M10	<i>for special applications</i>			L 60
128/18	M10	M10	bar	10x10		Ø5 (2x) L 60

* only for spare part



TYPS DOGA



TYP	A		B		C	L
I28/19	M8	M8	bar	10x10		16,5 L 60
I28/20	M10	M10	bar	10x10		16,5 L 60
I28/21	M10	M10	bar	10x10		26,5 L 60
I28/23	M8	M8	bar	10x10		26,5 L 85
I28/24	Ø16	Ø16	tube	24,5x12		26,5 L 90
I28/26	M8	M8	bar	10x10		26,5 L 60
I28/27	M12	M10	tube bar	24,5x12 10x10		26,5 L 60
I28/28	M10	M10	bar	10x10		26,5 L 65
I28/29	M10	M8	tube (2x)	bar Ø10 (2x) 10x4		16,5 L 60

* only for spare part



A

M8

B

M8

EKTENSIBLES
cada - each - chaque - je
10mm

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
121.09	121.0901.GA.*6 (*=I/D)	340 - 420	210	45	57	●	-	●	-
	121.0910.GA.*6 (*=I/D)	430 - 500	210	45	57	●	-	●	-

Brazos extensibles en acero inoxidable - Extendable stainless steel arms - Bras extensibles en acier inoxydable - Verstellbare Arme aus Edelstahl

A

M8

B

M8

EKTENSIBLES
cada - each - chaque - je
10mm

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
121.11	121.1101.GA.*4 (*=I/D)	340 - 420	255	45	57	●	-	●	OPT.KIT*
	121.1110.GA.*4 (*=I/D)	420 - 500	255	45	57	●	-	●	OPT.KIT*
	121.1119.GA.*4 (*=I/D)	480 - 560	255	45	57	●	-	●	OPT.KIT*

* KIT 120.5054.39.00

A

M8

B

M8

with = 122.06

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
122.05	122.0501.GA.*4 (*=I/D)	400	A-165/B-180	60	57	●	-	●	-
	122.0505.GA.*4 (*=I/D)	600	A-165/B-180	60	57	●	-	●	-

A

M8

B

M8

without = 122.05

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
122.06	122.0601.GA.*4 (*=I/D)	400	A-165/B-180	60	57	●	-	●	●
	122.0608.GA.*4 (*=I/D)	600	A-165/B-180	60	57	●	-	●	●



A

M8

Ø5 (2x)

B

M8

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
I23.07	123.0722.GA.04	450	180	10	55	-	●	-	-
	123.0723.GA.04	500	180	10	55	-	●	-	-

A

Z=70
Ø16

26,5

B

Z=70
Ø16

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
I24.02	124.0201.GA.04	860	270	-	65	-	●	-	●

A

Z=52
Ø12

26,5

B

Z=52
Ø12

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
I24.06	124.0601.GA.04	660	270	-	60	-	●	-	●
	124.0602.GA.04	700	270	-	60	-	●	-	●
	124.0603.GA.04	800	270	-	60	-	●	-	●

A

M8

Ø 5 (2x)

B

M8

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
I27.04	127.0406.GA.04	755	320	-	60	-	●	-	●



A

M8

B

M8

with = 127.10

9x25

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I		D	
127.06	127.0603.GA.*4 (*=l/D)	455	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0604.GA.*4 (*=l/D)	505	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0605.GA.*4 (*=l/D)	555	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A

M8

B

M8

with = 127.09

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)				
127.07	127.0701.GA.04	500	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0702.GA.04	550	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0703.GA.04	600	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0704.GA.04	650	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0707.GA.04	680	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.0705.GA.04	700	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A

M8

B

M8

without = 127.07

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)				
127.09	127.0901.GA.04	500	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0902.GA.04	550	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0903.GA.04	600	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0904.GA.04	650	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0907.GA.04	680	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0905.GA.04	700	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.0906.GA.04	750	270	-	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



A

M8

B

M8

without = 127.06

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I		D	
127.10	127.1003.GA.*4 (*=I/D)	455	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1004.GA.*4 (*=I/D)	505	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1005.GA.*4 (*=I/D)	555	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A

M8

B

M8

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I		D	
127.11	127.1152.GA.D4	320	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1106.GA.D4	375	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.1156.GA.D4	375	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1101.GA.D4	400	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.1153.GA.D4	400	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1105.GA.I4	A-472/B-435	A-166/B-178	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	127.1102.GA.*4 (*=I/D)	A-485/B-455	A-166/B-178	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.1151.GA.*4 (*=I/D)	455	A-166/B-178	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1159.GA.D4	470	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1155.GA.D4	480	A-166/B-178	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	127.1107.GA.I4	550	A-178/B-166	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A

M8

B

M8

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I		D	
127.12	127.1201.GA.*4 (*=I/D)	455	210	45	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	127.1251.GA.D4	455	210	45	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



A

B

9x2,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
127.15	127.1501.GA.D4	R483/R505.5	165/230	43	33	-	-	●	-

A

B

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
127.17	127.1702.GA.04	600	320	60	60	-	●	-	●
	127.1701.GA.04	635	320	60	60	-	●	-	●

A

B

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
127.22	127.2201.GA.04	600	270	-	60	●	-	●	-
	127.2252.GA.04	600	270	-	60	●	-	●	●
	127.2251.GA.04	680	270	-	60	●	-	●	●

A

B

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
127.23	127.2351.GA.04	700	270	-	95	●	-	●	●



 		 9x2,5																																													
			<table border="1"> <thead> <tr> <th>TYP</th> <th>REF.</th> <th>L1 (mm)</th> <th>L2 (mm)</th> <th>L3 (mm)</th> <th>L4 (mm)</th> <th>I</th> <th>O</th> <th>D</th> <th>▲</th> </tr> </thead> <tbody> <tr> <td rowspan="4">127.26</td> <td>127.2601.GA.*4 (*=V/D)</td> <td>375</td> <td>210</td> <td>45</td> <td>60</td> <td>●</td> <td>-</td> <td>●</td> <td>-</td> </tr> <tr> <td>127.2651.GA.D4</td> <td>420</td> <td>210</td> <td>45</td> <td>60</td> <td>-</td> <td>-</td> <td>●</td> <td>●</td> </tr> <tr> <td>127.2602.GA.*4 (*=V/D)</td> <td>435</td> <td>210</td> <td>45</td> <td>60</td> <td>●</td> <td>-</td> <td>●</td> <td>-</td> </tr> <tr> <td>127.2652.GA.D4</td> <td>480</td> <td>210</td> <td>45</td> <td>60</td> <td>-</td> <td>-</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲	127.26	127.2601.GA.*4 (*=V/D)	375	210	45	60	●	-	●	-	127.2651.GA.D4	420	210	45	60	-	-	●	●	127.2602.GA.*4 (*=V/D)	435	210	45	60	●	-	●	-	127.2652.GA.D4	480	210	45	60	-
TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲																																						
127.26	127.2601.GA.*4 (*=V/D)	375	210	45	60	●	-	●	-																																						
	127.2651.GA.D4	420	210	45	60	-	-	●	●																																						
	127.2602.GA.*4 (*=V/D)	435	210	45	60	●	-	●	-																																						
	127.2652.GA.D4	480	210	45	60	-	-	●	●																																						

 		 Ø5 (2x)																																																																								
			<table border="1"> <thead> <tr> <th>TYP</th> <th>REF.</th> <th>L1 (mm)</th> <th>L2 (mm)</th> <th>L3 (mm)</th> <th>L4 (mm)</th> <th>I</th> <th>O</th> <th>D</th> <th>▲</th> </tr> </thead> <tbody> <tr> <td rowspan="7">128.02</td> <td>128.0201.GA.04</td> <td>700</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0204.GA.04</td> <td>750</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0205.GA.04</td> <td>800</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0206.GA.04</td> <td>850</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0207.GA.04</td> <td>900</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0209.GA.04</td> <td>1000</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0210.GA.04</td> <td>820</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> </tbody> </table>	TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲	128.02	128.0201.GA.04	700	270	-	60	-	●	-	●	128.0204.GA.04	750	270	-	60	-	●	-	●	128.0205.GA.04	800	270	-	60	-	●	-	●	128.0206.GA.04	850	270	-	60	-	●	-	●	128.0207.GA.04	900	270	-	60	-	●	-	●	128.0209.GA.04	1000	270	-	60	-	●	-	●	128.0210.GA.04	820	270	-	60	-
TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲																																																																	
128.02	128.0201.GA.04	700	270	-	60	-	●	-	●																																																																	
	128.0204.GA.04	750	270	-	60	-	●	-	●																																																																	
	128.0205.GA.04	800	270	-	60	-	●	-	●																																																																	
	128.0206.GA.04	850	270	-	60	-	●	-	●																																																																	
	128.0207.GA.04	900	270	-	60	-	●	-	●																																																																	
	128.0209.GA.04	1000	270	-	60	-	●	-	●																																																																	
	128.0210.GA.04	820	270	-	60	-	●	-	●																																																																	

 		 26,5																																													
			<table border="1"> <thead> <tr> <th>TYP</th> <th>REF.</th> <th>L1 (mm)</th> <th>L2 (mm)</th> <th>L3 (mm)</th> <th>L4 (mm)</th> <th>I</th> <th>O</th> <th>D</th> <th>▲</th> </tr> </thead> <tbody> <tr> <td rowspan="4">128.03</td> <td>128.0303.GA.04</td> <td>700</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0305.GA.04</td> <td>800</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0307.GA.04</td> <td>900</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> <tr> <td>128.0309.GA.04</td> <td>1000</td> <td>270</td> <td>-</td> <td>60</td> <td>-</td> <td>●</td> <td>-</td> <td>●</td> </tr> </tbody> </table>	TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲	128.03	128.0303.GA.04	700	270	-	60	-	●	-	●	128.0305.GA.04	800	270	-	60	-	●	-	●	128.0307.GA.04	900	270	-	60	-	●	-	●	128.0309.GA.04	1000	270	-	60	-
TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲																																						
128.03	128.0303.GA.04	700	270	-	60	-	●	-	●																																						
	128.0305.GA.04	800	270	-	60	-	●	-	●																																						
	128.0307.GA.04	900	270	-	60	-	●	-	●																																						
	128.0309.GA.04	1000	270	-	60	-	●	-	●																																						



<p>A</p> <p>M8</p>	<p>B</p> <p>M8</p>					<p>Ø5 (2x)</p>			
		<p>TYP</p> <p>128.04</p>	<p>REF.</p> <p>128.0402.GA.04</p> <p>128.0403.GA.04</p> <p>128.0405.GA.04</p> <p>128.0406.GA.04</p>	<p>L1 (mm)</p> <p>600</p> <p>650</p> <p>700</p> <p>750</p>	<p>L2 (mm)</p> <p>270</p> <p>270</p> <p>270</p> <p>270</p>	<p>L3 (mm)</p> <p>10</p> <p>10</p> <p>10</p> <p>10</p>	<p>L4 (mm)</p> <p>60</p> <p>60</p> <p>60</p> <p>60</p>	<p>I</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>	<p>O</p> <p>●</p> <p>●</p> <p>●</p> <p>●</p>

<p>A</p> <p>M8</p>	<p>B</p> <p>M8</p>					<p>26,5</p>			
		<p>TYP</p> <p>128.05</p>	<p>REF.</p> <p>128.0503.GA.04</p> <p>128.0504.GA.04</p> <p>128.0505.GA.04</p> <p>128.0510.GA.04</p> <p>128.0506.GA.04</p> <p>128.0507.GA.04</p> <p>128.0508.GA.04</p> <p>128.0509.GA.04</p>	<p>L1 (mm)</p> <p>700</p> <p>750</p> <p>800</p> <p>820</p> <p>850</p> <p>900</p> <p>950</p> <p>1000</p>	<p>L2 (mm)</p> <p>270</p> <p>270</p> <p>270</p> <p>270</p> <p>270</p> <p>270</p> <p>270</p>	<p>L3 (mm)</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>	<p>L4 (mm)</p> <p>60</p> <p>60</p> <p>60</p> <p>60</p> <p>60</p> <p>60</p> <p>60</p>	<p>I</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>	<p>O</p> <p>●</p> <p>●</p> <p>●</p> <p>●</p> <p>●</p> <p>●</p> <p>●</p>

<p>A</p> <p>M8</p>	<p>B</p> <p>M8</p>					<p>26,5</p>			
		<p>TYP</p> <p>128.06</p>	<p>REF.</p> <p>128.0604.GA.04</p> <p>128.0605.GA.04</p> <p>128.0606.GA.04</p>	<p>L1 (mm)</p> <p>650</p> <p>700</p> <p>750</p>	<p>L2 (mm)</p> <p>270</p> <p>270</p> <p>270</p>	<p>L3 (mm)</p> <p>-</p> <p>-</p> <p>-</p>	<p>L4 (mm)</p> <p>60</p> <p>60</p> <p>60</p>	<p>I</p> <p>-</p> <p>-</p> <p>-</p>	<p>O</p> <p>●</p> <p>●</p> <p>●</p>



 		 26,5						
			TYP 128.08					
REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.0803.GA.04	600	270	-	60	-	●	-	●
128.0804.GA.04	650	270	-	60	-	●	-	●
128.0805.GA.04	700	270	-	60	-	●	-	●
128.0808.GA.04	750	270	-	60	-	●	-	●

 		 26,5						
			TYP 128.09					
REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.0901.GA.04	1070	348/270	-	60	●	-	●	●
128.0910.GA.04	1070	348/270	-	60	●	-	●	● (*)

(*) - Surtidor extra opcional - Optional extra nozzle - Gicleur optionnel extra - Zusätzliche Spritzdüse auf Anfrage

 		 16,5						
			TYP 128.10					
REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.1001.GA.04	800	270	85	60	-	●	-	●
128.1002.GA.04	950	270	148	60	-	●	-	●

 		 26,5						
			TYP 128.12					
REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.1201.GA.04	1000	400	-	60	-	●	-	●



A

M8

26,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.13	128.1301.GA.04	1000	270	-	60	-	●	-	●

A

M8

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.16	128.1602.GA.04	650	270	-	60	●	-	●	●
	128.1601.GA.04	750	270	-	60	●	-	●	●

A

M10

Ø5 (2x)

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.18	128.1801.GA.04	600	400	-	60	-	●	-	●

A

M8

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.19	128.1901.GA.0* (* = 1/6)	500	270	-	60	-	●	-	-
	128.1951.GA.0* (* = 1/6)	500	270	-	60	-	●	-	●
	128.1902.GA.0* (* = 1/6)	600	270	-	60	-	●	-	-
	128.1952.GA.0* (* = 1/6)	600	270	-	60	-	●	-	●
	128.1903.GA.0* (* = 1/6)	650	270	-	60	-	●	-	-
	128.1953.GA.0* (* = 1/6)	650	270	-	60	-	●	-	●
	128.1905.GA.0* (* = 1/6)	700	270	-	60	-	●	-	-
	128.1955.GA.0* (* = 1/6)	700	270	-	60	-	●	-	●

1 = Acabado en acero inoxidable - Stainless steel finish - Finition en acier inoxydable - Oberfläche Edelstahl
6 = Acabado en acero inoxidable negro - Stainless steel black finish - Finition en acier inoxydable noir - Oberfläche Edelstahl, schwarz



A

M10

B

M10

16,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)				
128.20	128.2052.GA.04	710	400	-	60	●	-	●	●
	128.2001.GA.04	900	400	-	60	●	-	●	-
	128.2051.GA.04	900	400	-	60	●	-	●	●

A

M10

B

M10

26,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.21	128.2102.GA.04	750	400	-	60	-	●	-	●
	128.2107.GA.04	800	400	-	60	-	●	-	●
	128.2101.GA.04	900	400	-	60	-	●	-	●

A

M8

B

M8

26,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.23	128.2301.GA.04	850	270	-	85	-	●	-	●

A

Z=70
Ø16

B

Z=70
Ø16

26,5

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	
128.24	128.2401.GA.04	900	410	-	90	-	●	-	●
	128.2402.GA.04	1000	410	-	90	-	●	-	●



A

B

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.26	128.2601.GA.04	800	270	-	60	-	●	-	●

A

B

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.27	128.2701.GA.I4	830	A-400 / B-420	-	60	●	-	-	●
	128.2702.GA.I4	900	A-400 / B-420	-	60	●	-	-	●

A

B

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.28	128.2801.GA.04	1000	400	-	65	-	●	-	●

A

B

TYP	REF.	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	I	O	D	▲
128.29	128.2901.GA.04	1100	A-348 / B-270	-	60	●	-	●	●

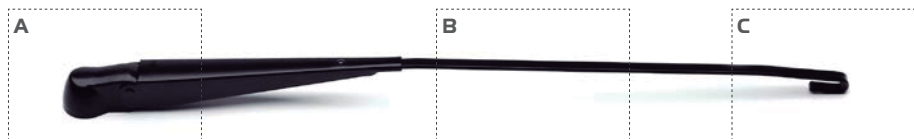


BRAZOS LIMPIAPARABRISAS
WINDSHIELD WIPER ARMS
BRAS ESSUIE-GLACE
SCHEIBENWISCHERARME

DOGA



TYPS DOGA



TYP	A	B	C
I20/00	M10	bar 12x4	12x4
I20/02	Ø12	bar 9x3	9x3
I20/05	Ø6	bar 8x2	8x2
I20/09	M8	bar 9x3	9x3
I20/23*	M6	bar 9x3	9x3
I20/25*	M6	bar 7x2,2	7x2,2
I20/27*	Ø6	<i>for special applications</i>	
I20/30	M8	bar 9x4	9x4
I20/32	M12	tube 24,5x12	26,5
I20/35	Ø12	bar 10x4	16,5
I20/41	M8	bar 9x3	9x3
I20/42*	M6	bar 9x3	9x3
I20/45	M8	bar 9x3	9x3
I20/48	M10	bar 9x3	9x3
I20/49	Ø16	bar 10x4	16,5
I20/50	M8	bar 9x3	9x3
I20/52	M8	bar 9x3	9x3
I20/53	M8	bar 9x3	9x3
I20/57	M10	bar 12x4	12x4

TYP	A	B	C
I20/58	M8	bar 9x3	9x3
I20/63*	M6	bar 9x3	9x3
I20/65	M8	bar 9x3	9x3
I20/67	M10	tube (x2) Ø10	26,5
I20/70	M8	bar 7,1x2,5	7,1x2,5
I20/71*	M8	bar 9x2,5	9x2,5
I20/87	M8	bar 9x3	9x3
I20/88	M8	bar 10x4	16,5
I20/89	M8	bar 9x3	9x3
I20/91	M8	bar 9x3	9x3
I25/00	M8	bar 9x4	9x4/10
I25/01	M8	bar 9x4	9x4/10
I25/02	M8	bar 9x4	9x4/10
I25/03	M8	bar 9x3	9x3
I25/07*	M6	bar 9x3	9x3
I25/08*	M6	<i>for special applications</i>	
I25/16	M8	bar 9x4	9x4/10
I25/17	M8	bar 12x4	12x4
I25/89	M8	bar 9x3	9x3

* only for spare part



								 12x4
	TYP 120.00	REF. 120.0057.GA.*4 (*=I/R/D) 120.0053.GA.*4 (*=I/R/D) 120.0051.GA.*4 (*=I/R/D) 120.0056.GA.*4 (*=I/R/D)	L1 (mm) 580 670 680 750	L2 (mm) 400 400 400 400	I ● (30°) ● (20°) ● (16°) ● (30°)	R - - - -	D ● (30°) ● (20°) ● (16°) ● (30°)	

								 9x3
	TYP 120.02	REF. 120.0251.GA.R4	L1 (mm) 500	L2 (mm) 210	I -	R ●	D -	

								 8x2
	TYP 120.05	REF. 120.0503.GA.R4 120.0505.GA.R4 120.0508.GA.R4 120.0510.GA.R4	L1 (mm) 280 340 390 420	L2 (mm) 163 163 163 163	I - - - -	R ● ● ● ●	D - - - -	

								 9x3
	TYP 120.09	REF. 120.0901.GA.R4 120.0910.GA.R4	L1 (mm) 340 - 420 420 - 500	L2 (mm) 255 255	I - -	R ● ●	D - -	

EKTENSIBLES
 cada - each - chaque - je
 10mm

* KIT 120.5054.39.00

								 9x4
	TYP 120.30	REF. 120.3002.GA.*4 (*=I/R/D) 120.3001.GA.*4 (*=I/R/D)	L1 (mm) 434 450,5	L2 (mm) 255 255	I ● ●	R - -	D ● ●	



									 26,5
	TYP 120.32	REF.	L1 (mm)	L2 (mm)	H	I	R	D	
	120.3201.GA.D4	750	420	304	-	-	● (40°)	●	
	120.3202.GA.I4	750	420	178	● (23°)	-	-	●	
	120.3203.GA.D4	800	420	142	-	-	● (18°)	●	
	120.3204.GA.I4	800	420	239	● (30°)	-	-	●	

									 16,5
	TYP 120.35	REF.	L1 (mm)	L2 (mm)	I	R	D		
	120.3558.GA.R4	500	270	-	●	-	-	●	
	120.3552.GA.*4 (*=I/R/D)	580	270	● (12°)	●	● (12°)	-	●	
	120.3555.GA.D4	600	270	-	-	● (23°)	-	●	
	120.3556.GA.I4	600	270	● (23°)	-	-	-	●	
	120.3561.GA.*4 (*=I/R/D)	630	270	● (18°)	-	● (18°)	-	●	
	120.3560.GA.*4 (*=I/R/D)	700	270	● (27°)	-	● (27°)	-	●	

									 9x3
	TYP 120.41	REF.	L1 (mm)	L2 (mm)	I	R	D		
	120.4102.GA.R4	486	166	-	●	-	-	-	
	120.4101.GA.I4	522	166	● (4°)	-	-	-	-	

									 9x3
	TYP 120.45	REF.	L1 (mm)	L2 (mm)	I	R	D		
	120.4501.GA.R6	340 - 420	210	-	●	-	-	-	
	120.4510.GA.R6	430 - 500	210	-	●	-	-	-	

EXTENSIBLES
 cada - each - chaque - je
 10mm



 M10							 9x3
	TYP I20.48	REF. 120.4851.GA.*4 (*=I/R/D)	L1 (mm) 485	L2 (mm) 320	I ● (12°)	R -	

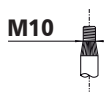



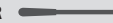
 Ø16	 Brazos alta resistencia - High-resistance arms - Bras de haute résistance - Besonders robuste Wischarme						 16,5
	TYP I20.49	REF. 120.4901.GA.R4 120.4902.GA.R4	L1 (mm) 580 665	L2 (mm) 258 258	I - -	R ● ●	

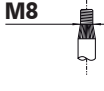

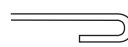


 M8	 SUZUKI JIMNY						 9x3
	TYP I20.50	REF. 120.5002.GA.*4 (*=I/R/D) 120.5001.GA.*4 (*=I/R/D)	L1 (mm) 432 490	L2 (mm) 178 178	I ● (9°) ● (7°)	R - -	


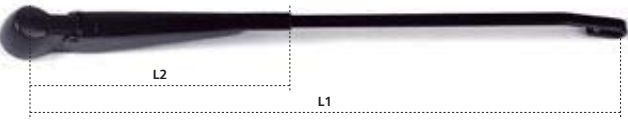



 M8	 Para ventanas abatibles - For folding windshields - Pour glaces rabattables - Für schwenkbare Fenster JOHN DEERE						 9x3
	TYP I20.52	REF. 120.5201.GA.R4	L1 (mm) 463	L2 (mm) 227	I -	R ●	

 M8							 9x3
	TYP I20.53	REF. 120.5302.GA.*4 (*=I/R/D) 120.5301.GA.I4	L1 (mm) 476 490,5	L2 (mm) 210 210	I ● (24°) ● (24°)	R - -	


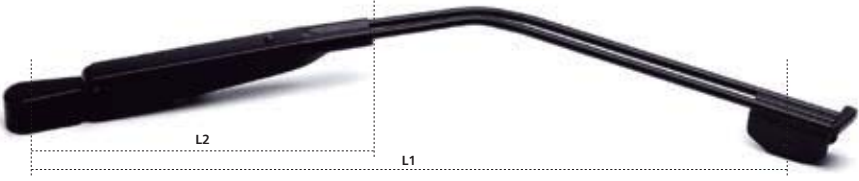

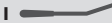












 M10							 12x4
	TYP I20.57	REF. 120.5751.GA.I4	L1 (mm) 628	L2 (mm) 320	I  ● (30°)	R  -	








 M8	 <p>Para ventanas abatibles - For folding windshields - Pour glaces rabattables - Für schwenkbare Fenster</p>						 9x3
	TYP I20.58	REF. 120.5802.GA.R4 120.5801.GA.R4 120.5803.GA.R4	L1 (mm) 310 370 464	L2 (mm) 230 230 230	I  - - -	R  ● ● ●	

 M8	 <p style="text-align: right;"><i>SUZUKI ANNIBAL</i></p>						 9x3
	TYP I20.65	REF. 120.6523.GA.R4 120.6508.GA.R4 120.6516.GA.R4 120.6515.GA.D4 120.6519.GA.D4 120.6520.GA.I4 120.6522.GA.*4 (*=I/R/D) 120.6526.GA.R4 120.6524.GA.*4 (*=I/R/D) 120.6527.GA.R4 120.6513.GA.R4 120.6501.GA.R4 120.6507.GA.R4 120.6503.GA.*4 (*=I/R/D) 120.6505.GA.R4 120.6509.GA.R4 120.6504.GA.D4 120.6502.GA.R4 120.6528.GA.D4 120.6517.GA.I4 120.6521.GA.I4	L1 (mm) 275 290 290 320 320 340 350 350 370 372 372 380 385 405 420 450 452 465 500 500 500	L2 (mm) 166	I  - - - - ● (20°) ● (17°) - ● (19°) - - - ● (36°) ● (12°)	R  ● ● ● - - - ● - ● ● ● ● ● ● ● ● ● - - -	



M10 								 26,5
TYP I20.67	REF.	L1 (mm)	L2 (mm)	H	I 	R 	D 	
	120.6706.GA.D4	650	348	297	-	-	● (40°)	●
	120.6707.GA.*4 (*=I/R/D)	650	348	180	● (23°)	-	● (23°)	●
	120.6703.GA.R4	675	348		-	●	-	●
	120.6709.GA.D4	675	348	103	-	-	● (15°)	●
	120.6710.GA.I4	675	348	154	● (20°)	-	-	●
	120.6708.GA.R4	725	348	-	-	●	-	●
	120.6701.GA.*4 (*=I/R/D)	750	348	297	● (40°)	-	● (40°)	●
	120.6702.GA.*4 (*=I/R/D)	750	348	182	● (23°)	-	● (23°)	●
	120.6705.GA.D4	750	348	142	-	-	● (18°)	●

M8 								 7,2x2,5
TYP I20.70	REF.	L1 (mm)	L2 (mm)	I 	R 	D 		
	120.7002.GA.R4	210	166	-	●	-	-	

M8 								 9x2,5
TYP I20.87	REF.	L1 (mm)	L2 (mm)	I 	R 	D 		
	120.8703.GA.I4	445	320	● (20°)	-	-	-	
	120.8701.GA.*4 (*=I/R/D)	460	320	● (20°)	-	● (20°)	-	
	120.8702.GA.I4	505	320	● (12°)	-	-	-	



TYP	REF.	L1 (mm)	L2 (mm)	I	R	D	
	120.88	120.8806.GA.R4	445	270	-	●	-
	120.8852.GA.*4 (*=I/R/D)	445	270	● (16°)	●	-	●
	120.8801.GA.R4	500	270	-	●	-	-
	120.8851.GA.I4	500	270	● (22°)	-	-	●
	120.8855.GA.I4	500	270	● (15°)	-	-	●
	120.8802.GA.R4	530	270	-	●	-	●
	120.8804.GA.I4	540	270	● (20°)	-	-	-
	120.8856.GA.I4	560	270	● (29°)	-	-	●
	120.8807.GA.D4	600	270	-	-	● (23°)	-
	120.8853.GA.*4 (*=I/R/D)	600	270	● (23°)	-	● (23°)	●
	120.8854.GA.I4	600	270	● (27°)	-	-	●
	120.8858.GA.I4	630	270	● (18°)	-	-	●

TYP	REF.	L1 (mm)	L2 (mm)	I	R	D	
	120.89	120.8923.GA.R4	375	210	-	●	-
	120.8916.GA.R4	380	210	-	●	-	●
	120.8917.GA.R4	380	210	-	●	-	●
	120.8902.GA.I4	400	210	● (15°)	-	-	-
	120.8907.GA.R4	400	210	-	●	-	●
	120.8914.GA.R4	400	210	-	●	-	●
	120.8918.GA.R4	400	210	-	●	-	●
	120.8925.GA.R4	410	210	-	●	-	-
	120.8926.GA.R4	425	210	-	●	-	-
	120.8922.GA.D4	440	210	-	-	● (15°)	-
	120.8905.GA.*4 (*=I/R/D)	450	210	-	●	● (15°)	-
	120.8912.GA.*4 (*=I/R/D)	450	210	● (15°)	-	● (15°)	●
	120.8927.GA.I4	450	210	● (36°)	-	-	-
	120.8924.GA.R4	470	210	-	●	-	-
	120.8910.GA.R4	480	210	-	●	-	-
	120.8911.GA.D4	480	210	-	-	● (10°)	●
	120.8901.GA.R4	500	210	-	●	-	-
	120.8906.GA.R4	500	210	-	●	-	●
	120.8928.GA.D4	500	210	-	-	● (15°)	-
	120.8930.GA.I4	500	210	● (10°)	-	-	●
	120.8903.GA.I4	520	210	● (6°)	-	-	-
	120.8915.GA.R4	535	210	-	●	-	●



							 9x3
	SUZUKI VITARA						
TYP I20.91	REF. 120.9101.GA.*4 (*=I/R/D)	L1 (mm) 450	L2 (mm) 218	I ● (38°)	R -	D ● (38°)	 -

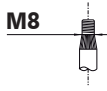


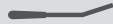
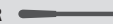
							 9x4 / 10mm
	NISSAN ATLEON						
TYP I25.00	REF. 125.0051.GA.I4	L1 (mm) 474	L2 (mm) 360	I ●	R -	D -	 ●

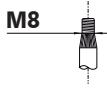
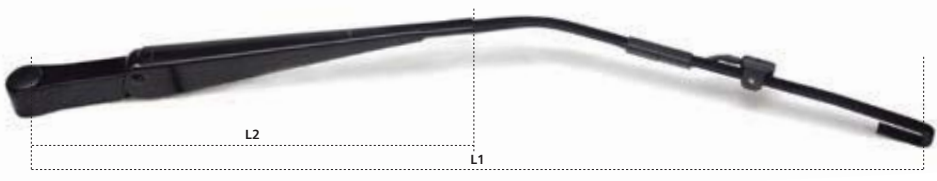



							 9x4 / 10mm
	NISSAN ATLEON						
TYP I25.01	REF. 125.0151.GA.I4	L1 (mm) 431	L2 (mm) 320	I ●	R -	D -	 ●

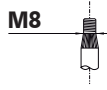
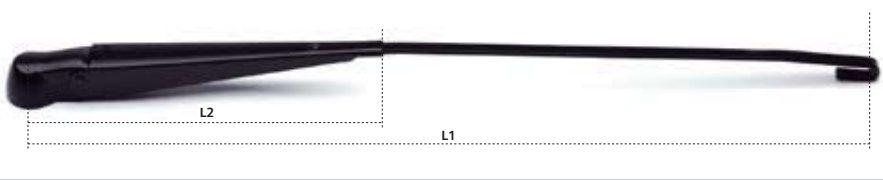
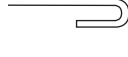

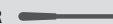
							 9x4 / 10mm	
	TYP I25.02	REF. 125.0251.GA.*4 (*=I/R/D)	L1 (mm) 590	L2 (mm) 260	I ●	R -		D ●
		125.0201.GA.R4	600	260	-	●		-

							 9x4
	MITSUBISHI CANTER						
	TYP I25.03	REF. 125.0351.GA.I4	L1 (mm) 457	L2 (mm) 210	I ● (17°)	R -	
	125.0352.GA.*4 (*=I/R/D)	500	210	● (17°)	-	● (17°)	



							 9x4 / 10mm
	TYP	REF.	L1 (mm)	L2 (mm)	I 	R 	
125.16	125.1601.GA.*4 (*=I/R/D)	500	320	●	-	●	●
	125.1602.GA.*4 (*=I/R/D)	700	320	●	-	●	●

							 12x4
	TYP	REF.	L1 (mm)	L2 (mm)	I 	R 	
125.17	125.1701.GA.*4 (*=I/R/D)	670	400	● (20°)	-	● (20°)	●

							 9x3
	TYP	REF.	L1 (mm)	L2 (mm)	I 	R 	
125.89	125.8901.GA.D4	550	210	-	-	● (15°)	●
	125.8902.GA.R4	500	210	-	●	-	-
	125.8903.GA.*4 (*=I/R/D)	535	210	● (15°)	-	● (15°)	●
	125.8904.GA.D4	500	210	-	-	● (15°)	●
	125.8905.GA.D4	550	210	-	-	● (30°)	-

* mm / in	VARILLA STYLE TIGE STAB	E 5,4 x 2 F 7,2 x 2,5		7 x 2,2	9 x 2,5 9 x 3	9 x 4	V 9 x 4 / 10 V1 9 x 4 / 15	12 x 4	A B C 8 x 2 8 x 2,5	16,5	26,5
		E F	C	D O1*	S O1*	V V1	T	K	4	A1	
280 / 11	134.0628.GA.04 - E 134.0728.GA.04 - F		134.0228.GA.04	134.0328.GA.04					134.1628.GA.04 - A/B		
300 / 12	134.0630.GA.04 - E 134.0730.GA.04 - F		134.0230.GA.04	134.0330.GA.04					134.1630.GA.04 - A/B		
330 / 13	134.0733.GA.04 - F		134.0233.GA.04	134.0333.GA.04					134.1633.GA.04 - A/B		
350 / 14	134.0735.GA.04 - F		134.0235.GA.04	134.0335.GA.04					134.1635.GA.04 - A/B		
380 / 15	133.0738.GA.04 - F		134.0238.GA.04	133.0338.GA.04					133.1638.GA.04 - A/B		
400 / 16	133.0740.GA.04 - F		134.0240.GA.04	133.0340.GA.04 130.1540.00.04*	130.1540.00.04*				133.1640.GA.04 - A/B/C		
450 / 18	133.0745.GA.04 - F			133.0345.GA.04 130.1545.00.04*	133.3045.GA.04 130.1545.00.04*				133.1645.GA.04 - B/C		
480 / 19				133.0348.GA.04 130.1548.00.04*	133.3048.GA.04 130.1548.00.04*				133.1648.GA.04 - B		
500 / 20				133.0350.GA.04 130.1550.00.04*	133.3050.GA.04 130.1550.00.04*	133.1150.GA.04 - V			133.1650.GA.04 - B/C	136.2050.GA.04	
530 / 21				133.0353.GA.04 130.1553.00.04*	133.3053.GA.04 130.1553.00.04*	133.1153.GA.04 - V			133.1653.GA.04 - B		
550 / 22				133.0355.GA.04 130.1555.00.04*	133.3055.GA.04 130.1555.00.04*	133.1155.GA.04 - V			133.1655.GA.04 - B		
560 / 22								136.2256.GA.04			
600 / 24				133.0360.GA.04 130.1560.00.04*	133.3060.GA.04 130.1560.00.04*	133.1160.GA.04 - V 136.1460.GA.04 - V1	136.2260.GA.04	133.1760.GA.04 - C	136.2060.GA.04		
650 / 26						133.1165.GA.04 - V 136.1465.GA.04 - V1	136.2265.GA.04	136.1765.GA.04 - C	136.2065.GA.04		
700 / 28						133.1470.GA.04 - V1	133.2270.GA.04	133.1770.GA.04 - C	133.2070.GA.04		
800 / 31							136.2280.GA.04		136.8880.GA.04		136.2080.GA.04 136.8280.GA.04
900 / 35											136.2090.GA.04 136.8290.GA.04
1000 / 39											136.2010.GA.04 136.8210.GA.04
1180 / 46											136.2011.GA.04
1360 / 54											136.2013.GA.04

