

ALFA ROMEO BRINGS STYLE AND PERFORMANCE TO A NEW AUSTRALIAN MARKET SECTOR

Alfa Romeo's unique combination of style and performance is now available to a whole new Australian market sector with the launch of the Alfa Romeo MiTo, which brings together the convenience, economy and low emissions of a small car with the style, performance, and luxury of Alfa Romeo's larger models.

"The only thing that has been downsized with the Alfa Romeo MiTo is the size," explains Edward Butler, General Manager for Alfa Romeo in Australia. "Everything else is what would be expected of an Alfa Romeo, from the style, which is inspired the Alfa Romeo fastest production car, the Alfa 8C Competizione, to its performance, which is provided by a choice of two compact turbocharged engines. Equally, the Alfa Romeo MiTo shares a lavish level of equipment with its larger brothers and its long list of advanced technology will make it a benchmark in its class."

Although Alfa Romeo has had small cars in the past, most famously the Alfa Romeo AlfaSud which started a line of cars that lead to the Alfa Romeo 147 in today's range, the Alfa Romeo MiTo is significantly different in its positioning from previous models. Not only is it in the market sector below the AlfaSud and today's 147, but also unlike the AlfaSud, which is was designed to compete mass market, every element of the MiTo places it firmly at the premium prestige end of its market sector.

The fact that the MiTo has been designed to be exclusively a three door car has provided the stylists at Alfa Romeo Centro Stile with the freedom to endow the MiTo with a new level of style, internally and externally, that has not been previously available in this market sector.

Most obviously is the way the MiTo tappers behind the 'b' pillar to provide not a just coupe style, but also shoulders over the rear wheels akin to those on the Alfa 8C sports car, that lead the eye to rear lights, which include the first of several class-firsts, the safety of LED rear lights replacing conventional light bulbs.

At the front, the shield-shaped grille is imposingly sited at the end of a sculpted V-shaped bonnet, flanked by clear lens and teardrop headlamps. In profile, the high waistline, flared wheel arches, disguised B-pillar and minimal rear overhang combine to communicate power, performance and agility.

Inside the cabin, the high quality interior feels like a car from a class above, with with additional touches in the MiTo Sport such as its unique carbon fibre-look dashboard. The

sporty dials are hooded and the central console comes with a satin finish. Careful soundproofing helps create a quiet and refined environment that optimises the inclusion of a quality sound system and integrated Blue & Me™ in the MiTo Sport.

Regardless of engine version, the Alfa MiTo delivers an engaging and rewarding driver experience. The turbocharged 1.4 litre 114 kW MiTo Sport delivers the type of power normally associated with a significantly larger engine as it accelerates from 0-100 kmh in 8 seconds, and continues to a top speed of 215 kmh, yet offers a combined fuel figure of just 6.5 litres 100 km.

The Alfa Romeo MiTo with the 88 kW Turbocharged engine achieves 100 kmh in just 8.8 seconds and goes on to a top speed of 198 kmh, while offering an even more impressive combined fuel figure of 6.1 litres per 100 km.

Alfa Romeo's innovative DNA system is another first for the class. A three-position switch, situated beside the gearlever, alters the throttle response and steering set-up for different driving environments – Dynamic, Normal and All Weather.

In Dynamic mode, the throttle response is quicker, the steering is sharper and the handling is more direct. For icy and loose surface environments the All Weather mode provides a more gentle response. Alfa Romeo's Electronic Q2 limited slip differential heads a list of dynamic driver aids, including a long list of safety systems. Together, these all help deliver impressive driving dynamics and handling, along with sure-footed road holding capabilities.

In line with entertaining levels of performance and handling, the Alfa MiTo also boasts high levels of safety.

Designed and developed to achieve the highest possible scores in passive and active safety tests, the Alfa MiTo is one of the safest cars on the road, providing driver and passengers with a high level of protection.

In recognition of its safety credentials, the Alfa MiTo has already collected a 5-star Euro NCAP safety rating.

Driver and occupant safety is paramount, and the specification of seven airbags including front airbags, window bags, sidebags and driver's kneebag work with Alfa Romeo's Self Aligning Head Restraint – a system that moves the head restraints closer to the neck of the front seat occupants to lessen the effect of whiplash in the event of an impact – is evidence of Alfa Romeo's commitment to the highest possible safety standards.

During emergency braking, the Alfa MiTo automatically operates its hazard lights to alert other road users.

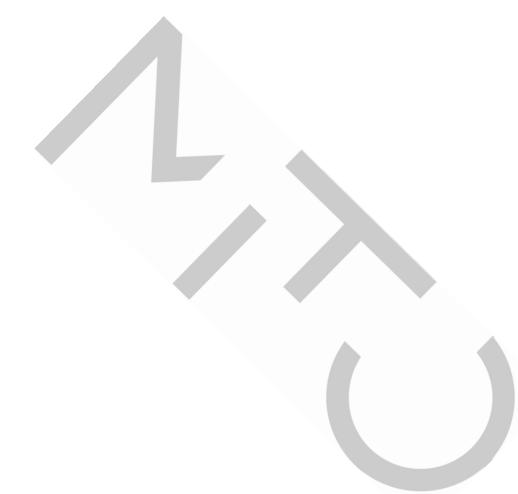
Both versions of the MiTo are well equipped with Trip computer, cruise control, aircon, remote locking and boot release, steering wheel audio controls, front armrest with locker, leather steering wheel, VDC with hill holder, front electric windows, DNA and a premium six speaker audio system headlining the standard equipment package.

The Alfa Romeo MiTo is launched in Australia in two versions; the 88 kW Alfa Romeo Mito is priced at a recommended price of \$31,490 plus statutory charges and delivery. In addition to a power boost from 88 to 114 kW, the MiTo Sport gains Blue&Me Bluetooth telematics with a

USB connection, climate control air conditioning, sports bumpers, spoiler and pedals, rear parking sensors, Brembo Brakes, auto wipers, lights and interior mirror as well as front fog lights. The MiTo Sport is priced at \$37,490 plus statutory charges and delivery.

The Alfa MiTo is being launched into a segment dominated by the Mini. The Italian sporting car company is planning to challenge leading rivals with the MiTo's persuasive combination of stylish looks, high specification and value for money proposition, driving credentials, and genuine four person comfort and luggage space.

"The moment is right to introduce a new sporty compact to the sector," says Edward Butler. "Cool, young drivers will relish the choice and excitement that this new model – a real driver's car – brings. Keen pricing, Alfa's evocative heritage and the MiTo's good looks mark it out as a genuine contender within this competitive sector."



TAKING ALFA ROMEO TO A NEW MARKET SECTOR

The Alfa Romeo MiTo takes the Italian car maker into an entirely new market sector for the first time, but as would be expected of company renowned for its performance and style, it is not competing with the mass market cars within this sector, a decision which has enabled its designers and engineers to enjoy the freedom to produce a car that is more aggressively styled, offers more equipment and technology and higher levels of performance.

Traditionally in Europe the A category or Small Family car sector was the largest market sector, but over the past decade there has been an aggressive growth in the AO or Supermini category as tax and driving conditions encouraged car buyers to move down not just from the A category but also, jumping a category, from the B category. But many of these motorists did not wish to give up the style, performance and luxury of the cars from which they had moved.

This has lead to the growth of a premium and prestige sector within the Supermini category, lead by the Mini. It is into this sub category that the MiTo is placed and given Alfa Romeo's abilities in other sectors, set to become a benchmark.

Although it is tempting to see the MiTo as a modern version of the AlfaSud, this is to miss two key points. The first, and most obvious, the AlfaSud was designed to be a mainstream competitor in the A category and, although stylish, had to be designed to allow it to have four and later five doors, and a large family boot Secondly it had to have a specification that enabled it to a rival to sector rivals such as the VW Golf, Citroën GS and Ford Escort. It also had to be available as wagon variant and, although it produced a coupe variant, this was a rival for cars such as the VW Scirocco.

Simply put there is a successor for the AlfaSud – today's Alfa Romeo 147.

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The Mito, in comparison, is designed for a market sector was just arriving in the early 1970s, the Supermini category, and a subsector that was two decades away, premium and prestige Superminis.

As such it has a technical specification that lifts above the majority of its market sector, equipment and features many of which aren't even available as options on many class rivals and a level of style and performance that are not hampered by banal requirements of having to compete with all models in the AO category.

STYLED TO BE SPORTY

With design cues taken from the stunning Alfa 8C Competizione, and only available as a three-door hatchback, the new Alfa MiTo is styled to match its description as the sportiest compact car on the market today.

From all angles, the Alfa MiTo manages to blend its sports credentials with typical Alfa Romeo style and sophistication to create a compact car that expresses the vitality and emotion of the brand.

Front on, the new addition to the range is every inch an Alfa Romeo. The instantly recognisable shield-shaped grille denotes the lineage of the Alfa MiTo and the shape of the bonnet and the headlamps pay homage to the Alfa 8C Competizione.

STYLISH AND COMFORTABLE

Inside the Alfa MiTo, it's clear to see that the sporty theme has been maintained.

Throughout the interior, a combination of precision materials, smart upholstery and top levels of build quality, plus neat finishing touches, make the cockpit a cosseting and welcoming environment.

The simply laid-out satin-chrome central console – home to the RDS stereo radio and MP3-compatible CD player – combined with the four air vents, tactile dashboard and the hooded driver instruments housing speedometer and rev-counter, fuel and water temperature gauges – create a high quality interior that is complemented matching seat upholstery.

The trim colour is extended to the driver and passenger door panels and complementary seat fabrics.

Controls for the heating and ventilation system are positioned in front of the gearlever on the central console. Across the range, all Alfa MiTo versions come with manual air conditioning as standard, with climate control on the MiTo Sport. Behind the wheel, the driver benefits from a rake and reach-adjustable steering wheel. All versions feature a leather steering wheel, gearlever and handbrake grip.

The three-position DNA switch is located beside the gear lever. The driver is reminded which function has been selected with a digital letter designation on the dashboard alongside a read-out for time, outside temperature and turbo pressure. The MiTo gets red-on-black dials while the Sport features white on black dials.

In the MiTo Sport, chrome kick plates and chrome sports pedals hint at the sporty lineage of the Alfa MiTo. Tilting and sliding front seats make rear passenger access easy and comfortable and, unlike some competitors, there's plenty of head, leg and elbow room in the back seats for two full-size adults.

Radio and Hi-Fi system

A young audience attracted to the Alfa MiTo's stylish and modern look will take in- car entertainment seriously. For that reason, the new Alfa MiTo includes a sophisticated RDS radio with CD and MP3 file player.

The sound system comes complete with six speakers (two mid-woofers with a power rating of 40W, two 40W full range speakers and two 30W tweeters) and, significantly, for the first time in its segment, the Alfa MiTo becomes available with a double antennae tuner fitted with a twin aerial for up to 80 per cent better reception.

Built into the design of the dashboard and laid out in user-friendly fashion, the controls for the radio, CD and MP3 player are easily accessible to the driver and front seat passenger.

In addition the sound system can be managed using steering wheel controls.

The radio comes with RDS (Radio Data System), TA (traffic news), and PTY (a code used by radio stations to indicate the type of music played so that the set can automatically select the type of music preferred by the listener).

Every time the radio is switched on, the volume settings remain the same as when it was switched off, while another device automatically corrects sound imbalance on the basis of road speed. The customer can also choose between seven equalisation bands for personal setting of sound parameters.

In addition, the Alfa MiTo Sport is fitted with the Blue&Me™ system. This innovative system has been created as a result of a joint venture between Fiat Group Automobiles and Microsoft, that changes the dynamics of in-car communication, information and entertainment to improve comfort and quality of time spent in the car.

The system is extremely simple to use, and allows occupants to make/receive telephone calls and to listen to music simply and safely, while on the move. And thanks to Bluetooth® technology, they can also communicate with the outside world from the car, using their own personal equipment, such as mobile phones or handheld computers.

Blue&MeTM is a system that is always able to keep pace with the times, with updatable, flexible and modular features. Fiat Group Automobiles and Microsoft, with the support of Magneti Marelli, also offer a platform that can be adapted to most mobile phones, music players or other personal equipment to replace the current costly and rigid hardware, with the great benefit of being able to constantly keep pace with market innovations and maintain perfect integration with the car.

Blue&MeTM ensures the greatest safety and ease of use. Because the voice control system is fully integrated with keys on the steering wheel and information on the instrument panel display, customers equipped with a Bluetooth® mobile phone can use it even if it is in a jacket pocket or handbag, without ever taking their hands off the steering wheel. Not to mention the fact that 'advanced voice recognition' allows immediate interactivity – no voice learning stage is required – and also allows incoming texts to be read out.

On the Alfa MiTo, Blue&MeTM achieves a further step forward by adding new functions that confirm the platform's great flexibility. By connecting a digital system to the USB port, it is possible to listen to hours of digital music in MP3, WMA and WAV format recorded on mobile phones, MP3 players and USB pen drives.

For greater compatibility with an iPod, it is now possible in a MiTo to listen to music tracks with an AAC extension in addition to the above formats, provided they are free from digital

rights (DRM) and saved in Hard Disk Drive mode. For greater passenger comfort, the Alfa MiTo Blue&Me™ also displays information on music tracks in the radio display.

ALL MOD CONS - THE ALFA MITO RANGE

The entire Alfa MiTo range is extremely well specified and, in some areas, class leading. The inclusion of Alfa Romeo's DNA system, LED rear lights and the highest Euro NCAP safety rating reinforce MiTo's keen pricing and exceptional value.

Mito

The standard specification list is long and comprehensive, featuring Alfa's advanced DNA function along with the Q2 system and electric power assisted steering. In addition, this model is fitted with Vehicle Dynamic Control – an amalgamation of ABS, Anti Slip Regulation and Brake Assistant – plus Hill Holder as standard.

Other safety features include driver, passenger, front side, window and driver's knee airbags, along with fast-reaction LED rear lights and a fire prevention system. The front passenger airbag can also be deactivated.

The LED rear lights complement the height adjustable follow-me-home headlights with titanium grey surrounds, electrically adjustable and heated colour-coded door mirrors and bumpers.

The Alfa MiTo version comes with 16" alloy wheels along with a leather steering wheel with remote audio controls and a leather gear knob.

Inside the cabin, driver and passengers benefit from manual air conditioning, electric one-touch window operation plus an RDS radio with CD and MP3 reader. There's also an 'auto-close' system to complement the Alfa code immobiliser and alarm system.

Also standard are a trip computer, cruise control, aircon, remote locking and boot release, steering wheel audio controls, front armrest with locker, leather steering wheel, VDC with hold holder, front electric windows, DNA and a premium six speaker audio system headlining the standard equipment package.

MiTo Sport

The top of the range Alfa MiTo Sport versions are fitted with 17" alloy wheels – similar to those that appear on the stunning Alfa 8C Competizione – along with satin effect headlamp surrounds and door mirrors.

This version features a rear spoiler and sports rear bumper with extractor. Sport versions also sport red painted brake callipers.

Inside the cockpit, the Sport features the same dashboard options as the MiTo version, but with an upgraded sports cloth and sports dials with white illumination and a carbon fibre effect dashboard.

The MiTo Sport comes with the Blue&Me hands-free system with voice recognition, and media player with USB port.

Blue&Me Bluetooth telematics with a USB connection, climate control air conditioning, sports bumpers, spoiler and pedals, rear parking sensors, Brembo Brakes, auto wipers, lights and interior mirror as well as front fog lights.

DRIVING SATISFACTION

With a long history of developing entertaining, driver-focussed small cars, Alfa Romeo has created a sporty compact that existing Alfisti and future fans are sure to enjoy.

On the road, Alfa MiTo delivers a fun, entertaining, comfortable and safe driving experience.

Its ability to deliver such high levels of driveability and refinement is derived from the choice of two turbo charged engines, the introduction of Alfa Romeo's innovative DNA (Dynamic, Normal, All Weather) system, the five and six speed gearboxes and newly developed running gear, and an innovative suspension set-up.

DNA

Until now, no other compact car has benefitted from advanced DNA driving technology derived from racing and supercars.

Situated beside the gearlever, a three-position switch alters the behaviour of vehicle dynamics with the system working on engine, steering, suspension, and gearbox. This creates three different vehicle behaviour modes based on the driving style best suited to the situation, terrain or the wishes of the driver.

With a choice of Dynamic, Normal and All Weather set-ups at the flick of a switch, the driver can effortlessly shift between the driving modes.

Ideal for urban driving, the Normal setting ensures the engine is tuned for agility in the city. However, shifting the DNA lever to the Dynamic setting delivers a sportier driver experience. Power steering assistance is reduced to bring a sportier feel to the steering and there is less intrusion from the Vehicle Dynamic Control and the Anti Slip Regulation systems.

When Dynamic mode is selected on the 114 kW Alfa MiTo Sport version, drivers can utilise an over-boost facility for increased driving entertainment.

Poor, low-grip weather conditions – loose surfaces, wet or snowy situations – could prompt the driver to switch to the All Weather mode.

When the All Weather function is selected, the traction control system increases its sensitivity, thus minimising the prospect of a loss of control in adverse conditions.

RIDE AND HANDLING - SUSPENSION

Key to the sporting ride and handling characteristics of the Alfa MiTo is the suspension layout.

Two tried and tested set-ups have been employed – a MacPherson layout at the front and a semi-independent layout with torsion beam at the rear.

In particular, some key elements have been incorporated to give an exclusive feel to the Alfa MiTo chassis.

To emphasise the promptness of response, stability and control, even under extreme conditions, MiTo's track widths are among the widest in the segment – 1483mm front and 1475mm rear.

The wheel rims are also wide in relation to the size of the tyres in order to optimise the latter's handling performance. The stiff, front and rear springs give the vehicle a sporting yet pliant ride, and the torsion beam features high torsional stiffness to enable it to also act as an antiroll bar, thereby ensuring optimum roll performance and helping maximise the promptness of response.

However, the most distinctive feature of the Alfa Romeo MiTo suspension is that the front and rear dampers feature coilover springs fitted inside the shock absorber that act in parallel with the main spring during extension travel, with the main purpose of reducing roll and increasing chassis response. Special dual-acting telescopic hydraulic dampers are fitted as standard on all versions.

ENGINES

Distinguished by its performance, eager throttle response, low fuel consumption, durability and reliability, the new 1.4 turbocharged petrol engines powers the MiTo with a choice of an 88 kW and 114 kW. The compact size of these engines provide performance, economy, emissions and handling and road holding advantages as they cut weight compared to older, larger designs require to produce these levels of power and torque.

1.4TB 88 kW Turbo petrol

New to the Alfa Romeo range is a 1.4 turbocharged unit that delivers enhanced levels of driving flexibility and lively performance.

Responsive and satisfying to drive, the new 1.4 TB engine is enhanced by the low inertia of the turbocharger that makes it possible to obtain maximum performance from a throttle command, without the annoying lag typical of this type of engine. Throttle control for this unit (and the 114 kW version) is drive-by-wire, without any mechanical connection, so that the driver can obtain the desired response from the engine with the greatest energy efficiency.

The 0-100 kmh sprint takes 8.8 seconds, and in fifth gear, a top speed of 198 kmh can be attained – impressive figures that have previously been associated with larger engines.

This 1.4 TB unit develops its maximum power of 88 kW at 5000 rpm but, more impressively, produces a generous 206 Nm of torque at just 1750 rpm.

In turn, these characteristics help the Alfa MiTo to achieve 8.1 l/100 km around town and 5.0 l/100 km in the extra urban cycle, plus a combined figure of 6.1 l/100 km.

1.4 TB 114 kW Turbopetrol

Only available in the MiTo Sport, the new 1.4TB 114 kW unit is the top performing petrol engine in the Alfa MiTo range, delivering its maximum power at 5500 rpm along with a maximum torque of 230 Nm at 3000 rpm.

Quickest of the Alfa MiTo launch range, this version can accelerate from 0-100 kmh in just 8.0 seconds and reach a top speed of 215 kmh.

Despite the increase in power and performance, fuel economy remains notably competitive.

Around town, drivers can achieve 8.5 I/100 km, while motorway journeys and the combined cycle are 5.3 I/100 km and 6.5 I/100 km respectively.

SAFETY AT ITS CORE

The Alfa MiTo has been designed to obtain a maximum score in passive and active safety tests – bringing drivers peace of mind in the knowledge that this is one of the safest cars available today.

Active safety benefits from state-of-the-art technology

To ensure active safety, the new Alfa MiTo offers some of the most sophisticated electronic systems to control the vehicle's dynamic performance (from braking to traction) and push its dynamic limits still further. These systems are not intrusive for the driver but greatly benefit safety.

Braking system

The power-assisted, hydraulic braking system on the Alfa MiTo comprises two cross-over independent circuits, and is particularly effective, guaranteeing prompt, smooth braking combined with minimal stopping distances.

At the front, the Alfa MiTo 1.4 TB 114 kW is fitted with 305mm ventilated discs with onepiece aluminium four piston callipers. The rear discs are solid (251mm diameter) with floating callipers. A one-piece aluminium calliper on the front brakes increases calliper stiffness without increasing weight, and therefore contributes to increased performance.

ABS with EBD

In addition to a high-performing braking system, the Alfa MiTo also comes with one of the most advanced ABS anti-lock braking systems available. It features four active sensors and a hydraulic control unit with 12 solenoids.

The ABS contains an electronic brakeforce distributor (EBD). This device apportions braking action over all four wheels to prevent locking and ensure full control of the car under all

conditions. The system also adapts its operation to wheel grip conditions and brake pad efficiency to reduce pad overheating.

VDC (Vehicle Dynamic Control)

VDC is Alfa Romeo's version of ESP (Electronic Stability Program), a system that activates under extreme conditions when vehicle stability is at risk, helping the driver to control the car.

Permanently engaged, VDC allows the driver the full satisfaction of controlling the car as long as conditions are normal, but cuts in just before a situation becomes critical.

MSR (Motor Speed Regulator) cuts in when a gear is shifted down abruptly under conditions of low grip. This device restores torque to the engine to prevent loss of control as a result of lock.

To achieve this result, VDC continually monitors tyre grip in both longitudinal and lateral directions. If the car slides, it cuts in to restore directionality and ride stability. It uses sensors to detect rotation of the car body about its vertical axis (yaw speed), its lateral acceleration, and the steering wheel angle set by the driver (which indicates the chosen direction). It then goes on to compare these data with parameters generated by a computer and establishes whether the car is cornering within its grip limits or if the front or rear is about to slide (understeer or oversteer).

To restore the correct trajectory, it then generates a yaw movement in the opposite direction to the movement that gave rise to the instability by braking the appropriate wheel individually, and reducing engine power (via the throttle). This is the key attribute of the system designed by Alfa Romeo engineers. It acts in a modulated fashion on the brakes to ensure the action is as smooth as possible (and the drive is not therefore disturbed). In addition, engine power reduction is contained to ensure outstanding performance and great driving satisfaction at all times.

ASR (Anti Slip Regulation)

The ASR (Anti Slip Regulation) system, an integral part of the VDC, optimises traction at any speed with the aid of the brakes and throttle.

The system computes the degree of slip on the basis of wheel rpm calculated by the ABS sensors, and activates two different control systems to restore grip. When an excessive power demand causes both driven wheels to slip (e.g. in the case of aquaplaning or when accelerating over an unsurfaced, snowy or icy road), it reduces engine torque by reducing the throttle opening angle and thus air flow. If only one wheel slips (e.g. the inside wheel following acceleration or dynamic load changes), this is automatically braked without the driver touching the brake pedal. The resulting effect is similar to that of a self-locking differential. This allows the Alfa MiTo to get out of difficulty easily on road surfaces with low grip.

CBC (Cornering Brake Control)

The CBC (Cornering Brake Control) system comes into play when the car takes a corner while under heavy braking. In this case, brake pressure is discharged on each wheel individually to maintain vehicle stability, minimising any understeer or oversteer behaviour.

DST (Dynamic Steering Torque)

The VDC on the Alfa MiTo always activates unobtrusively because it is combined with DST (Dynamic Steering Torque), an active electronic steering system that makes corrections automatically and also controls oversteer on surfaces with low grip.

DST improves both driving safety and handling performance. Under all driving conditions, the electronic steering system suggests the correct manoeuvres to be carried out to the driver to allow outstanding road holding performances, while instilling a great sense of security. This is achieved through continuous interaction between the electric power steering (which generates torque at the steering wheel) and electronic control of dynamics (VDC). In detail, DST automatically makes corrections, helps to maintain vehicle control and ensures that the VDC activates unobtrusively.

The DST System is particularly useful in the case of oversteer because it facilitates the most appropriate manoeuvre to maintain control of the vehicle in every situation.

The MCF function (Mu-Split Control Function) activates when the vehicle is being driven over surfaces with different levels of grip. (In winter, it is sometimes the case that two wheels are on ice while the other two are on asphalt.)

In this particular case, the DST System allows automatic counter-steering that makes it possible to control the vehicle (preventing it from spinning) and also to pull up within the shortest possible distance, (braking distances are reduced by up to 10%). In the event of a sporty drive, if the system detects higher lateral acceleration (from 0.6 g) it cuts in to deliver an increase in resistant torque to the steering wheel. In this way it significantly improves the sensation of mastering the car on corners, particularly at high speed.

HBA and Hill-holder

The equipment array on the Alfa MiTo is completed by the HBA system, (hydraulic braking assistance) which automatically increases pressure in the braking circuit during emergency braking; and by the Hill-holder system, which maintains brake pressure for a few moments after the driver removes his foot from the pedal, to simplify hill starts and prevent the car from slipping backwards.

Electronic Q2

Another specific feature of the Alfa MiTo is its Electronic Q2 System that improves the transfer of drive torque to the wheels and, in particular, guarantees excellent cornering behaviour, thus making the car safer and more entertaining during a sporty drive or when grip is poor. In detail, the Electronic Q2 System is based on the principle of making full use of the braking system that, when appropriately controlled by the VDC control unit, develops a form of behaviour very similar to that of a limited slip differential (in other words, the Electronic Q2 System electronically simulates the presence of a self-locking differential).

In practical terms, when accelerating in a bend, the front braking system acts on the inner wheel to increase traction on the outer wheel (bearing the highest load), and therefore distributes torque between the front driven wheels in a continuous, dynamic manner according to driving and road surface conditions.

Systems for comprehensive protection

Alfa Romeo's deep-rooted commitment to making the Alfa MiTo one of the safest cars in its segment has involved the company in conducting around 100 simulations on a HyGe slide, 500 crash tests, and some 200 tests on components and subsystems.

The new Alfa MiTo thus represents the cutting edge as far as passive safety is concerned.

Comprehensive occupant protection is achieved by the standard specification of seven airbags (two of which are Multistage); three-point seatbelts with pre-tensioners and load limiters; and an S.A.H.R. (Self Aligning Head Restraint) system – an anti-whiplash device built into the front seat backrests.

In addition, the body, bonnet, doors and dashboard crossmember, along with the seats and steering column, have been designed with a view to absorbing impact energy progressively and limiting their intrusion on the driver and passengers.

Air-Bag Smart 2 system

In the event of a head-on impact, occupant protection is safeguarded by an innovative constraint system known as the Air-Bag Smart 2, that automatically adapts the activation parameters according to the severity of the impact.

On the Alfa MiTo, the driver and passenger front airbags operate with dual stage activation. When the impact is of moderate force, the system opens only to the first of two stages, while during more serious collisions, the control unit sanctions the activation of both stages.

The airbags may, however, be activated in accordance with different sequences determined by the various impact types. In each case, braids inside the bags ensure that maximum bag dimension and final shape are as non-invasive as possible for passengers.

The front passenger airbag may be deactivated manually (by means of the control panel menu) so that a child can be carried in a seat with its back to the direction of travel (the pretensioner remains active).

The sensors on the Air-Bag Smart 2 system also control seat belt pre-tensioner activation.

Control unit and sensors

The Alfa MiTo is equipped with all the most advanced passive safety systems currently available. They are governed by a sophisticated new 'nerve centre' that is controlled by an electronic control unit located in the transmission tunnel. This control unit receives signals from various sensors distributed throughout the car, (and others inside), and decides how many systems should be activated, and which ones.

This is why the system is said to be 'smart'.

Utilising a CSA (Crash Severity Algorithm), the system is able to recognise the severity of impact and control the Multistage front airbags. At the same time, two-way accelerometers make it possible to enhance the function of satellite sensors, installed in the central 'B' pillars, to ensure timely operation of the side airbags and window bags in the event of side impact.



Lastly, the Alfa MiTo is also fitted with a decentralised sensor for detecting frontal impact or ECS (Early Crash Sensor); this extra device is located on the front structure of the car and allows the control unit to activate the front airbags earlier. Unlike conventional systems, this device allows the bag to inflate fully before belted occupants even start to move in the direction of the steering wheel or dashboard.

Window bags and side airbags

These airbags drop down along the windows to safeguard the passengers' heads in the case of side impact. Compared with other solutions, the windowbags adopted on the Alfa MiTo are more protective (because they always take up the correct position); they are also faster to inflate and less invasive for passengers. They open from top to bottom and do not involve a risk of secondary damage to occupants' arms.

They also effectively safeguard the heads of front as well as rear passengers because they extend along the entire length of the window area and ensure protection even during rollover. Two bags are located under the roof rails where they are folded into a closed compartment. At the appropriate moment, the roof lining bends open to allow the bags to expand and drop downward.

The Alfa MiTo comes with two side airbags located inside the seat backrest to protect the pelvic and chest areas of its passengers, even when the car is struck from the side. This positioning affords better protection for passengers regardless of height, sitting position and seat adjustment.

Driver's knee bag

The area beneath the steering column, typically the most dangerous for a driver's knees, has been made safer by the use of a knee bag and also a new steering lock location that involved moving the ignition key from its conventional position.

Protective, wrap-around seats

Particular attention was also paid to the seats. These play an all-important role in ensuring effective containment of the occupants and therefore achieving the required level of safety during head-on, rear or side impact. The seat performance required exceeds that imposed by European type-approval standards. The seats have been developed to exceed the toughest standards required by the market. Among other things, the front seats of the Alfa MiTo are equipped with an S.A.H.R. (Self Aligning Head Restraint) system that moves the head restraint closer to occupants' necks to lessen the effect of whiplash in the event of impact.

Emergency stop indication

The Alfa MiTo also employs a system that indicates an emergency stop by operating its hazard warning indicators. The function becomes operational when – at a speed greater than 50 kmh – a deceleration greater than 7m/s^2 occurs, the brake pedal is being pressed and the hazard warning lights are not active. Once these parameters are satisfied, the system automatically activates both front and rear direction indicators.

TECHNICAL DATA

	MiTo 1.4 TB 88 kW	MiTo Sport 1.4 TB 114 kW					
No of cylinders, arrangement	4 in line	4 in line					
Bore x stroke (mm)	72 x 84	72 x 84					
Displacement (cc)	1368	1368					
Compression ratio	10.8:1	9.8:1					
Max power output kW-EC at rpm	88/5000	114/5500					
Peak torque Nm (kgm-EC) at rpm	206 (21) 1750	230 (23.5) 3000					
Exhaust System	Single tip	Twin Tip					
ELECTRICAL EQUIPMENT (12V)		-					
Battery: capacity (Ah)/ (A)	50/360	50/360					
TRANSMISSION	,	,					
Drive	Front	Front					
Number of gears	5+1R	6+1R					
1 st	3.909	3.818					
2 nd	2.238	2.158					
3 rd	1.444	1.475					
4 th	1.029	1.067					
5 th	0.767	0.875					
6 th	~	0.744					
Reverse	3.909	3.545					
Final drive	3.563	4.176					
WHEELS/TYRES							
Tyres	195/55 R16	205/45					
Wheels	Alloy 16 x 7	Alloy 17 x 7					
STEERING SYSTEM	1	1					
Turning circle kerb-to-kerb (m)	11.25	11.25					
SUSPENSION							
Front		em, front transverse trailing arms; bound springs; anti-roll bar					
Rear	slotted bushings with variable bodyshell; high-stiffness helical	tion and high torsional stiffness; e stiffness for attaching beam to springs; contractive vertical shock orbers					
BRAKES							
Front (mm)	Ventilated 305 x 28 D, fixed aluminium calliper with 40 mm pistons	Brembo Ventilated 305 x 28 D, fixed aluminium calliper with 40 mm pistons					
Rear		8 mm floating calliper					
FEATURES/DIMENSIONS							
Seats		5					
Doors		3					
Length/width (mm)	4063	3/1720					
Height (mm)	1	446					
Wheelbase (mm)	1	511					

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Front/rear track (mm)	1483/1475							
Luggage capacity (litres)	270							
WEIGHTS/TANK CAPACITY								
Fuel tank (litres)	45	45						
Kerb weight DIN (kg)	1145	1145						
Towing braked/unbraked	500/400	500/400						
PERFORMANCE								
Top speed kmh	198	215						
0-100 kmh seconds	8.8	8.0						
FUEL CONSUMPTION/EMISSIONS*(I/1	00 km)							
Urban cycle	8.1	8.5						
Extra-urban cycle	5.0	5.3						
Combined cycle	6.1	6.5						
Exhaust emissions – CO ₂ (g/km)	145	153						
Emissions standard	EU IV	EU IV						

Equipment

Standard: Optional: O Not available: NA	MiTo	MiTo Sport
Alfa Code immobiliser and alarm system	•	•
Front electric windows	•	•
Kick plates	•	•
Front arm rest with storage compartment	•	•
Manual air conditioning	•	NA
Dual Zone automatic climate control with distribution	NA	•
Cruise control	•	•
Pollen filter	•	•
Sports pedals with metal footrest	0	•
Lumbar adjustment on passenger side	•	•
Third rear seat (60/40 rear seats split) with third rear headrest	•	•
Cloth seats	•	NA
Sports cloth seats (Black-grey & Black-red)	NA	•
Sports Frau® leather upholstery	NA	0
Floor mats	0	0
Sports dials with white illumination	NA	•
Sports dials with Red illumination	•	NA
Visibility Pack (rain, dusk and condensation sensors and electro-chromatic rear view mirror with deactivation button)	NA	•
Steering wheel with adjustable height and rake	•	•
Leather steering wheel, gearshift knob and handbrake grip	•	•
Electrically operated sunroof	0	0
Alfa Romeo D.N.A.	•	•
VDC (Hill holder, ABS, ASR and Brake assist with Q2 Electronic	•	•
Electric power steering	• /	•
Seat belt reminder display (SBR)	•	•
LED rear lights	•	•
Dynamic Steering Torque System	•	•

Driver, passenger, front side, window and driver knee airbags	•	•
Front airbag deactivation on passenger side	•	•
Front fog lights	NA	•
Front & rear red brake callipers	-	•
Front seatbelt safety pretensioners (electronic and load limiters)	•	•
Adjustable headlights	•	•
Rear parking sensors	NA	•
Fire protection system (FPS)	•	•
Electronic key with remote central locking and boot release	•	•
Tinted windows	•	•
Chrome effect window sill	NA	•
Follow-me-home lights	•	•
Sports rear bumper with extractor	NA	•
On-board instrumentation with multifunctional display and trip computer	•	•
16" sport alloy wheels with 195/55 R16 tyres	•	NA
17" Exclusive design alloy wheels with 205/45 tyres	NA	•
Electrically adjustable and heated wing mirrors	•	•
Single chrome exhaust tail pipe	•	NA
Twin chrome exhaust tail pipes	NA	•
Lucid chrome headlight and tail light surrounds	•	0
Satin effect headlight and tail light surrounds	0	•
Satin effect door mirror covers	0	•
Rear spoiler	0	•
Car radio with audio CD and MP3 reader	•	•
Blue&Me™ (Bluetooth™ hands-free system with voice recognition and media player with USB port)	0	•
Steering wheel audio controls	•	•

