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[www.magnetimarelli-checkstar.com](http://www.magnetimarelli-checkstar.com)



# 2011

Spazzole tergicristallo  
Wiper blades  
Wischerblätter  
Balais d'essuie-glace  
Escobillas limpiaparabrisas  
Escovas de limpa-vidros  
βούρτσες υαλοκαθαριστήρα  
Piora wycieraczki szyby  
Щетки-стеклоочистители  
Ön cam silcekleri

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# professional TRUCK

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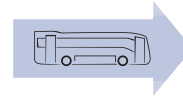
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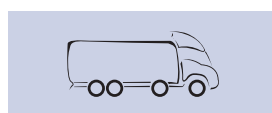
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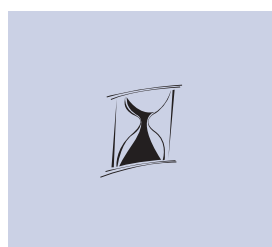
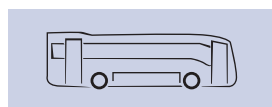


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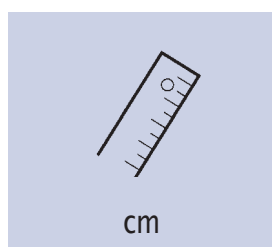
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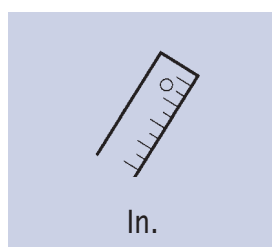
Costruttore e modello  
 Make and model  
 Hersteller und Modell  
 Modèle  
 Constructor y modelo  
 Montadora e modelo  
 Μάρκα και οντέλο  
 Producent i model  
 Сделано и смоделировано  
 Üretici ve model



Anno di produzione  
 Manufacturing year  
 Baujahr  
 Date de fabrication  
 Año de fabricación  
 Ano de fabricação  
 Έτος παραγωγής  
 Rok produkcji  
 Год изготовления  
 Üretim yılı



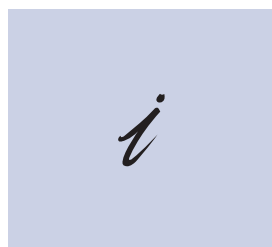
Lunghezza (cm)  
 Length (cm)  
 Länge (cm)  
 Longueur (cm)  
 Longitud (cm)  
 Comprimento (cm)  
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 Długość (cm)  
 Длина (cm)  
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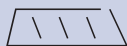
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 Length (In.)  
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 Magneti Marelli references  
 Magneti Marelli Nr.  
 Références Magneti Marelli  
 Códigos Magneti Marelli  
 Códigos Magneti Marelli  
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3 Wischblätter  
3 Balais  
3 Escobillas  
3 palhetas de limpador  
3 υαλοκαθαριστήρες  
3 rózra wycieraczek  
три стеклоочистителя  
3 süpürgelik



Connessione a gancio  
Hook fitting  
Haken-anchluss  
Connexion crochet  
Conexión tipo gancho  
Conexão em gancho  
Σύνδεση με γατζο  
Мосowanie typu hak  
Крепление по типу «крючок»  
Çengel bağlantı



Spazzole per parabrezza inferiore  
Lower Screen Wiper Blade  
Wischblatt für untere scheinbe  
Balai inférieur  
Escobilla inferior  
Palhetas para para-brisa inferior  
Υαλοκαθαριστήρας Κάτω  
Rózra wycieraczki szyby dolnej  
нижняя щетка стеклоочистителя  
Alt cam silecek süpürgeliği



Spazzole per parabrezza superiore  
Upper Screen Wiper Blade (Top)  
Wischblatt für obere Scheibe  
Balai supérieur  
Escobilla superior  
Palhetas para para-brisa superior  
Υαλοκαθαριστήρας Άνω  
Rózra wycieraczki szyby górnej  
верхняя щетка стеклоочистителя  
(верх)  
Üst cam silecek süpürgeliği



Lato guidatore  
Driver side  
Fahrerseite  
Côté chauffeur  
Lado conductor  
Lado condutor  
Πλευρά οδηγού  
Miejsce kierowcy  
Сторона водителя  
Yan şoför



Lato passeggero  
Passenger side  
Beifahrerseite  
Côté passager  
Lato pasajero  
Lato passageiro  
Πλευρά συνοδηγού  
Miejsce pasazera  
Сторона пассажира  
Yan yolcu



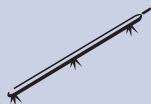
Cabina arretrata  
Cab behind engine (tractor unit with long hood)  
Haubenfahrzeug  
Modèle à cabine avancée  
Cabina retrasada  
Cabine retraída  
Φορτηγό με μούρη  
Kabina za silnikiem (ciągniki siodłowe z długą maską)  
кабина за двигателем (трактор с удлиненным капотом)  
Motor arka kabin



Braccio a sella  
Saddle fitting  
Sattelbefestigung  
Bras à selle  
Braço tipo silla  
Braço com sela  
Μπράτσο με σέλα  
Мосowanie typu siodło  
седловое крепление  
Eyer bağılantı



A due piani  
Double Deck  
Doppeldecker  
Bus à deux étages  
Doble piso  
Em dois planos  
Δύο Επίπεδα  
Autobus dwupokładowy  
два этажа  
Çift katlı



Spazzola con ugelli a fettuccia  
Clipped spray bar  
Geklippte sprühleiste  
Balai avec rompe d'arrosage  
Barra con clips y difusor de agua  
Palheta com bicos em fita  
Υαλοκαθαριστήρας με ψεκασμό  
Dysza spryskiwacza do montażu  
na wycieraczce  
стеклоомыватель  
Klipsli sprej çubuğu



Braccio con spruzzatori  
Wiper with spray nozzel (washer)  
Arm mit Waschdüsen  
Bras avec d'arrosage  
Braço con difusor de agua  
Braço com esguichadores  
Μπράτσο με μπεκάκι  
Wycieraczka z dyszą spryskiwacza  
стеклоочиститель с форсункой омывателя  
Fiskiyeli silecek

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*Caratteristiche generali*  
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*Allgemeine Merkmale*  
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*Características gerais*  
*Γενικά χαρακτηριστικά*  
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*Общие характеристики*  
*Genel özellikler*



Le spazzole tergicristallo – The wiper blades – Die Wischerblätter – Les balais d'essuie-glace  
 Las escobillas limpiaparabrisas – As escovas de limpa-vidros – Οι βούρτσες υαλοκαθαριστήρα  
 Piora wycieraczkі szyby – Щетки-стеклоочистители – Ön cam silcekleri

I

Le spazzole Magneti Marelli soddisfano gli standard qualitativi richiesti dal primo impianto. La produzione è sottoposta a rigorosi test e collaudi, come ad esempio l'esposizione per 800 ore alla nebbia salina, e per 500 ore agli UVA, che ne assicurano la totale affidabilità.

La gomma naturale viene trattata con processo di brominazione che ne esalta le caratteristiche di resistenza e durata. Il bromo infatti la rende più resistente ai raggi UVA ed alle escursioni termiche.

Le spazzole Magneti Marelli grazie a questi accorgimenti sono più silenziose, resistenti e durature. La gamma offerta da Magneti Marelli comprende spazzole convenzionali auto, veicoli commerciali ed industriali, refill e le spazzole flat, sempre più utilizzate sulle vetture di nuova produzione

Spazzole Tradizionali (metalloplastiche) – Professional

– Ponticelli in acciaio e resina per una maggiore robustezza e durata del prodotto

– Verniciatura con polvere poliestere che rende la spazzola

più resistente alla decolorazione dovuta all'esposizione ai raggi UVA

– Connettore premontato CH31 per agevolare il montaggio sulla gran

parte delle applicazioni

– Spoiler con effetto deportante per contrastare l'effetto air lift: la spazzola rimane perfettamente aderente al parabrezza anche alle alte velocità.

– Fino a otto punti di pressione per una perfetta aderenza della spazzola al parabrezza.

Spazzole Flat (interamente in gomma) – Kit flat & Professional ONE

– Qualità e tecnologia OE

– Refill con profilo «a pagoda» per ridurre l'usura del tergente

– Matrice universale termosaldata con le vertebre e la gomma per dare solidità e robustezza all'elemento tergente

– Presenza di connettori Side lock (Bosch), Top Lock (SWF Valeo),

Baionet (Champion), Dolphin (Renault) e Retrofit (braccio "U") ,

che rendono la spazzola universale, adatta a sostituire sia tutti i

tipi di spazzole flat montate in primo impianto sulle vetture di ultima

generazione, che le spazzole tradizionali.

– Gamma professional ONE: 18 codici (14 lunghezze) per una copertura

di oltre il 95% del circolante Europeo.

GB

Magneti Marelli wipers satisfy the quality standards required for initial installation.

Production undergoes rigorous trials and tests, as for example exposure to 800 hours of saline fog, to 500 hours of UVA, which guarantee their total reliability. Natural rubber is treated with a process of bromination, which enhances its durability and resistance.

In fact bromide makes it more resistant to UVA radiation as well as to extremes of temperature range.

Thanks to these improvements, Magneti Marelli wipers are more silent, tough and long lasting. The range offered by Magneti Marelli includes wipers for conventional cars, commercial and industrial vehicles, re-fills and flat wipers, ever more frequently used on new production vehicles.

Traditional Wipers (metal plastic) – Professional

– Jumper wires made in steel and resin to achieve a more long lasting and stronger product

– Covering with polyester dust to make the wiper more resistant to the fading effect produced by exposure to UVA radiation.

– Pre-fitted CH31 connector which eases assembly on most applications

– Spoiler with flattening effect to counter balance the air-lift effect: the wiper stays perfectly flush against the windscreen even at high speeds.

– Up to eight pressure points to achieve perfect adherence of the wiper to the windscreen

Flat Wipers (made entirely in rubber) – Flat kit & Professional ONE

– OE quality and technology

– Refill with a "Pagoda" profile to reduce the wear of cleaner head

– Heat soldered universal matrix with both vertebra and rubber to give solidity and strength to the cleaner head

– The use of Side lock connectors (Bosch), Top lock (SWF Valeo),

Bayonette (Champion), Dolphin (Renault) and retrofit ("U" arm), that

make the wiper universal, and suitable to substitute all types of flat wipers mounted on initial installation on latest generation vehicles as well as traditional wipers.

– The Professional ONE range: 18 codes (14 lengths) to cover over 95% of European vehicles currently on the road.

D

Die Scheibenwischer der Fa. Magneti Marelli erfüllen die geforderten Qualitätsstandards für die Erstausrüstung. Die Produktion unterliegt rigorosen

Tests und Abnahmen, wie zum Beispiel der Aussetzung für 800 Stunden in Salznebel, sowie für 500 Stunden unter UVA, wodurch absolute Zuverlässigkeit garantiert wird.

Das Naturgummi wird dem Prozess der Bromierung unterzogen, wodurch dessen Eigenschaften hinsichtlich Widerstandsfähigkeit und Lebensdauer hervorgehoben werden.

Dank des Broms wird es nämlich widerstandsfähiger und resistenter gegen UVA Strahlen, sowie gegen thermische Ausdehnungen.

Die Scheibenwischer der Fa. Magneti Marelli sind dank dieser Behandlung wesentlich leiser, widerstandsfähiger und langlebiger. Die von der Fa. Magneti Marelli angebotene Palette umfasst konventionelle Scheibenwischer für Kraftfahrzeuge, Nutzfahrzeuge und Lastkraftwagen, Ersatzscheibenwischerblätter (Refill), sowie die Scheibenwischerreihe „Flat“, welche immer mehr bei neuen Fahrzeugen eingesetzt werden.

Herkömmliche Scheibenwischer (Metallkunststoff) – Professional

– Haltestege aus Stahl und Kunststoff bieten höhere Robustheit und längere Lebensdauer des Produktes

– Beschichtung mit Polyesterpulver, wodurch die Scheibenwischer farbbeständiger gegen UVA Strahlen werden

– Der vormontierte Anschlussstecker CH31 erleichtert den Einbau beim größten

Teil der Anwendungen

– Andrucks spoiler um dem Luftwirbeleffekt entgegenzuwirken: Der Scheibenwischer bleibt auch bei hohen Geschwindigkeiten perfekt an der Windschutzscheibe anliegend.

– Bis zu acht Andruckpunkte garantieren einen perfekten Halt der Scheibenwischer an der Windschutzscheibe.

Scheibenwischer vom Typ Flat (komplett aus Gummi) – Set Flat & Professional ONE

– Qualität und Technik des OE (Originalherstellers)

– Nachfüllen „Refill“ mit «Pagodenprofil» um den Verschleiß des Wischers zu reduzieren

– Universelle Matrice heiß verschweißt zusammen mit den Rippen und dem Gummi um der Wischerlippe Festigkeit und Widerstandsfähigkeit zu geben

– Anschlussstücke vom Typ Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion),

Dolphin (Renault) und Nachrüstung/Retrofit ("U"-Arm) vorhanden, wodurch die Scheibenwischer universell einsetzbar werden, geeignet sämtliche Scheibenwischerarten,

sowohl vom Typ Flat, wie in der Erstausrüstung der Fahrzeuge der letzten Generation eingesetzt, als auch die herkömmlichen Scheibenwischer zu ersetzen.

– Reihe Professional ONE: 18 Codenummern (14 Längen) wodurch mehr als 95% des Fuhrparks in Europa abgedeckt wird.

## F

Les balais d'essuie-glaces Magneti Marelli répondent aux standards de qualité prescrits par la première installation.

La production est rigoureusement soumise à divers tests et contrôles fonctionnels, comme par exemple les 800 heures d'exposition en brouillard salin et les 500 heures aux rayons UVA, en vue de leur conférer une fiabilité absolue. Le caoutchouc naturel est traité par un processus de "bromination" pour en exalter les caractéristiques de résistance et de durée, le brome ayant la propriété de le rendre plus résistant aux rayons UVA et aux amplitudes thermiques. Grâce à toutes ces mesures, les balais Magneti Marelli sont plus silencieux, résistants et durables. La gamme offerte par Magneti Marelli comprend des balais conventionnels pour autos, véhicules commerciaux et industriels, refill et balais flat, de plus en plus utilisés sur les véhicules de nouvelle production

**Balais Traditionnels (métallo-plastique) – Professional**

- Pontets en acier et résine pour renforcer la robustesse et augmenter la durée du produit
- Peinture avec poudre polyester pour rendre le balai plus résistant à la décoloration causée par l'exposition aux rayons UVA

- Connecteur pré monté CH31 pour faciliter le montage sur la grande majorité des applications

- Béquet avec effet de déport pour contraster l'effet air lift: le balai reste en adhérence parfaite avec le pare-brise même à grande allure.
- Jusqu'à huit points de pression pour une adhérence totale du balai au pare-brise.

**Balais Flat (entièrement en caoutchouc) – Kit flat & Professional ONE**

- Qualité et technologie OE
- Refill avec profil «à pagode» pour réduire l'usure de l'essuie-glace
- Matrice universelle thermo soudée avec les vertèbres et de caoutchouc pour un balai d'essuie-glace plus solide et robuste
- Présence de connecteurs Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) et Retrofit (bras "U") , qui font de ce balai un élément universel pouvant remplacer tous les types de balais flat montés en première installation sur les voitures de la dernière génération et tous les balais du type traditionnel.
- Gamme professional ONE: 18 codes (14 longueurs) pour la couverture de plus de 95% du parc circulant en Europe.

## E

Las escobillas Magneti Marelli cumplen con todos los requisitos estándar de calidad requeridos para el montaje en la fábrica.

Toda la producción se somete a pruebas rigurosas, como, por ejemplo, la exposición durante 800 horas a la niebla salina y por 500 horas a los rayos ultravioleta, lo que garantiza una fiabilidad total. La goma natural se somete a un tratamiento de brominación, que lleva al máximo la resistencia y la duración. De hecho, el bromo la hace más resistente a los rayos ultravioleta y a los cambios de temperatura. Gracias a estas soluciones, las escobillas Magneti Marelli resultan más silenciosas, resistentes y duraderas.

La gama ofrecida por Magneti Marelli comprende escobillas convencionales para coches de turismo, vehículos comerciales e industriales, "refill" y las escobillas "flat", utilizadas cada vez más en los vehículos producidos en la actualidad.

**Escobillas Tradicionales (de metal y plástico) – Profesionales**

- Puente de acero y resina, para mayor solidez y duración del producto.
- Pintura con polvo poliéster, que aumenta la resistencia de la escobilla al descoloramiento provocado por la exposición a los rayos ultravioleta.
- Conector premontado CH31 para facilitar el montaje en la mayoría de las

aplicaciones.

- Spoiler con efecto deportante para contrarrestar el efecto conocido como "air lift": la escobilla permanece adherente al parabrisa incluso a velocidad elevada.
- Hasta ocho puntos de presión para una adherencia perfecta de la escobilla al parabrisas.

**Escobillas Flat (totalmente de goma) – Kit flat & Professional ONE-**

- Calidad y tecnología OE
- "Refill" con perfil de pagoda para reducir el desgaste de la goma.
- Matriz universal termosoldada con las vertebras y la goma para darle solidez y robustez al elemento limpiador.
- Conectores Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) y Retrofit (brazo "U") , que hacen universal la escobilla, pudiendo sustituir tanto las escobillas tipo flat montadas en la fábrica en los vehículos de la última generación, como también las escobillas tradicionales.
- Gama profesional ONE: 18 códigos (14 longitudes), que abarca más del 95% del parque circulante en Europa.

## P

As escovas limpadoras Magneti Marelli satisfazem os padrões qualitativos requeridos de primeira instalação.

A produção é submetida a rigorosas provas e inspeções, como por exemplo: a exposição por 800 horas à nevoeiro salino, e por 500 horas aos UVA, que asseguram a total fiabilidade. A borracha natural é tratada com um processo de brominação que sublinha as características de resistência e duração. De fato, o bromo a torna mais resistente aos raios UVA e as excursões térmicas.

As escovas limpadoras Magneti Marelli graças a estes meios são mais silenciosas, resistentes e duradouras. A gama oferecida pela Magneti Marelli compreende escovas convencionais para automóveis, veículos comerciais e industriais, refill e as escovas flat, sempre mais utilizadas nos veículos de nova produção.

**Escovas Tradicionais (metal-plásticas) – Profissional**

- Braços de aço e resina para uma maior robustez e duração do produto
- Pintura com pó de poliéster que torna a escova mais resistente à descoloração devida à exposição aos raios UVA
- Conector pré-montado CH31 para facilitar a montagem na maior parte das aplicações
- Spoiler com efeito deportante para contrastar o efeito "air lift": a

escova permanece perfeitamente aderente ao pára-brisas mesmo nas altas velocidades.

- Até a oito pontos de pressão para uma perfeita aderência da escova no pára-brisas.

**Escovas Flat (inteiramente de borracha) – Kit flat & Professional ONE**

- Qualidade e tecnologia OE
- Refill com perfil «a pagode» para reduzir o desgaste do limpador
- Matriz universal soldado termicamente com as vértebras e a borracha para dar solidez e robustez ao elemento limpador
- Presença de conetores Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) e Retrofit (braço "U") , que tornam a escova universal, adequada a substituir seja todos os tipos de escovas flat montadas na primeira instalação nos veículos de última geração, que as escovas tradicionais.
- Gama profissional ONE: 18 códigos (14 comprimentos) para uma cobertura de mais de 95% dos veículos em circulação na Europa.

**G**

Οι βούρτσες Magneti Marelli ικανοποιούν τα στάνταρντ ποιότητας που απαιτούνται από την πρώτη εγκατάσταση.

Η παραγωγή υπόκειται σε αυστηρές δοκιμές και ελέγχους, όπως για παράδειγμα την έκθεση για 800 ώρες σε αλμυρή ομίχλη, και για 500 ώρες σε UVA, που διασφαλίζουν τη μέγιστη αξιοπιστία.

Η επεξεργασία του φυσικού λάστιχου γίνεται με τη διαδικασία του βρωμίου που τονίζει τα χαρακτηριστικά αντοχής και διάρκειας. Πράγματι το βρώμιο την κάνει πιο ανθεκτική στις ακτίνες UVA και στις θερμικές ασκήσεις.

Οι βούρτσες Magneti Marelli χάρη σε αυτά τα μέτρα είναι πιο ήσυχες, ανθεκτικές και μεγαλύτερης διάρκειας. Η γκάμα που προσφέρει η Magneti Marelli περιλαμβάνει συμβατικές βούρτσες αυτοκινήτου, εμπορικά και βιομηχανικά οχήματα, ανταλλακτικά και βούρτσες φλατ, που χρησιμοποιούνται όλο και περισσότερο στα οχήματα καινούριας παραγωγής.

Βούρτσες (μεταλλοπλαστικές) – Professional

– Γέφυρες από αστάλι και ρητίνη για μεγαλύτερη δύναμη και διάρκεια του προϊόντος.

– Βάψιμο με σκόνη πολυεστέρα που κάνει τη βούρτσα πιο ανθεκτική στο ξεθώριασμα που προκύπτει από την έκθεση στις ακτίνες UVA

– Σύνδεσμος CH31 που έχει ήδη τοποθετηθεί για να διευκολύνει τη

συναρμολόγηση στο μεγαλύτερο μέρος των εφαρμογών

– Σπόιλερ με εκτόπιση για να ισορροπήσει το εφέ air lift: η βούρτσα μένει εντελώς κολλημένη στο παρμπρίζ ακόμη και με μεγάλες ταχύτητες.

– Μέχρι οκτώ σημεία πίεσης για μια τέλεια εφαρμογή της βούρτσας στο παρμπρίζ.

Βούρτσες Φλατ (εξ ολοκλήρου από λάστιχο) – Kit flat & Professional ONE

– Ποιότητα και τεχνολογία OE

– Ανταλλακτικό με προφίλ "σε σχήμα παγόδας" για μείωση της φθοράς του καθαριστικού

– Ενιαία θερμοσυγκολλημένη μήτρα με σπονδύλους και λάστιχο για μεγαλύτερη στερεότητα και δύναμη του καθαριστικού στοιχείου

– Παρουσία συνδέσμων Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) και Retrofit (βραχίονας "U"), που κάνουν την ενιαία βούρτσα κατάλληλη να αντικαταστήσει τόσο

όλους τους τύπους βουρτσών φλατ που είχαν συναρμολογηθεί στην πρώτη εγκατάσταση στα οχήματα τελευταίας γενιάς όσο και τις παραδοσιακές βούρτσες.

– Γκάμα professional ONE: 18 κωδικόι (14 μήκη) για μια κάλυψη πάνω από το 95% που κυκλοφορεί στην Ευρώπη.

**PL**

Wycieraczki szyb Magneti Marelli zadowalaja standartowa jakoscia wymagana od pierwszego urzadzenia.

Produkcja poddawana jest rygorystycznym probom i jest testowana, jak na przykład umieszczając produkt na 800 godzin w slonej mgle i poddawając na 500 godzin na działanie promieni slonecznych UVA, co zapewnia calkowita niezawodnosc. Naturalna guma jest poddana procesowi brominacji, ktory powieksza cechy wytrzymalosci i trwalosci.

Brom faktycznie sprawia ze staje sie ona odporniejsza na działanie promieni slonecznych i na skoki temperatury.

Wycieraczki szyb Magneti Marelli wlasnie dzieki tym procesom sa bardziej ciche, wytrzymale i dlugotrwale. Gama produktow oferowana przez Magneti Marelli obejmuje wycieraczki konwencjonalne do samochodow osobowych, do pojazdow dostawczych i przemyslowych refill oraz wycieraczki flat coraz bardziej uzywane w pojazdach nowej produkcji.

Wycieraczki szyb tradycyjne (metaloplastyczne) – Professional

– Mostki ze stali i żywicy dla zwiększenia masywności i trwałości produktu

– Lakierowanie proszkiem poliestru który sprawia że wycieraczka staje się bardziej wytrzymała na dekoloracje spowodowana promieniami slonecznymi UVA

– Złączka wstępnie montowana CH31 aby ulatwić montaż na większości zasto-

sowan

– Spoiler z efektem deportacji aby kontrastować efekt air lift:

wycieraczka przylega świetnie do przedniej szyby również przy dużych szybkościach jazdy.

– Do osmiu punktow cisnienia do doskonałej przylegliwości wycieraczki do przedniej szyby.

Wycieraczki Flat (całkowicie z gumy) – Kit flat & Professional ONE

– Jakosc i technologia OE

– Refill z przekrojem «jak pagoda» aby zredukować zużycie czesci wycierajacej

– Matryca uniwersalna termosopawana ze szkieletem i guma aby nadac wytrzymalosc i masywnosc czesci wycierajacej

– Obecność złączek Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) e Retrofit (braccio "U"), ktore sprawiają że wycieraczka uniwersalna moze zastapic wszystkie rodzaje wycierakow szyb flat montowanych na pierwszym urzadzeniu samochodow nowoczesnego typu, jak i wycieraczki tradycyjne .

– Gama professional ONE: 18 kodow (14 dlugosci) na pokrycie ponad 95% pojazdow jezdzaczych w Europie.

**R**

Стеклоочистители производства фирмы «Magneti Marelli» отвечают качественным стандартам при первой сборке.

Производство стеклоочистителей проходит жесткий контроль и испытания, как например испытание в солевой туманной ванне на протяжении 800 часов, а также испытания в камере с ультрафиолетовыми лучами (UVA) на протяжении 500 часов.

Такого рода испытания гарантируют тотальную надежность продукта.

Натуральный каучук подвергается процессу бромирования, который улучшает характеристики стойкости и долговечности изделий. Бром повышает стойкость на влияние ультрафиолетовых лучей (UVA), а также термический стресс.

Благодаря техническим решениям стеклоочистители «Magneti Marelli» становятся менее шумными, более стойкими и долговечными.

Гамма производства стеклоочистителей «Magneti Marelli» включает стандартные стеклоочистители для легковых автомобилей, для коммерческого и грузового транспорта, щетку рефиль и плоскую щетку, которые все шире применяются в автомобилях нового поколения.

Традиционные щетки– стеклоочистители (металлопластика) – Профессиональные

– мостик сталь–смола обеспечивает повышенную стойкость и долговечность изделия

– окраска порошковым полиэфиром придает щеткам повышенную стойкость на обесцвечивание из-за воздействия ультрафиолетовых лучей (UVA)

– предварительно установленный соединительный зажим CH31 служит для упрощения монтажа в самой широкой области применения

– спойлер предохраняет от разбрызгивания при эффекте «air lift», т.е. щетка идеально прилегает к лобовому стеклу в том числе и на большой скорости

– щетка имеет до восьми точек прилегания, тем самым обеспечивается идеальное прилегание к лобовому стеклу.

Плоские щетки–стеклоочистители «flat» (полностью резиновая) – набор «flat» плюс профессиональный «ONE»

– качество и технология OE

– рефиль с профилем «орбренем» позволяет уменьшать износ контактной чистящей части

– универсальная термосварная матрица, состоящая из позвонков и резины для гарантии жесткости и стойкости контактной чистящей части

– наличие соединительных зажимов типа «Side block (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault), Retrofit (рычаг U)» делают щетку–стеклоочиститель универсальной, которая может замещать все виды плоских щеток «flat», устанавливаемых при первичной сборке на автомобилях

последнего поколения, а также традиционные щетки

– гамма профессиональных стеклоочистителей «ONE»: 18 кодов (14 размеров по длине), что позволяет покрыть свыше 95% циркулируемого транспорта в Европе.

Magneti Marelli silecekleri ilk kurululumun gerektirdiği nitelikli standartlara cevap verir. Üretimi, zorlu test ve denemelerle gerçekleşir, örneğin güvenilirliği tamamen garantileyen 800 saat tuz buharına ve 500 saat UV ışınlarına maruz bırakılır. Doğal lastik, dayanıklılığı ve uzun ömürlülüğü arttıran brom işlemi ile test edilir. Brom, sileceği UV ışınlarına ve termik dolaşıma karşı daha dayanıklı hale getirir. Magneti Marelli silecekler, bu teknik çözümler sayesinde daha sessiz, daha dayanıklı ve daha uzun ömürlüdür. Magneti Marelli tarafından sunulan seride endüstriyel ve ticari araçlarla ilgili oto konvansiyonel silecekler yeni üretim araçlarda da kullanılabilen değiştirilebilir silecek lastiği içerir.

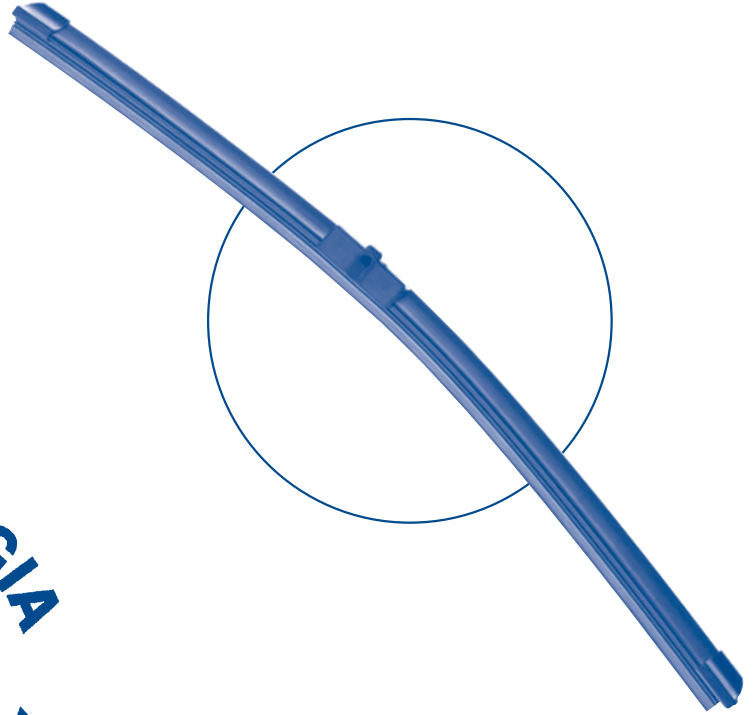
**Klasik Silecekler (metalplastikten) – Profesyonel**

- En yüksek ürün dayanıklılığı ve sağlamlığı için reçine ve çelikten yapılan bağlantı köprüsü
- UV ışınları nedeniyle ağarmaya karşı daha dayanıklı hale gelmesi amacıyla sileceklerin polyster toz ile cilalanması
- Uygulamaların büyük bölümünde montajı kolaylaştıran önceden monte edilen CH31 konnektör

- Hava basıncı etkisine karşı sürüklenme etkili spoiler: silecek, çok yüksek hızda bile ön cama mükemmel şekilde yapışır
- Sekizinci noktaya kadar olan basınçta sileceğin ön cama mükemmel şekilde yapışması

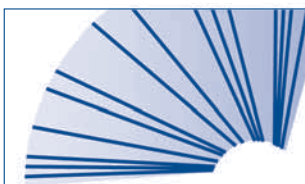
**Eskiyen Lastikli Silecek (lastiğin içi) – Kit flat & Professional ONE (Eskiyen Lastik Techizati ve Profesyonel olan)**

- OE kalite ve teknolojisi
- Kurulamanın kullanımını azaltmak için pagoda profil ile tekrar değiştirme
- Temizleme parçasına dayanıklılık ve sertlik veren lastik ve omurgalar ile termolehmlenen uluslararası matris
- Klasik silecekler dahil tüm silecekleri, son jenerasyon otomobillere bile monte edilebilen, her çeşide uygun, uluslararası hale getiren Side lock (Bosch), Top Lock (SWF Valeo), Baionet (Champion), Dolphin (Renault) ve Retrofit (kol "U") konnektörler mevcuttur.
- Gamma professional ONE (Gama Profesyonel olan): Avrupa'nın %95'inden daha fazlasını dolaşan kaplama için 18 şifre ( 14 karakter)



**TECNOLOGIA  
OE  
TECHNOLOGY**

Quando e perché si cambiano le spazzole – When and why the wiper blades are changed. – Wann sollten die Wischerblätter gewechselt werden? – Quand et pourquoi changer les balais – Cuando y porqué hay que cambiar las escobillas – Quando e porquê se mudam as escovas – Πότε και γιατί αλλάζουν οι βούρτσες – Kiedy i dlaczego wymieniac wycieraczki szyb – Когда и почему меняются щетки – Silecekler neden ve ne zaman değıştirilir



**I**

**Scarsa tergenza**

Lunghi periodi di riposo deformano il filo del tergente causando un effetto velo sul parabrezza.

**Bande opache**

La gomma del tergente indurisce o si deteriora con il tempo. Rimangono così sul parabrezza delle aree non deterse.

**Rigature**

La gomma del tergente si deteriora con il tempo o a causa del pulviscolo stradale dando origine a sottili linee semicircolari sul parabrezza.

**Saltellamento**

La deformazione della struttura della spazzola può causare saltellamenti del tergente, lasciando sul parabrezza linee radiali.

**Sollevamento**

La deformazione della struttura della spazzola può causare una imperfetta aderenza al parabrezza, soprattutto alle alte velocità.

**Forti vibrazioni**

Deformazione della spazzola, connettore errato, età o usura del tergente provocano rumorosi ed irregolari movimenti.

**GB**

**Low wiping quality**

Long periods without use can deform the wiper's profile causing a veil effect on the windscreen.

**Opaque stripes**

Time hardens and deteriorates the rubber, so eventually the wiper does not clean the whole surface of the windscreen.

**Lines**

Wear and tear of the rubber in the presence of dust can cause semi-circular lines on the windscreen.

**Jumping**

Deformity of the wiper can cause jumping of the blade, this produces radial lines on the windscreen.

**Lifting**

Deformity of the wiper can also cause a loss of contact between the blade and the windscreen, especially at high speed.

**Vibrations**

Use of the wrong connector, wear and tear, age or deformity of the wiper blade, cause noisy and irregular vibrations.

**D**

**Schwache Wischerwirkung**

Werden die Wischerblätter längere Zeit nicht benutzt, führt dies zu einer Deformation der Wischergummis und verursacht einen Schleier auf der Windschutzscheibe.

**Streifenbildung**

Mit der Zeit härten die Wischergummis aus und verschleifen. Teilweise werden so Bereiche auf der Windschutzscheibe nicht gesäubert.

**Kratzer**

Verursacht durch Straßenstaub verschleißt das Gummi, und mit der Zeit können Risse im Wischergummi entstehen. Es bilden sich feine halbkreisförmige Kratzer auf der Windschutzscheibe.

**Sprünge der Scheibenwischer**

Das Wischerblatt kann so deformiert sein, daß es zu Sprüngen des Wischers führen kann. Es entstehen strahlenförmige

**Streifen auf der Windschutzscheibe**

Das Wischerblatt haftet schlecht. Die Deformation des Wischerblattes, insbesondere bei hoher Fahrgeschwindigkeit, kann zu einer schlechten Haftung auf der Windschutzscheibe führen.

**Starke Vibrationen**

Falsche Steckverbindungen und Halterungen sowie allgemeiner Verschleiß der Wischerblätter verursachen Geräusche und unregelmäßige Bewegungen.



**F****Essuyage insuffisant**

De longues périodes d'inactivité déforment le caoutchouc causant en effet un voile sur le pare-brise.

**Bandes opaques**

La gomme du caoutchouc se durcit et se détériore dans le temps. Sur le pare-brise, des zones restent non essuyées.

**Rayures**

La gomme du caoutchouc se détériore dans le temps à cause des pollutions routières formant des lignes semi-circulaires sur le pare-brise.

**Sautillage**

La déformation de la structure du balai peut causer des sautilllements du caoutchouc, laissant sur le pare-brise des lignes radiales.

**Soulèvement**

La déformation de la structure du balai peut causer une adhérence imparfaite au pare-brise, surtout à haute vitesse.

**Vibrations fortes**

La déformation du balai, le connecteur incorrecte, l'âge ou l'usure du caoutchouc provoquent des mouvements rainureux et irréguliers.

**E****Poca limpieza**

Los largos períodos de reposo deforman el filo limpiador haciendo que se empañe el parabrisas.

**Bandas opacas**

La goma se deteriora y endurece con el tiempo quedando zonas del parabrisas sin limpiar.

**Rayaduras**

La goma de la escobilla se deteriora con el tiempo a causa de la suciedad, provocando rayadas en el parabrisas.

**Saltos**

La deformación en la estructura de la escobilla puede causar saltos de la misma, dejando líneas radiales sobre el parabrisas.

**Levantamiento**

La deformación de la estructura de la escobilla puede restar adherencia al parabrisas, sobre todos en los casos de gran velocidad.

**Fuertes vibraciones**

Las deformaciones, un adaptador erróneo, la antigüedad de la escobilla provocan ruidos y movimientos irregulares.

**P****Pouca limpeza**

Longo períodos sem serem utilizadas causam um efeito de véu sobre o pára-brisas.

**Tiras opacas**

A borracha endurece e deteriora-se com o tempo, não limpando completamente o vidro.

**Riscos**

Com o tempo as borrachas ganham pó e ao serem utilizadas podem fazer riscos no vidro.

**Saltitar**

A deformação da estrutura da escova pode levar a que a escova salte e provoque riscos no vidro.

**Levantamento**

A deformação da estrutura da escova também pode causar uma imperfeita aderência da escova ao pára-brisas, sobretudo em alta velocidade.

**Fortes vibrações**

Deformações da escova, ligações incorrectas, idade e mexer na escova constantemente pode causar barulhos irregulares e vibrações.

**G****Ανεπαρκής καθαρισμός**

Μεγάλες περίοδοι αναμονής παραμορφώνουν το καλώδιο καθαρισμού προκαλώντας θαμπότητα στο παρμπρίζ.

**Θαμπές ταινίες**

Το λάστιχο του καθαριστικού σκληραίνει ή φθείρεται με τον καιρό. Έτσι παραμένουν στο παρμπρίζ σημεία που δεν έχουν καθαριστεί.

**Γρατζουνιές**

Το λάστιχο του καθαριστικού φθείρεται με τον καιρό ή εξ αιτίας της λεπτής σκόνης του δρόμου που προκαλεί λεπτές ημικυκλικές γραμμές στο παρμπρίζ.

**Χοροπήδημα**

Η παραμόρφωση της βούρτσας μπορεί να προκαλέσει χοροπήδημα του καθαριστικού αφήνοντας στο παρμπρίζ ακτινωτές γραμμές.

**Ανύψωση**

Η παραμόρφωση της βούρτσας μπορεί να προκαλέσει ατελή εφαρμογή στο παρμπρίζ, κυρίως με υψηλές ταχύτητες.

**Δυνατές δονήσεις**

Παραμόρφωση της βούρτσας, λάθος σύνδεσμος, ηλικία ή φθορά του καθαριστικού προκαλούν θορυβώδεις και ακανόνιστες κινήσεις.

**PL****Złe wycieranie**

Długie okresy nieużytkowania deformują pioro wycieraczki szyby powodując powstanie powłoki na przedniej szybie.

**Matowe pasma**

Guma wycieraczki twaragneje i niszczy się z upływem czasu. Z tego powodu pozostawia na szybie strefy nie domyte.

**Rysy**

Guma piora niszczy się z czasem z powodu kurzu i pyłu w powietrzu powodując pojawienie się na szybie polokragłych zarysów.

**Podskakiwanie**

Zniekształcenie struktury wycieraczki może spowodować podskoki piora, pozostawiając na szybie promieniowe zarysowania.

**Odchylenie**

Deformacja struktury wycieraczki może spowodować niedokładne przyleganie jej do szyby, przede wszystkim przy dużych szybkościach.

**Silne wibracje**

Zniekształcenie wycieraczki, zła złączka, starość i zużycie piora wycieraczki powodują ruchy głośne i nieregularne.

**R****Слабая чистка**

Длительные периоды простоя ведут к деформации контактной очищающей части, это значит, что на лобовом стекле остается матовый налет.

**Матовые полосы**

Резина контактной очищающей части отвердывает или портится со временем. На лобовом стекле формируются не очищенные участки.

**Полосы**

Контактная очищающая часть портится со временем или из-за дорожной пыли, что ведет к образованию полукругов на лобовом стекле.

**Подскоки**

Деформация структуры щетки ведет к образованию подскоков контактной очищающей части, оставляя радиальный след на лобовом стекле.

**Отход**

Деформация структуры щетки ведет к дефектному прилеганию контактной очищающей части к лобовому стеклу, особенно это выявляется на высокой скорости.

**Сильная вибрация**

Деформация щетки, ошибочный соединительный зажим, длительный срок эксплуатации контактной очищающей части ведут к формированию нерегулярного и шумного хода.

**T****Temizlemede azalma**

Uzun süre çalışmaması ön cam üzerinde perdeleme etkisine yol açarak temizleyen bölümü deforme eder.

**Mat şeritler**

Sileceğin lastiği zamanla sertleşir ve çürür. Böylece ön camda temizlenemeyen alanlar kalır.

**Çizgiler**

Sileceğin lastiği ön cam üzerinde yarım daire şeklinde ince çizgilere neden olan yoldaki tozlar nedeniyle ve zamanla eskir.

**Atlama**

Sileceğin yapısındaki deformasyon ön camda dairesel çizgiler bırakarak temizlemede atlamalara yol açabilir.

**Kalkma**

Sileceğin yapısındaki deformasyon özellikle yüksek hızda sileceğin ön cama yapışmasına engel olabilir.

**Güçlü titreşimler**

Sileceğin deformasyonu, yanlış konnektör, yaş veya yanlış kullanım, çıkardığı sesi ve düzensiz hareketleri tetikler



*Istruzioni di montaggio*  
*Fitting instructions*  
*Montageanleitung*  
*Instructions de montage*  
*Istrucciones de montaje*  
*Instruções de instalação*  
*Οδηγίες συναρμολόγησης*  
*Instrukcje do montazu*  
*Инструкция по монтажу*  
*Montaj açıklaması*

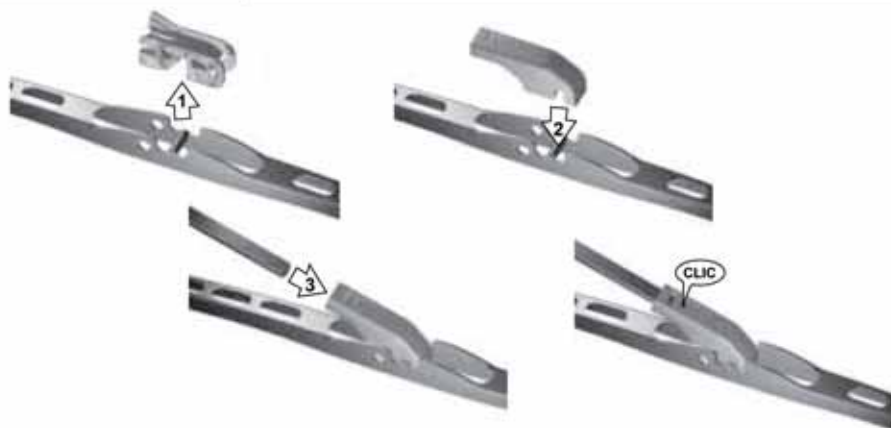
**CB5**



MT4511



9.5 x 2.5 mm



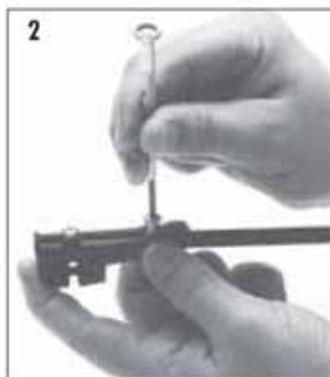
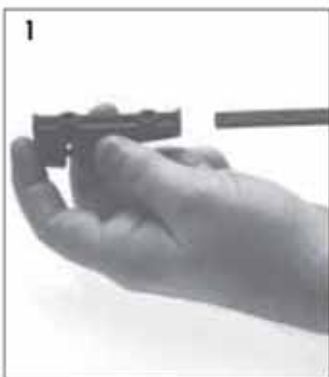
**CB10**



10 x 3 mm



MT4511  
MT5511

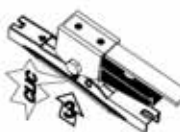


### CB10



13.6 mm

MT4511  
MT5511



### CH34



9.0 x 3.0 mm  
12.0 x 4.0 mm  
9.0 x 4.0 mm

MT601H  
MT651H  
MT701H  
MT705H

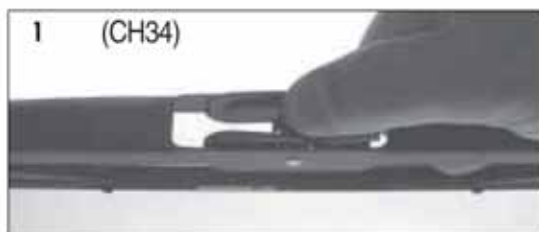
### CH17



9.0 x 4.0 mm

MT5511  
MT603H

1 (CH34)



2



4



1 (CH17)



3



5



(-)

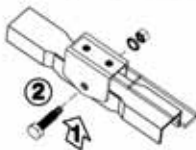
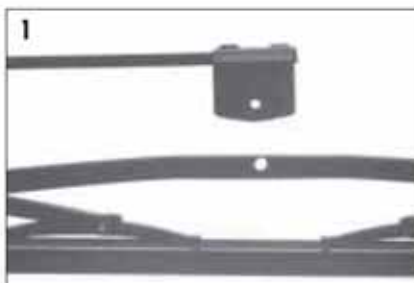
Use original  
adaptor



13.6 mm



MT800S



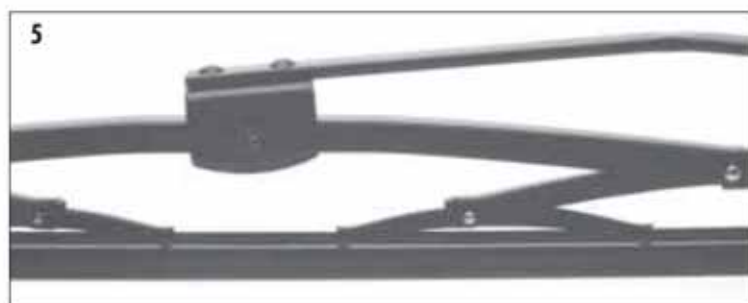
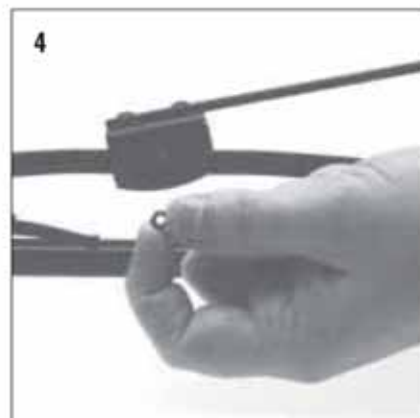
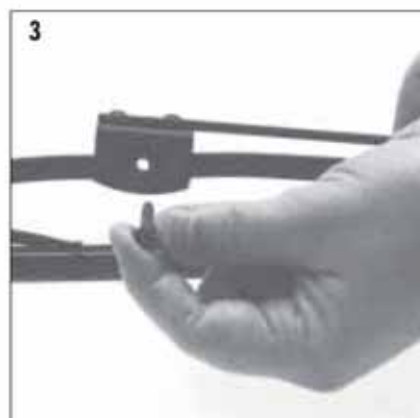
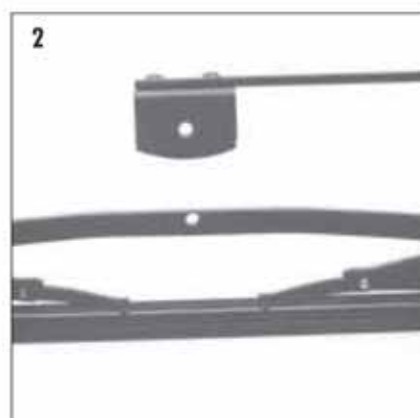
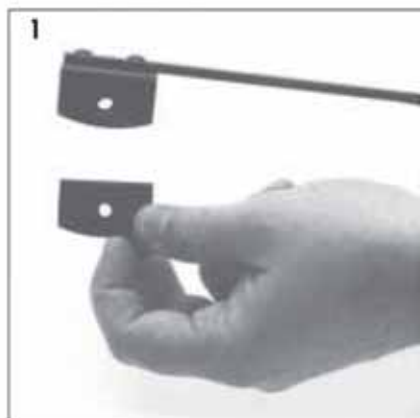
CS8



MT800S



16,5 mm

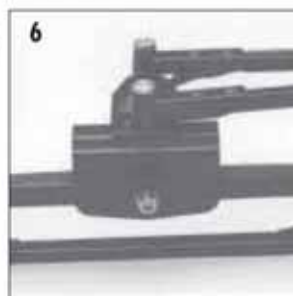
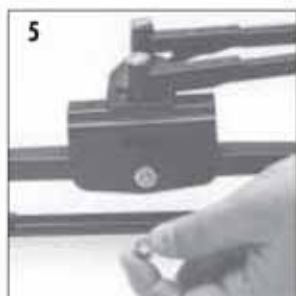
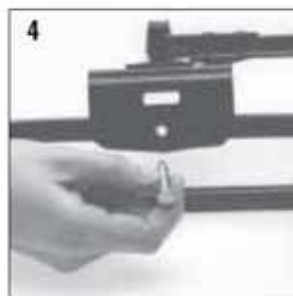
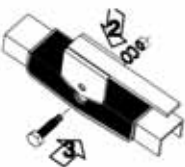
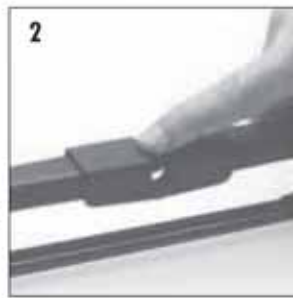
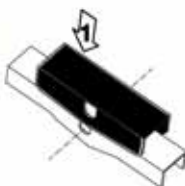
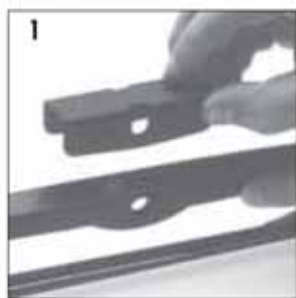




**CS5/CS6**



25 mm



MT800S  
MT900S  
MT1000S

CS7



MT900S  
MT1000S

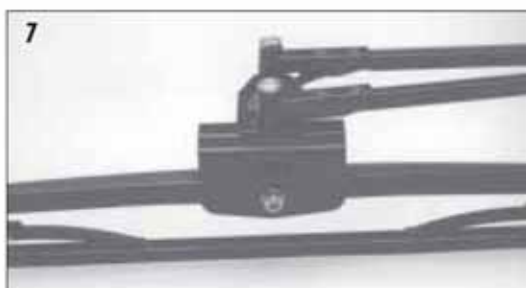
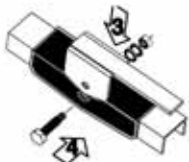
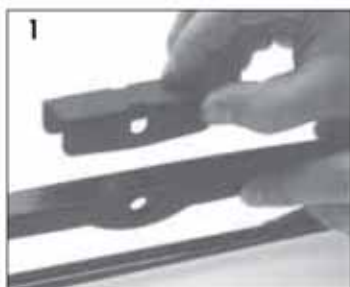
21 mm

CS9



MT900S  
MT1000S

27 mm



CW3



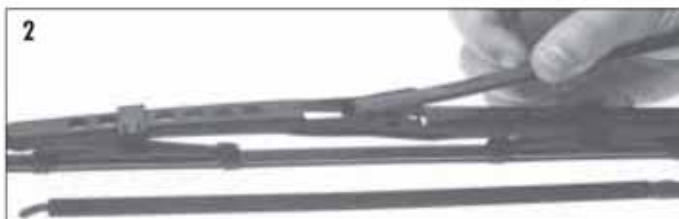
MT5511



CW3



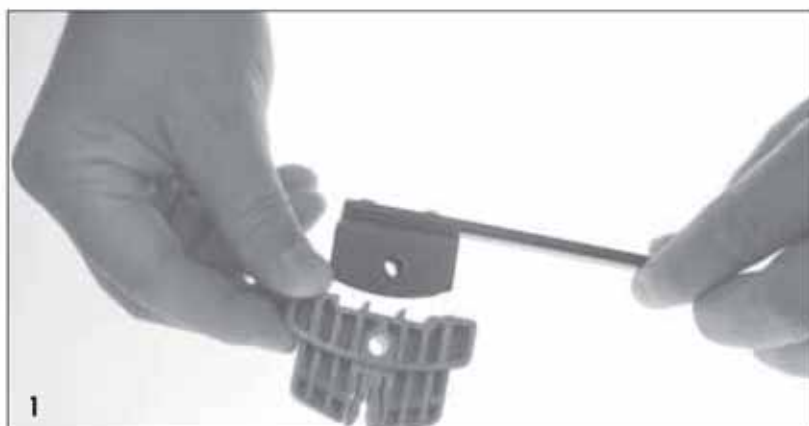
MT5511



# CS16

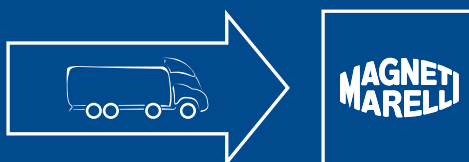


16,5 mm

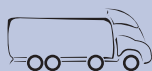


MT601H  
MT651H  
MT701H

*Applicazione per marca e veicolo*  
*Vehicle application guide*  
*Zuordnung nach Marke und Fahrzeug*  
*Affectations par marques et véhicules*  
*Aplicación por marca y vehículo*  
*Aplicação por marca e veículo*  
*Εφαρμογή ανά μοντέλο*  
*Zastosowanie dla marki i pojazdu*  
*Применение*  
*Marka ve otomobile göre uygulama*







<b>BMC</b>					
200_13		2000→	MT5511	55	22
Megastar		2005→	MT651H	65	26
Pro 518		2004→	MT651H	65	26
Pro 622, 625		2000→	MT651H	65	26
Pro 832		2000→	MT651H	65	26
Pro 935, 938		2004→	MT651H	65	26
<b>DAF</b>					
65		03/93→02/98	MT601H	60	24
75		07/92→02/98	MT601H	60	24
85		07/92→02/98	MT601H	60	24
CF 65		02/98→	MT601H	60	24
CF 75		02/98→	MT601H	60	24
CF 85		02/98→	MT601H	60	24
F1100 -> 3600		→09/91	MT601H	60	24
F1700 F/FA 1700 D/N		12/86→02/95	MT601H	60	24
F65, F75, F85		1992→12/97	MT601H	60	24
LF 45		01/01→	MT601H	60	24
		01/01→	MT603H	60	24
LF 55		01/01→	MT601H	60	24
		01/01→	MT603H	60	24
<b>ERF</b>					
EC Series		1997→2000	MT601H	60	24
ECM Series		2002→	MT601H	60	24
ECT Series		2002→	MT701H	70	28
ECX		1996→	MT601H	60	24
ES Series		1992→2001	MT601H	60	24
<b>FODEN</b>					
2000 Series		1997→2001	MT601H	60	24
3000 Series		1997→2001	MT601H	60	24
4000 Series		1997→2001	MT601H	60	24
A2000 4R		2002→2006	MT601H	60	24
A3000 6M, 6TT, 8RT		2002→2006	MT601H	60	24



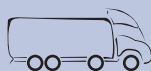
## GINAF

A2121-N		1998→	MT5511	55	22
DAF Cab. 95 Series		1990→	MT601H	60	24
M3335, M3132, M3333, M4243, M4443, M5450			MT601H	60	24

## IVECO

120		1983→1990	MT601H	60	24
120.13 - 330.36 P, PA Series...			MT601H	60	24
139		1982→1987	MT651H	65	26
150 -16		1983→1992	MT601H	60	24
160 160.19		1982→1986	MT601H	60	24
160.30AH - 320, - 490 (Eurofire)		1983→1993	MT601H	60	24
170 OM35		1979→	MT601H	60	24
170F		1978→1982	MT601H	60	24
175		1988→	MT601H	60	24
180.24 -> 240.38 Turbostar/Turbotech T Series		1982→	MT651H	65	26
190		1987→1998	MT651H	65	26
190.30, 190.36, 190.42		1983→1993	MT601H	60	24
190F, 190 PAC		1978→	MT601H	60	24
220F, 240F, 260F		1977→1992	MT601H	60	24
240.36, 250.30, 260.30		1983→1993	MT601H	60	24
256 M		1978→1983	MT651H	65	26
260		1989→1999	MT651H	65	26
260 PAC		1977→	MT601H	60	24
300.30, 320.30, 330.30, 333.36		1984→1993	MT601H	60	24
306, 308, 309, 314, 315GT, 343		1970→1978	MT5511	55	22
320		1984→1996	MT651H	65	26
330		1978→	MT601H	60	24
		1987→1995	MT601H	60	24
		1989→1999	MT651H	65	26
340		→1992	MT651H	65	26
470, 570, 670		1981→1985	MT601H	60	24
619, 684, 697		1977→1981	MT601H	60	24
75.9 A -> 130.16 MK..		1979→	MT601H	60	24
Euro Fire - Fire Engine 300		2000→	MT651H	65	26
EuroCargo		1992→2000	MT651H	65	26
EuroCargo 75E, 80E, 90E, 120E, 135E, 180E		2000→	MT651H	65	26





## IVECO

EuroClass		1993→2002	MT651H	65	26
EuroMover		1998→	MT651H	65	26
EuroStar E45 - 430, 470		1992→2002	MT651H	65	26
Eurostar Cursor		2000→	MT651H	65	26
EuroTech E45 - 350		1992→2000	MT651H	65	26
EuroTrackker E45 - 350, 420		1993→	MT651H	65	26
M130D, 160D, 170D		1977→1983	MT601H	60	24
		1975→1980	MT601H	60	24
M170 SH 110, M200 SH 110V		1975→1980	MT701H	70	28
M170L, 200L, 230L		1975→1980	MT701H	70	28
M232D, 256D, 270D, 310D		1977→1983	MT601H	60	24
		1975→1980	MT601H	60	24
M320 DCS2601		1980→1983	MT601H	60	24
M320 M 19		1980→1983	MT651H	65	26
P/PA Series 120.13 - 330.36			MT601H	60	24
Stralis AS440S...19-44t		2002→	MT651H	65	26
Trakker		2002→	MT651H	65	26
Turbo Star		1989→2000	MT651H	65	26
Turbo Tech		1980→2001	MT651H	65	26

## LEYLAND DAF

65		1992→	MT601H	60	24
75		1992→	MT601H	60	24
85		1992→	MT601H	60	24
95		06/91→	MT5511	55	22

## LIAZ

18.33, 19.33, 24.33		1997→	MT5511	55	22
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## M.A.N.

35		1988→1996	MT601H	60	24
48 VF		1989→1990	MT601H	60	24
E2000		1996→	MT601H	60	24
F 90 Unterflur U Series 19.....-> 26.....		10/86→1994	MT601H	60	24
F2000 T Series 19.....-> 41.....		01/94→	MT601H	60	24
F90 F Series 19.....-> 48.....		09/87→1996	MT601H	60	24
M2000 M M Series 14.....-> 25..... Large Cab		08/95→	MT601H	60	24
M90 M Series 12.....-> 24.....		08/88→1996	MT601H	60	24
TGA H series 18.....-> 41.....		04/00→	MT701H	70	28



## M.A.N.

TGL N Series 6....-> 12.....7-12t		04/05→	MT701H	70	28
TGM N Series 12....-> 26..... 13-26t		10/05→	MT701H	70	28
TGS 18.....-> 41.....18-41t		2000→	MT701H	70	28
TGX 18.....-> 41.....18-41t		2000→	MT701H	70	28

## MERCEDES

1729 - 4850 SK series type 641/649		1989→	MT651H	65	26
Actros 18...- 41....		1996→2003	MT701H	70	28
Actros MP2 18...- 41....		04/03→	MT701H	70	28
Atego 7.. - 26....		1998→10/2004	MT651H	65	26
Atego 2 8.... - 16.....		10/2004→	MT651H	65	26
Axor 18... - 32...		2002→10/2004	MT651H	65	26
Axor 2 18... - 32...		10/2004→	MT651H	65	26
Econic 18.... - 26....		03/1998→	MT601H	60	24
Powerliner SK series 641/649 - 17.... - 48....		10/88→08/96	MT651H	65	26
Unimog U300, 400, 500 UGN Series: 405		2000→	MT800S	80	32
Unimog UX100		1996→	MT651H	65	26

## MULTICAR

Multicar M26		1998→	MT651H	65	26
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## NISSAN

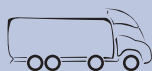
Atleon7.5-15t		2006→	MT601H	60	24
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## PEGASO

360 Series		1988→	MT601H	60	24
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## RENAULT/R.V.I.

AE 500 Series Magnum		1990→	MT701H	70	28
Kerax 260 - 420		2000→	MT655H	65	26
Magnum AE385 - 560		1997→	MT701H	70	28
Magnum E-Tech 400 - 480		2000→	MT701H	70	28
Magnum DXi 12.440 - 14.500		10/04→	MT701H	70	28
Major "R" R340 - 420 '1990 ->		1991→1996	MT601H	60	24
Manager "G" G200 - 340 '01/93 ->		1991→1996	MT601H	60	24
Maxter "G" G230 - 340		1992→1997	MT601H	60	24
Messenger "B" B80-120		1990→1999	MT601H	60	24
Midliner "M" M140 - 250, ME160 - 180		1988→2000	MT601H	60	24
Midlum 180 - 250		2000→2006	MT603H	60	24
Premium II 280 - 450		2005→	MT655H	65	26



## SCANIA

3 Series - 93, 113, 143		1988→12/96	MT601H	60	24
4 Series - 94, 114, 124, 144, 164		1996→	MT701H	70	28
P, R, T Series P230 - 420, R340 - 620, T470		2004→	MT705H	70	28

## SEDDON ATKINSON

Strato 215 - 420		1996→	MT651H	65	26
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## STEYR-DAIMLER-PUCH

18 S 46, 19 S 46		1994→	MT601H	60	24
19 S 46 Man F2000		1998→	MT601H	60	24
F Series 19 S 17 - 40 S 42		1997→	MT601H	60	24

## TERBERG

FL single cockpit		1998→	MT701H	70	28
FL1350, FL1850, FL2000		1998→	MT701H	70	28

## VOLVO

F16		1987→1995	MT601H	60	24
FE FES 42, 62, FEE 64		2006→	MT655H	65	26
FH12		1996→1999	MT651H	65	26
		2000→2003	MT651H	65	26
		2004→	MT701H	70	28
FH16		1996→2003	MT651H	65	26
FH16 FH42, 62, 64, 82, 84		2006→	MT651H	65	26
FL 180 - 250		2001→	MT601H	60	24
		2006→	MT603H	60	24
FL4		1986→1989	MT601H	60	24
FL6		1985→2005	MT601H	60	24
		2006→	MT603H	60	24
FL7, FL10, FL12		1985→1996	MT701H	70	28
FL7, FL10, FL12, FL16		1997→2001	MT701H	70	28
FLC		1996→	MT601H	60	24
FM7, FM9, FM10, FM12		1998→2001	MT651H	65	26
		2002→	MT651H	65	26
FS10		1987→1996	MT601H	60	24
FS7		1986→1996	MT601H	60	24
NH12		2000→	MT651H	65	26

## VW

Constellation 13, 15, 17, 19, 24		2006→	MT601H	60	24
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*Applicazione per marca e veicolo*

*Vehicle application guide*

*Zuordnung nach Marke und Fahrzeug*

*Affectations par marques et véhicules*

*Aplicación por marca y vehículo*

*Aplicação por marca e veículo*

*Εφαρμογή ανά μοντέλο*

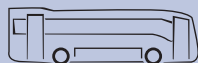
*Zastosowanie dla marki i pojazdu*

*Применение*

*Marka ve otomobile göre uygulama*







## ALFA

Coach			MT701H	70	28
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## ALEXANDER DENNIS

ALX 400 Double Decker		1997→2006	MT900S	90	36
ALX200 Midi Bus		1996→	MT900S	90	36
ALX300 City Bus		1997→2007	MT900S	90	36
ALX500 Double Decker		1997→2002	MT900S	90	36
Javelin			MT1000S	100	40
Pointer Plaxton		2001→2007	MT900S	90	36
President Plaxton		1999→2005	MT900S	90	36

## ANADOLU

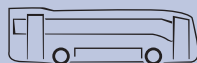
Harmony/Turquoise		2004→	MT800S	80	32
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## AUTOSAN

A0808T Gemini II		2004→	MT1000S	100	40
A0909L Tramp 2		2004→	MT651H	65	26
A 1112T Ramzes		2004→	MT1000S	100	40

## AUWÄRTER (E. Auwärter)

Clubstar HD MAN 11.220 HOCL		2000→	MT900S	90	36
Clubstar MAN		1998→	MT900S	90	36
Clubstar O301			MT701H	70	28
Clubstar Otego		2000→	MT1000S	100	40
Economy MB O 614D		1989→	MT601H	60	24
Economy MB O814		1998→	MT601H	60	24
Eurostar HD, HDS K112T			MT1000S	100	40
Microstar/Multimax VW T4		1998→	MT601H	60	24
Panorama			MT1000S	100	40
Stadbus	L	1998→	MT5511	55	22
	♿	1998→	MT601H	60	24
Super Sprinter MB 412	L	1998→	MT5511	55	22
	♿	1998→	MT601H	60	24
Team Star 613/41, L613D			MT800S	80	32
Team Star City		1996→	MT1000S	100	40
Team Star City811D, 814D		1987→1996	MT1000S	100	40
Team Star Reise		2000→	MT1000S	100	40
Travelskate			MT800S	80	32



## BERKHOF (VDL)

1000 LD Exelence		1992→	MT1000S	100	40
2000 HD Exelence		1992→	MT1000S	100	40
2000 HDA,HL	☞	1992→	MT701H	70	28
	☞	1992→	MT1000S	100	40
Ambassador 200		2000→	MT1000S	100	40
Axial 100 ADD	☞☞	2000→	MT651H	65	26
	☞☞	2000→	MT1000S	100	40
Axial 70 ASD	☞	2000→	MT651H	65	26
	☞	2000→	MT1000S	100	40
Berkhof Bus Volvo B10B,B10M,B12		1992→	MT1000S	100	40
Bluebird Q-Bus		1992→	MT601H	60	24
Esprite Alizee/Acron			MT1000S	100	40
Exellence 3000			MT800S	80	32
Exellence 500			MT1000S	100	40
Premier Daf, Jonkheer		1998→	MT1000S	100	40
Radial		1998→	MT1000S	100	40

## BMC

Belde City Bus 220SLF, 260SLF, 260 CB		2002→	MT1000S	100	40
Falcon 1100 LF		2004→	MT701H	70	28
Hawk 900 LF		2004→	MT1000S	100	40
Probus City Bus 215 SCB		2004→	MT1000S	100	40
Probus Coach 850 Club/TBX		2004→	MT1000S	100	40
School Bus 1100 FE		2004→	MT701H	70	28

## CAETANO

Optimo IV		2000→	MT800S	80	32
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## COBUS

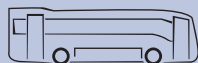
3000		2000→	MT900S	90	36
City		2000→	MT800S	80	32

## DEN OUDSTEN

Aliance City, Interurban		1992→	MT1000S	100	40
B93 Aliance		1992→	MT800S	80	32
B96 Aliance		1998→	MT1000S	100	40

## DENNIS

Arrow		1998→	MT800S	80	32
Dart Duple		1989→	MT800S	80	32
Dart SLF Low Floor City Bus		1995→	MT900S	90	36



## DENNIS

Dart SPD Pointer		1997→	MT900S	90	36
Double Deck Falcon V		1982→	MT601H	60	24
Javellin		1987→	MT1000S	100	40
Javellin Horseman		1998→	MT900S	90	36

## DRÖGMÖLLER

E290,300,310,320,330			MT1000S	100	40
E420,440	☞		MT800S	80	32
	☞		MT701H	70	28
E430			MT1000S	100	40
E430U	☞		MT701H	70	28
	☞		MT1000S	100	40
K 110 Scania			MT1000S	100	40

## EVOBUS

Citaro L Articulated Bus		1999→	MT906H	90	36
Citaro O 530		1998→	MT906H	90	36
Tourismo O 350	☞	1998→2001	MT1000S	100	40

## GINAF

B3128, B2121		1998→	MT1000S	100	40
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## HEULIEZ

GX 217 - 417			MT800S	80	32
GX 37H, 27			MT701H	70	28
GX 44 - 77H			MT1000S	100	40
GX 107, 113			MT1000S	100	40

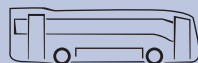
## HINO

Millennium Bus			MT701H	70	28
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## IKARUS

216, 260		1998→	MT701H	70	28
280 - 286 Articulated Bus			MT701H	70	28
315			MT1000S	100	40
386, 396.61, 398.20			MT1000S	100	40
397,07	☞		MT1000S	100	40
397,07	☞		MT800S	80	32
405 Midibus			MT800S	80	32
412, 415 City Bus		1995→	MT1000S	100	40
417 Articulated City Bus		1995→	MT800S	80	32
435 Articulated City Bus		1995→	MT1000S	100	40





## IKARUS

480 City Bus		1992→	MT701H	70	28
489 Polaris		2000→	MT800S	80	32
E13 Midibus		1998→	MT1000S	100	40
E15		2000→	MT1000S	100	40
E91 City Bus E91		2000→	MT1000S	100	40
E94 City Bus E94		1998→	MT1000S	100	40
E99 DD	☞		MT1000S	100	40
Hughes Daf		1998→	MT1000S	100	40
Orlandi Happy		2000→	MT900S	90	36
SB 3000		1989→	MT1000S	100	40
Scania K112			MT1000S	100	40
Stadtbus		1992→	MT701H	70	28

## IRISBUS (IVECO/IKARUS)

Agora City Bus (Renault)		2002→	MT4511	45	18
Ares School Bus N, N15 line		2000→	MT1000S	100	40
Domino Coach HD, HDH (Orlandi)		2000→	MT900S	90	36
Europolis Midi Bus (Iveco)		2000→	MT900S	90	36
Evadys Coach H. HD		2004→	MT1000S	100	40
Happy Minibus		2000→	MT900S	90	36
Iliade Coach H, HD		2000→	MT1000S	100	40

## IRIZAR

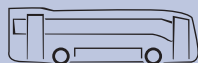
Century TOP BUS		2002→2003	MT900S	90	36
Century TOP BUS		2004→	MT1000S	100	40
Intercentury		2000→	MT1000S	100	40
PB		2002→	MT1000S	100	40
Pyrenean, Shetland			MT1000S	100	40

## ISUZU

Harmony		2004→	MT900S	90	36
Turquoise		2004→	MT900S	90	36

## IVECO

Cavalier		1998→	MT1000S	100	40
Citelis Trolley Bus		2006→	MT1000S	100	40
Domino		2000→	MT1000S	100	40
Domino 2001		2000→	MT1000S	100	40
EuroClass			MT1000S	100	40
Fiat 370..., - Domino		1982→	MT1000S	100	40



## IVECO

Fiat 471..., 571..., 671...		1982→	MT1000S	100	40
Magirus 160 R81 315.8.17			MT1000S	100	40
Magirus M2000 12m		1981→	MT1000S	100	40
Magirus M2000 HD		1982→	MT1000S	100	40
Midi Stadtbus Europolis		2000→	MT1000S	100	40

## JONKHEERE (VDL)

Auteuil		1992→	MT800S	80	32
Bermuda			MT701H	70	28
Jubilee P90			MT701H	70	28
Monaco Double Decker	☞	1992→	MT800S	80	32
	☞	1992→	MT701H	70	28
Neuilly		1992→	MT1000S	100	40

## KAROSA

900 Series		1997→	MT800S	80	32
Recreo		1997→	MT800S	80	32

## KÄSSBOHRER-SETRA -> SETRA

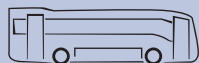
S 213 HR, S215 RL Rational			MT1000S	100	40
S 215 UL - SG 221 UL Regional			MT1000S	100	40
S 215, S216 HDS	☞		MT1000S	100	40
	☞		MT800S	80	32
S 328 DT		1998→	MT1000S	100	40
SG 215 SL, SG 219 Conceptbus			MT1000S	100	40

## KUSTERS

Mid Euro XL 416		2002→	MT601H	60	24
Mid City III 416		2002→	MT601H	60	24
Parade		2002→	MT601H	60	24

## M.A.N.

Ale Euro 3		2000→	MT1000S	100	40
Economy Bus			MT1000S	100	40
FE360A		2000→	MT601H	60	24
FRH353		1996→	MT1000S	100	40
Lions City DD		2004→	MT906H	90	36
Lions City M		2004→	MT906H	90	36



## M.A.N.

Lions City, City LL		1998→	MT906H	90	36
Lions Coach RH 403		1998→	MT1000S	100	40
Lions Regio C, L		2004→	MT1000S	100	40
MCV Evolution		2004→	MT900S	90	36
NG 263		1996→	MT906H	90	36
NG 312		1994→1998	MT800S	80	32
NG 312, NG 313		1998→	MT906H	90	36
NH 283		2000→	MT900S	90	36
NL 202	⌋	1989→	MT906H	90	36
	⌋	1989→1993	MT900S	90	36
		1998→2001	MT800S	80	32
NL 222			MT800S	80	32
NL 222 FR		1998→	MT800S	80	32
NL 223, NL 263, NL 313			MT906H	90	36
NL 232			MT800S	80	32
NL 262			MT800S	80	32
NL 312			MT800S	80	32
NM 223, 283		02/96→	MT906H	90	36
NU 263, NU313		1996→	MT906H	90	36
	⌋	2000→	MT1000S	100	40
RHG		2000→	MT1000S	100	40
RHS 464		2000→	MT1000S	100	40

## MARBUS

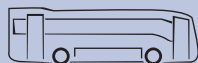
B30 90TM		2002→	MT1000S	100	40
B40 80TS		2002→	MT800S	80	32

## MARCOPOLO

Viaggio Coach 330, 350		2004→	MT1000S	100	40
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## MARSHALL

Capital C39 Dart SLF		1998→2003	MT900S	90	36
O 814 (Mercedes)		1998→	MT601H	60	24

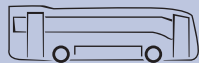


## MERCEDES

Citaro (Evobus) O 530		1998→	MT906H	90	36
Citaro L (Evobus) Articulated Bus		1999→	MT906H	90	36
Medio Minibus		2004→	MT800S	80	32
Nouvelle 2		1998→	MT900S	90	36
O 814 Marshall		1996→1999	MT601H	60	24
O 817		1996→1999	MT601H	60	24
Tourino (Evobus) O 510		2004→	MT900S	90	36
Tourismo (Evobus) O 350		1998→2001	MT1000S	100	40

## NEOPLAN (-> G. AUWÄRTER (NEOPLAN))

Airport Bus 9010-9040			MT1000S	100	40
Centroliner - Double Decker 4426		10/98→	MT701H	70	28
		10/98→	MT800S	80	32
Centroliner N4407		10/98→	MT900S	90	36
Centroliner N4413 CNG		01/99→	MT900S	90	36
Centroliner N4416		10/98→	MT900S	90	36
Clubliner N122		1983→01/86	MT701H	70	28
		02/86→	MT800S	80	32
Jumbocruiser N138			MT1000S	100	40
		1983→01/86	MT701H	70	28
		02/86→	MT800S	80	32
Megaspace N128/4			MT800S	80	32
			MT701H	70	28
Megatrans N4020			MT800S	80	32
Metroshuttle 4114 DE			MT800S	80	32
Midibus N4010 NF			MT800S	80	32
N424, N426/3			MT701H	70	28
Regioliner		1998→	MT1000S	100	40
Skyliner N 122/3 L		09/04→	MT701H	70	28
		09/04→	MT800S	80	32
Skyliner N122		08/83→01/86	MT701H	70	28
		09/82→	MT701H	70	28



## NEOPLAN (-> G. AUWÄRTER (NEOPLAN))

		02/86→	MT800S	80	32
Starliner		2002→	MT800S	80	32
		2002→	MT900S	90	36
Tourliner N 2216 SHD		01/03→	MT1000S	100	40
Trendliner N3516		09/04→	MT1000S	100	40

## NOGE

Euro Class, Euro Rider Coach			MT1000S	100	40
Touring Star Coach O404			MT1000S	100	40

## OPTARE

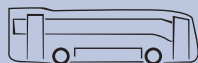
Easy Rider		1998→	MT900S	90	36
Metro Rider		1989→2000	MT1000S	100	40
Navigo 125, 160		2004→	MT900S	90	36
Skiaper		1992→	MT1000S	100	40
Spectra		1992→	MT1000S	100	40

## PLAXTON

Cheetah MB Vario		2004→	MT900S	90	36
Hughes Daf		1998→	MT900S	90	36
Pointer Dennis Dart SLF		1998→	MT900S	90	36
SB3000 DAF		1998→	MT701H	70	28
Volvo		1998→	MT701H	70	28

## RENAULT

Agora		1996→	MT4511	45	18
Agora		1996→	MT1000S	100	40
Ares		2000→	MT1000S	100	40
Bus R 312		1990→	MT1000S	100	40
Bus S 105		1990→	MT601H	60	24
Iliade Coach H, HD	2000→		MT1000S	100	40
Monospace P, C, F, L			MT701H	70	28
Tracer		1992→	MT1000S	100	40



## SALVADOR CAETANO

Nimbus Dart SLF		1998→	MT900S	90	36
Optimo IV		2000→	MT800S	80	32

## SCANIA

Century		1998→	MT900S	90	36
Century K124 TOP BUS		2000→	MT900S	90	36
E95		2004→	MT1000S	100	40
Intercentury		1998→2003	MT1000S	100	40
Irizar		1998→	MT1000S	100	40
Omnicity, Omni Decker N 94, CN 94		1996→	MT800S	80	32
Omniline IL 94		2000→	MT800S	80	32
Omnilink CL94		1998→2001	MT800S	80	32

## SETRA

S 328DT		1998→	MT900S	90	36
S 431 DT Double Deck		2000→	MT701H	70	28

## SMIT

Antares		1992→	MT1000S	100	40
Mercurius, Meteor		1992→	MT1000S	100	40
Orion		1992→	MT1000S	100	40

## SOLARIS

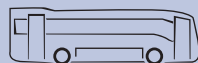
Urbino		2002→	MT800S	80	32
Vacanza		2002→2003	MT1000S	100	40
		2004→	MT1000S	100	40
		2004→	MT800S	80	32

## SUNDANCER

Midikurz		2004→	MT1000S	100	40
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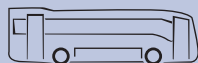
## TEMSA

Diamond - 13, 14m		2004→	MT800S	80	32
Executive Safari		2002→	MT1000S	100	40
Opalin Midi Coach - 8, 9m		2004→	MT900S	90	36
Safari - 10, 12, 13, 14m		2002→	MT1000S	100	40
Safir - 12m		1999→	MT1000S	100	40



## VAN HOOL

A308 Midi Bus		1998→	MT900S	90	36
A309 Low Floor City Bus		2004→	MT900S	90	36
A 300, A 320, A330, A 360 Standard Bus Low Floor City Bus		1998→	MT900S	90	36
A 600 Standard Bus Low Floor City Bus		2000→	MT900S	90	36
AG 300 Articulated Bus Low Floor City Bus		1991→	MT900S	90	36
AG 500 Articulated Bus High Floor Inter Urban		1996→	MT900S	90	36
AG 700, AG 900 Articulated Bus High Floor Inter Urban		1991→	MT900S	90	36
AGG 300 Double Articulated Bus Low Floor City Bus		1993→	MT900S	90	36
Acron		→1997	MT900S	90	36
Acron T915 - T918		1998→	MT1000S	100	40
Alicorn A 308		1992→	MT900S	90	36
Alicorn T911 - T916		2002→	MT1000S	100	40
Alizée T815H		1996→	MT1000S	100	40
Altano T816 - T818		1992→	MT900S	90	36
		2000→	MT800S	80	32
Astromega Double Deck TD 824, TD 827			MT1000S	100	40
Astromega Double Deck TD 917, TD 924, TD 927		2000→	MT800S	80	32
Astron		→2002	MT900S	90	36
Astron T917		2002→	MT1000S	100	40
Astron T916	☞	2004→	MT1000S	100	40
EOS 80, 90	☞	1998→	MT900S	90	36
EOS 200	☞	1996→	MT701H	70	28
	☞	1996→	MT800S	80	32
EOS 230		1996→	MT800S	80	32
EOS 233		→1999	MT800S	80	32
EOS Coach		1992→	MT1000S	100	40
Linea Bus - A600 Mercedes/Scania/ Volvo Chassis		1992→	MT1000S	100	40
SB 2700			MT701H	70	28



## VAN HOOL

Sion			MT900S	90	36
T915		1996→	MT1000S	100	40
T915 CL		2000→	MT1000S	100	40
T917		1998→	MT1000S	100	40

## VDL BUS GROEP (DAF BUS)

Berkhof Ambassador		2004→	MT1000S	100	40
Bova Axial Double Deck		2004→	MT800S	80	32
		2004→	MT651H	65	26
Bova Futura		2004→	MT1000S	100	40
Bova Mirage		2004→	MT1000S	100	40

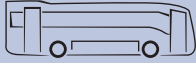
## VOLVO

5000 - 7500 City Bus B10, B7, B9		1998→	MT1000S	100	40
7000/7700 City Bus (Hybrid) B10L, B7L, B9L B5L		1998→	MT1000S	100	40
8700 LE City Bus, TX Intercity B7, B12		2004→	MT1000S	100	40
9700 TX Intercity/Coach B12		2002→	MT1000S	100	40
9900 Coach B12		2002→	MT601H	60	24
Alé (Autodromo)		2002→	MT1000S	100	40
B6		1991→1998	MT1000S	100	40
B9 TL Olympian		1992→2000	MT1000S	100	40
B10 - Berkhof Excelens		1998→	MT1000S	100	40
B10 BLE City Bus		1992→2004	MT800S	80	32
B10 TL Super Olympian		1998→2004	MT1000S	100	40
B10L City Bus		1994→1999	MT1000S	100	40
B10LA Articulated City Bus		1994→1999	MT1000S	100	40
B10M (Saffle)		1992→2004	MT800S	80	32
B10M City Bus		1978→2001	MT1000S	100	40
B12		2000→	MT1000S	100	40
B12 600		2000→	MT1000S	100	40

## WRIGHT

Cadet Midi Bus VDL SB120		1999→2006	MT800S	80	32
Commander City Bus VDL SB200		2002→2007	MT800S	80	32





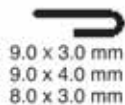
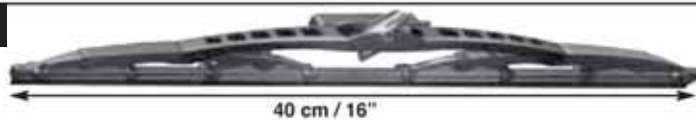
## WRIGHT

Crusader 2 Volvo B6LE		1998→	MT800S	80	32
Eclipse Commuter Intercity Bus Volvo B7RLE		1999→	MT800S	80	32
Eclipse Gemini Double Decker Volvo B7TL, B9TL		2004→	MT800S	80	32
Eclipse Metro/Urban City Bus Volvo B7L, B7RLE		1999→	MT800S	80	32
Pulsar City Bus VDL SB180, SB200		2006→	MT800S	80	32
Pulsar Gemini Double Decker VDL DB250		2004→	MT800S	80	32
Renown Volvo B10 BLE		1998→	MT800S	80	32
Solar City Bus Scania L94UA		2000→	MT800S	80	32
Solar Fusion Articulated City Bus Scania L94, K Series		2000→	MT800S	80	32
Streetcar BRT Volvo B7, B9LA		2007→	MT800S	80	32
Streetcar RTV Hess		2008→	MT800S	80	32

*Disegni*  
*Drawings*  
*Zeichnungen*  
*Plans*  
*Disenos*  
*Desenhos*  
*Αναλήψεις*  
*Rysunki*  
*Рисунки*  
*Çizimler*

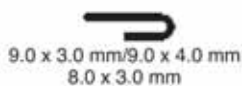


MT4511



(-)

MT5511



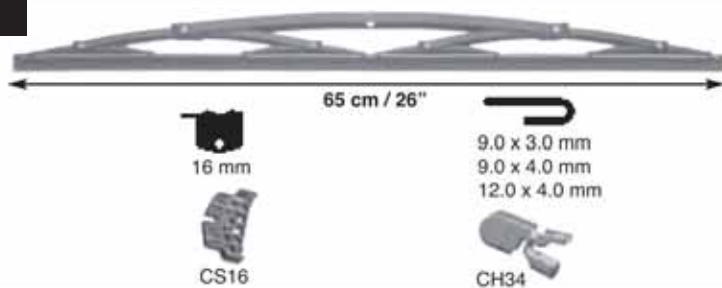
MT601H



MT603H



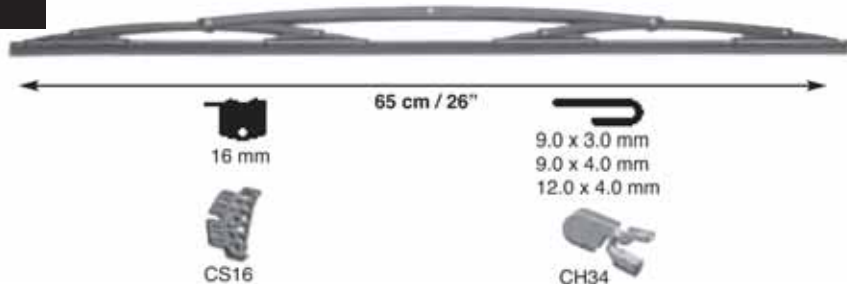
**MT651H**



**MT655H**



**MT701H**



**MT705H**



**MT800S**



**MT906H**



**MT900S**



**MT1000S**



Applicazione per codice  
Buyers guide  
Zuordnung nach Bestellnummer  
Affectations par références  
Aplicación por código  
Aplicação por código  
Εφαρμογες ανά κωδικό  
Zastosowanie dla kodu  
Применение для кода  
Şifreye göre uygulama





<b>MT4511</b>	
<b>IRISBUS (IVECO/IKARUS)</b>	
Agora City Bus (Renault)	2002→
<b>RENAULT</b>	
Agora	1996→

<b>MT5511</b>	
<b>AUWÄRTER (E. Auwarter)</b>	
Stadbus	1998→
Super Sprinter MB 412	1998→
<b>BMC</b>	
200_13	2000→
<b>GINAF</b>	
A2121-N	1998→
<b>IVECO</b>	
306, 308, 309, 314, 315GT, 343	1970→1978
<b>LEYLAND DAF</b>	
95	06/91→
<b>LIAZ</b>	
18.33, 19.33, 24.33	1997→

<b>MT601H</b>	
<b>AUWÄRTER (E. Auwarter)</b>	
Economy MB O 614D	1989→
Economy MB O814	1998→
Microstar/Multimax VW T4	1998→
Stadbus	1998→
Super Sprinter MB 412	1998→
<b>BERKHOF (VDL)</b>	
Bluebird Q-Bus	1992→
<b>DAF</b>	
65	03/93→02/98
75	07/92→02/98
85	07/92→02/98
CF 65	02/98→
CF 75	02/98→
CF 85	02/98→
F1100 -> 3600	→09/91
F1700 F/FA 1700 D/N	12/86→02/95

<b>MT601H</b>	
<b>DAF</b>	
F65, F75, F85	1992→12/97
LF 45	01/01→
LF 55	01/01→
<b>DENNIS</b>	
Double Deck Falcon V	1982→
<b>ERF</b>	
EC Series	1997→2000
ECM Series	2002→
ECX	1996→
ES Series	1992→2001
<b>FODEN</b>	
2000 Series	1997→2001
3000 Series	1997→2001
4000 Series	1997→2001
A2000 4R	2002→2006
A3000 6M, 6TT, 8RT	2002→2006
<b>GINAF</b>	
DAF Cab. 95 Series	1990→
M3335, M3132, M3333, M4243, M4443, M5450	
<b>IVECO</b>	
120	1983→1990
120.13 - 330.36 P, PA Series...	
150 -16	1983→1992
160 160.19	1982→1986
160.30AH - 320, - 490 (Eurofire)	1983→1993
170 OM35	1979→
170F	1978→1982
175	1988→
190.30, 190.36, 190.42	1983→1993
190F, 190 PAC	1978→
220F, 240F, 260F	1977→1992
240.36, 250.30, 260.30	1983→1993
260 PAC	1977→
300.30, 320.30, 330.30, 333.36	1984→1993
330	1978→
	1987→1995
470, 570, 670	1981→1985

MT601H	
<b>IVECO</b>	
619, 684, 697	1977→1981
75.9 A -> 130.16 MK..	1979→
M130D, 160D, 170D	1977→1983
	1975→1980
M232D, 256D, 270D, 310D	1977→1983
	1975→1980
M320 DCS2601	1980→1983
P/PA Series 120.13 - 330.36	
<b>KUSTERS</b>	
Mid Euro XL 416	2002→
Mid City III 416	2002→
Parade	2002→
<b>LEYLAND DAF</b>	
65	1992→
75	1992→
85	1992→
<b>M.A.N.</b>	
35	1988→1996
48 VF	1989→1990
E2000	1996→
F 90 Unterflur U Series 19.....-> 26.....	10/86→1994
F2000 T Series 19.....-> 41.....	01/94→
F90 F Series 19.....-> 48.....	09/87→1996
FE360A	2000→
M2000 M M Series 14.....-> 25..... Large Cab	08/95→
M90 M Series 12.....-> 24.....	08/88→1996
<b>MARSHALL</b>	
O 814 (Mercedes)	1998→
<b>MERCEDES</b>	
Econic 18.... - 26....	03/1998→
O 814 Marshall	1996→1999
O 817	1996→1999
<b>NISSAN</b>	
Atleon7.5-15t	2006→
<b>PEGASO</b>	
360 Series	1988→

MT601H	
<b>RENAULT</b>	
Bus S 105	1990→
<b>RENAULT/R.V.I.</b>	
Major "R" R340 - 420 '1990 ->	1991→1996
Manager "G" G200 - 340 '01/93 ->	1991→1996
Maxter "G" G230 - 340	1992→1997
Messenger "B" B80-120	1990→1999
Midliner "M" M140 - 250, ME160 - 180	1988→2000
<b>SCANIA</b>	
3 Series - 93, 113, 143	1988→12/96
<b>STEYR-DAIMLER-PUCH</b>	
18 S 46, 19 S 46	1994→
19 S 46 Man F2000	1998→
F Series 19 S 17 - 40 S 42	1997→
<b>VOLVO</b>	
9900 Coach B12	2002→
F16	1987→1995
FL 180 - 250	2001→
FL4	1986→1989
FL6	1985→2005
FLC	1996→
FS10	1987→1996
FS7	1986→1996
<b>VW</b>	
Constellation 13, 15, 17, 19, 24	2006→

MT603H	
<b>DAF</b>	
LF 45	01/01→
LF 55	01/01→
<b>RENAULT</b>	
Midlum 180 - 250	2000→2006
<b>VOLVO</b>	
FL 180 - 250	2006→
FL6	2006→

<b>MT651H</b>	
<b>AUTOSAN</b>	
A0909L Tramp 2	2004→
<b>BERKHOF (VDL)</b>	
Axial 100 ADD	2000→
Axial 70 ASD	2000→
<b>BMC</b>	
Megastar	2005→
Pro 518	2004→
Pro 622, 625	2000→
Pro 832	2000→
Pro 935, 938	2004→
<b>IVECO</b>	
139	1982→1987
180.24 -> 240.38 Turbostar/Turbotech T Series	1982→
190	1987→1998
256 M	1978→1983
260	1989→1999
320	1984→1996
330	1989→1999
340	→1992
Euro Fire - Fire Engine 300	2000→
EuroCargo	1992→2000
EuroCargo 75E, 80E, 90E, 120E, 135E, 180E	2000→
EuroClass	1993→2002
EuroMover	1998→
EuroStar E45 - 430, 470	1992→2002
Eurostar Cursor	2000→
EuroTech E45 - 350	1992→2000
EuroTrackker E45 - 350, 420	1993→
M320 M 19	1980→1983
Stralis AS440S...19-44t	2002→
Trakker	2002→
Turbo Star	1989→2000
Turbo Tech	1980→2001

<b>MT651H</b>	
<b>MERCEDES</b>	
1729 - 4850 SK series type 641/649	1989→
Atego 7.. - 26....	1998→10/2004
Atego 2 8.... - 16.....	10/2004→
Axor 18... - 32...	2002→10/2004
Axor 2 18... - 32...	10/2004→
Powerliner SK series 641/649 - 17.... - 48....	10/88→08/96
Unimog UX100	1996→
<b>MULTICAR</b>	
Multicar M26	1998→
<b>SEDDON ATKINSON</b>	
Strato 215 - 420	1996→
<b>VDL BUS GROEP (DAF BUS)</b>	
Bova Axial Double Deck	2004→
<b>VOLVO</b>	
FH12	1996→1999
	2000→2003
FH16	1996→2003
FH16 FH42, 62, 64, 82, 84	2006→
FM7, FM9, FM10, FM12	1998→2001
	2002→
NH12	2000→

<b>MT655H</b>	
<b>RENAULT/R.V.I.</b>	
Kerax 260 - 420	2000→
Premium II 280 - 450	2005→
<b>VOLVO</b>	
FE FES 42, 62, FEE 64	2006→

<b>MT701H</b>	
<b>ALFA</b>	
Coach	
<b>AUWÄRTER (E. Auwarter)</b>	
Clubstar O301	
<b>BERKHOF (VDL)</b>	
2000 HDA,HL	1992→

<b>MT701H</b>	
<b>BMC</b>	
Falcon 1100 LF	2004→
School Bus 1100 FE	2004→
<b>DRÖGMÖLLER</b>	
E420,440	
E430U	
<b>ERF</b>	
ECT Series	2002→
<b>HEULIEZ</b>	
GX 37H, 27	
<b>HINO</b>	
Milennium Bus	
<b>IKARUS</b>	
216, 260	1998→
280 - 286 Articulated Bus	
480 City Bus	1992→
Stadtbus	1992→
<b>IVECO</b>	
M170 SH 110, M200 SH 110V	1975→1980
M170L, 200L, 230L	1975→1980
<b>JONKHEERE (VDL)</b>	
Bermuda	
Jubilee P90	
Monaco Double Decker	1992→
<b>M.A.N.</b>	
TGA H series 18.....-> 41.....	04/00→
TGL N Series 6.....-> 12.....7-12t	04/05→
TGM N Series 12.....-> 26..... 13-26t	10/05→
TGS 18.....-> 41.....18-41t	2000→
TGX 18.....-> 41.....18-41t	2000→
<b>MERCEDES</b>	
Actros 18...- 41....	1996→2003
Actros MP2 18...- 41....	04/03→
<b>NEOPLAN (-&gt; G. AUWÄRTER (NEOPLAN))</b>	
Controliner - Double Decker 4426	10/98→
Clubliner N122	1983→01/86

<b>MT701H</b>	
<b>NEOPLAN (-&gt; G. AUWÄRTER (NEOPLAN))</b>	
Jumbocruiser N138	1983→01/86
Megaspace N128/4	
N424, N426/3	
Skyliner N 122/3 L	09/04→
Skyliner N122	08/83→01/86
	09/82→
<b>PLAXTON</b>	
SB3000 DAF	1998→
Volvo	1998→
<b>RENAULT</b>	
Monospace P, C, F, L	
<b>RENAULT/R.V.I.</b>	
AE 500 Series Magnum	1990→
Magnum AE385 - 560	1997→
Magnum E-Tech 400 - 480	2000→
Magnum DXi 12.440 - 14.500	10/04→
<b>SCANIA</b>	
4 Series - 94, 114, 124, 144, 164	1996→
<b>SETRA</b>	
S 431 DT Double Deck	2000→
<b>TERBERG</b>	
FL single cockpit	1998→
FL1350, FL1850, FL2000	1998→
<b>VAN HOOL</b>	
EOS 200	1996→
SB 2700	
<b>VOLVO</b>	
FH12	2004→
FL7, FL10, FL12	1985→1996
FL7, FL10, FL12, FL16	1997→2001
<b>MT705H</b>	
<b>SCANIA</b>	
P, R, T Series P230 - 420, R340 - 620, T470	2004→

<b>MT800S</b>	
<b>ANADOLU</b>	
Harmony/Turquoise	2004→
<b>AUWÄRTER (E. Auwarter)</b>	
Team Star 613/41, L613D	
Travelskate	
<b>BERKHOF (VDL)</b>	
Excellence 3000	
<b>CAETANO</b>	
Optimo IV	2000→
<b>COBUS</b>	
City	2000→
<b>DEN OUDSTEN</b>	
B93 Aliance	1992→
<b>DENNIS</b>	
Arrow	1998→
Dart Duple	1989→
<b>DRÖGMÖLLER</b>	
E420,440	
<b>HEULIEZ</b>	
GX 217 - 417	
<b>IKARUS</b>	
397,07	
405 Midibus	
417 Articulated City Bus	1995→
489 Polaris	2000→
<b>JONKHEERE (VDL)</b>	
Auteuil	1992→
Monaco Double Decker	1992→
<b>KAROSA</b>	
900 Series	1997→
Recreo	1997→
<b>KÄSSBOHRER-SETRA -&gt; SETRA</b>	
S 215, S216 HDS	
<b>M.A.N.</b>	
NG 312	1994→1998

<b>MT800S</b>	
<b>M.A.N.</b>	
NL 202	1998→2001
NL 222	
NL 222 FR	1998→
NL 232	
NL 262	
NL 312	
<b>MARBUS</b>	
B40 80TS	2002→
<b>MERCEDES</b>	
Medio Minibus	2004→
Unimog U300, 400, 500 UGN Series: 405	2000→
<b>NEOPLAN (-&gt; G. AUWÄRTER (NEOPLAN))</b>	
Centroliner - Double Decker 4426	10/98→
Clubliner N122	02/86→
Jumbocruiser N138	02/86→
Megaspace N128/4	
Megatrans N4020	
Metroshuttle 4114 DE	
Midibus N4010 NF	
Skyliner N 122/3 L	09/04→
Skyliner N122	02/86→
Starliner	2002→
<b>SALVADOR CAETANO</b>	
Optimo IV	2000→
<b>SCANIA</b>	
Omnicity, Omni Decker N 94, CN 94	1996→
Omniline IL 94	2000→
Omnilink CL94	1998→2001
<b>SOLARIS</b>	
Urbino	2002→
Vacanza	2004→
<b>TEMSA</b>	
Diamond - 13, 14m	2004→

**MT800S**
**VAN HOOL**

Altano T816 - T818	2000→
Astromega Double Deck TD 917, TD 924, TD 927	2000→
EOS 200	1996→
EOS 230	1996→
EOS 233	→1999

**VDL BUS GROEP (DAF BUS)**

Bova Axial Double Deck	2004→
B10 BLE City Bus	1992→2004
B10M (Saffle)	1992→2004

**WRIGHT**

Cadet Midi Bus VDL SB120	1999→2006
Commander City Bus VDL SB200	2002→2007
Crusader 2 Volvo B6LE	1998→
Eclipse Commuter Intercity Bus Volvo B7RLE	1999→
Eclipse Gemini Double Decker Volvo B7TL, B9TL	2004→
Eclipse Metro/Urban City Bus Volvo B7L, B7RLE	1999→
Pulsar City Bus VDL SB180, SB200	2006→
Pulsar Gemini Double Decker VDL DB250	2004→
Renown Volvo B10 BLE	1998→
Solar City Bus Scania L94UA	2000→
Solar Fusion Articulated City Bus Scania L94, K Series	2000→
Streetcar BRT Volvo B7, B9LA	2007→
Streetcar RTV Hess	2008→

**MT900S**
**ALEXANDER DENNIS**

ALX 400 Double Decker	1997→2006
ALX200 Midi Bus	1996→
ALX300 City Bus	1997→2007
ALX500 Double Decker	1997→2002

**MT900S**
**ALEXANDER DENNIS**

Pointer Plaxton	2001→2007
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**MT900S**
**ALEXANDER DENNIS**

President Plaxton	1999→2005
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**AUWÄRTER (E. Auwarter)**

Clubstar HD MAN 11.220 HOCL	2000→
Clubstar MAN	1998→

**COBUS**

3000	2000→
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**DENNIS**

Dart SLF Low Floor City Bus	1995→
Dart SPD Pointer	1997→
Javellin Horseman	1998→

**IKARUS**

Orlandi Happy	2000→
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**IRISBUS (IVECO/IKARUS)**

Domino Coach HD, HDH (Orlandi)	2000→
Europolis Midi Bus (Iveco)	2000→
Happy Minibus	2000→

**IRIZAR**

Century TOP BUS	2002→2003
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**ISUZU**

Harmony	2004→
Turquoise	2004→

**M.A.N.**

MCV Evolution	2004→
NH 283	2000→
NL 202	1989→1993

**MARSHALL**

Capital C39 Dart SLF	1998→2003
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**MERCEDES**

Nouvelle 2	1998→
Tourino (Evobus) O 510	2004→

**NEOPLAN (-> G. AUWÄRTER (NEOPLAN))**

Centroliner N4407	10/98→
Centroliner N4413 CNG	01/99→
Centroliner N4416	10/98→

<b>MT900S</b>	
<b>NEOPLAN (-&gt; G. AUWÄRTER (NEOPLAN))</b>	
Starliner	2002→
<b>OPTARE</b>	
Easy Rider	1998→
Navigo 125, 160	2004→
<b>PLAXTON</b>	
Cheetah MB Vario	2004→
Hughes Daf	1998→
Pointer Dennis Dart SLF	1998→
<b>SALVADOR CAETANO</b>	
Nimbus Dart SLF	1998→
<b>SCANIA</b>	
Century	1998→
Century K124 TOP BUS	2000→
S 328DT	1998→
<b>TEMSA</b>	
Opalin Midi Coach - 8, 9m	2004→
<b>VAN HOOL</b>	
A308 Midi Bus	1998→
A309 Low Floor City Bus	2004→
A 300, A 320, A330, A 360 Standard Bus Low Floor City Bus	1998→
A 600 Standard Bus Low Floor City Bus	2000→
AG 300 Articulated Bus Low Floor City Bus	1991→
AG 500 Articulated Bus High Floor Inter Urban	1996→
AG 700, AG 900 Articulated Bus High Floor Inter Urban	1991→
AGG 300 Double Articulated Bus Low Floor City Bus	1993→
Acron	→1997
Alicorn A 308	1992→
Altano T816 - T818	1992→
Astron	→2002
EOS 80, 90	1998→
Sion	
<b>MT906H</b>	
<b>EOBUS</b>	
Citaro L Articulated Bus	1999→
Citaro O 530	1998→
<b>M.A.N.</b>	
Lions City DD	2004→
Lions City M	2004→
Lions City, City LL	1998→
NG 263	1996→
NG 312, NG 313	1998→
NL 202	1989→
NL 223, NL 263, NL 313	
NM 223, 283	02/96→
NU 263, NU313	1996→
<b>MERCEDES</b>	
Citaro (Evobus) O 530	1998→
Citaro L (Evobus) Articulated Bus	1999→
<b>MT1000S</b>	
<b>ALEXANDER DENNIS</b>	
Javelin	
<b>AUTOSAN</b>	
A0808T Gemini II	2004→
A 1112T Ramzes	2004→
<b>AUWÄRTER (E. Auwarter)</b>	
Clubstar Otego	2000→
Eurostar HD, HDS K112T	
Panorama	
Team Star City	1996→
Team Star City811D, 814D	1987→1996
Team Star Reise	2000→
<b>BERKHOF (VDL)</b>	
1000 LD Exelence	1992→
2000 HD Exelence	1992→
2000 HDA,HL	1992→
Ambassador 200	2000→
Axial 100 ADD	2000→

<b>MT1000S</b>	
<b>BERKHOF (VDL)</b>	
Axial 70 ASD	2000→
Berkhof Bus Volvo B10B,B10M,B12	1992→
Esprite Alizee/Acron	
Exellence 500	
Premier Daf, Jonkheer	1998→
Radial	1998→
<b>BMC</b>	
Belde City Bus 220SLF, 260SLF, 260 CB	2002→
Hawk 900 LF	2004→
Probus City Bus 215 SCB	2004→
Probus Coach 850 Club/TBX	2004→
<b>DEN OUDSTEN</b>	
Aliance City, Interurban	1992→
B96 Aliance	1998→
<b>DENNIS</b>	
Javellin	1987→
<b>DRÖGMÖLLER</b>	
E290,300,310,320,330	
E430	
E430U	
K 110 Scania	
<b>EOBUS</b>	
Tourismo O 350	1998→2001
<b>GINAF</b>	
B3128, B2121	1998→
<b>HEULIEZ</b>	
GX 44 - 77H	
GX 107, 113	
<b>IKARUS</b>	
315	
386, 396.61, 398.20	
397,07	
412, 415 City Bus	1995→
435 Articulated City Bus	1995→
E13 Midibus	1998→
E15	2000→
E91 City Bus E91	2000→

<b>MT1000S</b>	
<b>IKARUS</b>	
E94 City Bus E94	1998→
E99 DD	
Hughes Daf	1998→
SB 3000	1989→
Scania K112	
<b>IRISBUS (IVECO/IKARUS)</b>	
Ares School Bus N, N15 line	2000→
Evadys Coach H. HD	2004→
Iliade Coach H, HD	2000→
<b>IRIZAR</b>	
Century TOP BUS	2004→
Intercentury	2000→
PB	2002→
Pyrenean, Shetland	
<b>IVECO</b>	
Cavalier	1998→
Citelis Trolley Bus	2006→
Domino	2000→
Domino 2001	2000→
EuroClass	
Fiat 370..., - Domino	1982→
Fiat 471..., 571..., 671...	1982→
Magirus 160 R81 315.8.17	
Magirus M2000 12m	1981→
Magirus M2000 HD	1982→
Midi Stadtbus Europolis	2000→
<b>JONKHEERE (VDL)</b>	
Neuilly	1992→
<b>KÄSSBOHRER-SETRA -&gt; SETRA</b>	
S 213 HR, S215 RL Rational	
S 215 UL - SG 221 UL Regional	
S 215, S216 HDS	
S 328 DT	1998→
SG 215 SL, SG 219 Conceptbus	
<b>M.A.N.</b>	
Ale Euro 3	2000→
Economy Bus	
FRH353	1996→



<b>MT1000S</b>	
<b>M.A.N.</b>	
Lions Coach RH 403	1998→
Lions Regio C, L	2004→
RH 463	2000→
RHG	2000→
RHS 464	2000→
<b>MARBUS</b>	
B30 90TM	2002→
<b>MARCOPOLO</b>	
Viaggio Coach 330, 350	2004→
<b>MERCEDES</b>	
Tourismo (Evobus) O 350	1998→2001
<b>NEOPLAN (-&gt; G. AUWÄRTER (NEOPLAN))</b>	
Airport Bus 9010-9040	
Jumbocruiser N138	
Regioliner	1998→
Tourliner N 2216 SHD	01/03→
Trendliner N3516	09/04→
<b>NOGE</b>	
Euro Class, Euro Rider Coach	
Touring Star Coach O404	
<b>OPTARE</b>	
Metro Rider	1989→2000
Skiaper	1992→
Spectra	1992→
<b>RENAULT</b>	
Agora	1996→
Ares	2000→
Bus R 312	1990→
Iliade Coach H, HD	2000→
Tracer	1992→
<b>SCANIA</b>	
E95	2004→
Intercentury	1998→2003
Irizar	1998→
<b>SMIT</b>	
Antares	1992→
Mercurius, Meteor	1992→

<b>MT1000S</b>	
<b>SMIT</b>	
Orion	1992→
<b>SOLARIS</b>	
Vacanza	2002→2003
	2004→
<b>SUNDANCER</b>	
Midikurz	2004→
<b>TEMSA</b>	
Executive Safari	2002→
Safari - 10, 12, 13, 14m	2002→
Safir - 12m	1999→
<b>VAN HOOL</b>	
Acron T915 - T918	1998→
Alicorn T911 - T916	2002→
Alizée T815H	1996→
Astromega Double Deck TD 824, TD 827	
Astron T917	2002→
Astron T916	2004→
EOS Coach	1992→
Linea Bus - A600 Mercedes/Scania/ Volvo Chassis	1992→
T915	1996→
T915 CL	2000→
T917	1998→
<b>VDL BUS GROEP (DAF BUS)</b>	
Berkhof Ambassador	2004→
Bova Futura	2004→
Bova Mirage	2004→
<b>VOLVO</b>	
5000 - 7500 City Bus B10, B7, B9	1998→
7000/7700 City Bus (Hybrid) B10L, B7L, B9L B5L	1998→
8700 LE City Bus, TX Intercity B7, B12	2004→
9700 TX Intercity/Coach B12	2002→
Alé (Autodromo)	2002→
B6	1991→1998
B9 TL Olympian	1992→2000

**MT1000S****VOLVO**

B10 - Berkhof Excelens	1998→
B10 TL Super Olympian	1998→2004
B10L City Bus	1994→1999
B10LA Articulated City Bus	1994→1999

**MT1000S****VOLVO**

B10M City Bus	1978→2001
B12	2000→
B12 600	2000→

