

ROAD & TRACK 2015
AUTOMOTIVE

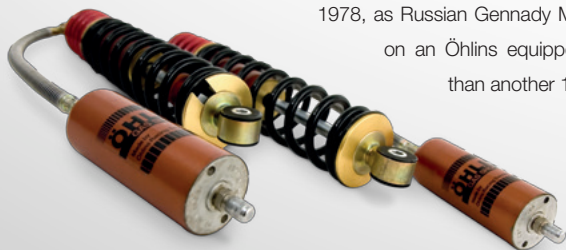


HISTORY

Ever since the company was founded in 1976, Öhlins has represented the very pinnacle of suspension technology and firmly rooted itself as an intricate part of the motorsport industry, underpinning countless world titles. That very technology has subsequently been adopted not only as the gold standard of aftermarket suspension, but is also by car and motorcycle manufacturers around the world.

Back in the 1960's, Kenth Öhlin was an up-and-coming motocross rider and showed an innate talent for mechanics. He knew how to bring the best out of his material and soon he saw himself engaged in modifying his competitor's bikes. By the time he started his business he had already designed exhaust pipes, engines and – of course – shock absorbers.

Öhlins soon became synonymous with advanced suspension. The products were not only superior in terms of technology, but as Mr. Öhlin was, and is, a very meticulous man the quality was always outstanding. The first world championship was won already in 1978, as Russian Gennady Moiseev took the 250cc title on an Öhlins equipped KTM. Since then, more than another 150 have followed.



The success continued in road racing and soon also in the automotive segment, in racing as well as in rally, all adding to the motorsport pedigree. But don't think that Öhlins was content, not for a minute. The company continued to grow, adding electronically controlled, semi-active suspension to its portfolio under the trademark CES. Today, this technology has revolutionized the car industry and can be found in a wide range of products from premium car manufacturers.

In the 1980's, Öhlins' achievements got the attention of industrial giants and in 1987, Öhlins was acquired by Yamaha. Under the Japanese ownership, Öhlins had the necessary financial stability to develop into a dominating player in the industry. Twenty years later, Öhlins was considered better off on its own legs and Kenth Öhlin regained the company he once had started.



Today, Öhlins is more than ever in the forefront of advanced suspension technology, covering areas from top tier motorsport to original equipment manufacturing. All with the same performance, quality and attention to detail.



ÖHLINS IN NUMBERS

- Today 280 employees
- Kenth Öhlin holds a 95% stake in the company
- Headquarters and manufacturing plant in Stockholm, Sweden
 - Subsidiary in Hendersonville, NC, USA
 - Subsidiary at Nürburgring, Germany
 - Subsidiary in Thailand
- Subsidiaries in Karlstad and Jönköping, Sweden
 - 97% of all sales on export
 - Annual turnover around 60 MEUR
- Annual growth around 15-20% last 10 years
 - 16% of turnover invested in R&D

WHAT WE LEARNED FROM MOTORSPORT

Competition improves the breed they say. Wise words, but here at Öhlins, competition created the breed. We are a company that has been clearly focused since day one, with a singular purpose: To win races. From Kenth Öhlins' first simple design back in 1976, through to the computer designed and tested masterpieces that we now create, every Öhlins unit is designed to give you total control, even on the very edge of the performance envelope. As our engineers say 'The ground gives better traction than air.' so every Öhlins design has one clear remit: to keep the car, bike, ATV or snowmobile maximizing traction, cornering speed and control! That is how you win races.

We enjoy a two-way dialogue with all of the teams we support. Kenth Öhlin made a clear decision many years ago, that we would never give any product away free to teams in sponsorship. Not one thing. So, every team that you see winning on Öhlins is doing so through choice, not obligation. The fact that so many teams choose to decline free product to pay for ours perhaps tells you what you need to know about the quality and ability of Öhlins race suspension products.



Over 250 World Titles have been achieved on Öhlins, and many thousands of podiums. Every discipline from Touring and GT-cars, through to prototypes, Formula 1 and Indycars.

From the WRC through to World Superbikes, MX-GP and MotoGP. In every instance we work closely with the team's technical division in a two-way flow of information that allows us both to analyze data and evaluate performance. This is then poured back into the design and creation of new products as well as the continual improvement of existing lines. Winning races has taught us a lot, and these lessons are directly transferred into our aftermarket programmes where the real enthusiasts can benefit from the very best in forks, steering dampers or suspension.



Motorsport means so much to us. We have over 30 employees solely dedicated to high-end racing support and service. This team regularly briefs our designers on their results 'in the field' to ensure that every Öhlins customer, whether they're a Factory Le Mans team – or a single, discerning enthusiast gets the very best performance from their machine.

We test everything – and then we test again. But data can only tell you so much. At Öhlins, it has always been as much about 'feel' as it has been about the numbers. If it feels 'right' to the driver or rider, then that is even more important than the dry statistics. We're drivers too, and once you have driven on the product, you'll feel the difference.



THE FEATURES OF DFV TECHNOLOGY

So what is DFV? It is Dual Flow Valve technology – and it sets us apart from our competitors. Only Öhlins has DFV technology on its road and track products.

With DFV, the dual flow valve gives the same characteristics on rebound as it does on compression, thanks the damper fluid having a consistent path of flow in both directions. This means that the wheel and tyre can quickly and effectively resume their important position back on the ground, providing grip and traction. The new Öhlins R&T range uses DFV technology on every single fitment, making it the perfect upgrade for the enthusiast that needs comfort and agility in the one unit.

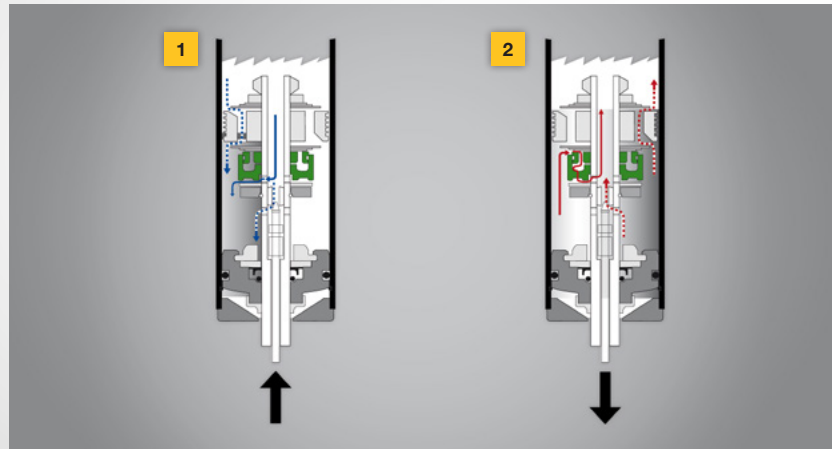


Figure 1: (Compression flow) At low shaft speeds, oil flows mostly through the shaft jet bleed (lower dotted arrow). At higher shaft speeds, oil flows mostly through the compression ports in the piston (upper dotted arrow). At very high shaft speeds, or during sudden shaft accelerations, oil can also escape through the compression ports in the DFV, increasing comfort.

Figure 2: (Rebound flow) At low shaft speeds, oil flows mostly through the shaft jet bleed (lower dotted arrow). At higher shaft speeds, oil flows mostly through the rebound ports in the piston (upper dotted arrow). At very high shaft speeds, or during sudden shaft accelerations, oil can also escape through the rebound ports in the DFV, maintaining tyre contact with the road.

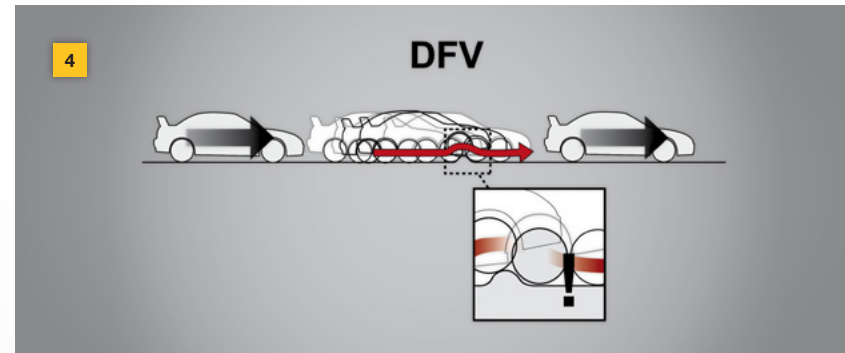
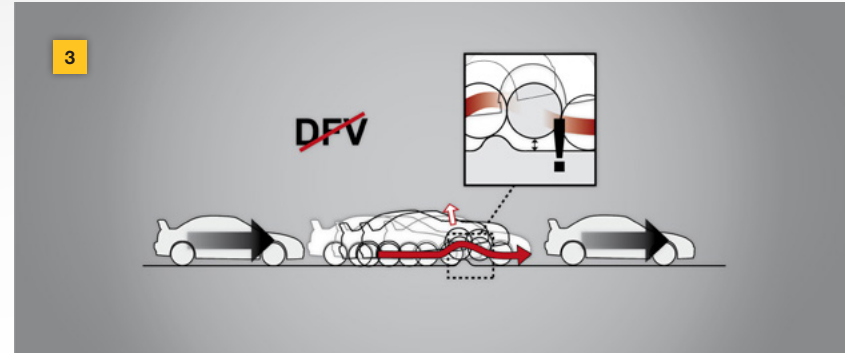


Figure 3: (Vehicle – no DFV) Without DFV the oil can not flow through the piston quickly enough on the rebound stroke after hitting a bump, so the tyre is not able to stay in contact with the road.

Figure 4: (Vehicle – DFV technique) The DFV valve opens, letting the oil flow quicker through the piston on the rebound stroke after hitting a bump, enabling the tyre to stay in contact with the road.

Because DFV opens more quickly and easily on minor road imperfections, ride comfort is surprisingly supple and more akin to an OEM strut than a coilover set-up. Over undulating surfaces, the compliance of the R&T units allows the car to crest bumps and pot-holes, whilst still keep stable and in control. Traction is always maintained at its optimum level. When comparing suspension, why settle for second best?



When adjusting ride height on coilover units, it's worth comparing how it's done. On many inferior designs, height is adjusted by raising or lowering the lower spring platform. This has the effect of compressing or extending the spring, which can limit the suspension travel that may cause topping out. The Öhlins method is to leave the spring seat in its perfect position, whilst the lower flange spins easily on the threaded body, to allow you to adjust with absolute precision whilst maintaining the perfect characteristics that we took so long to design in! Once you've set it all up, the adjuster simply locks off to maintain your exact settings.

Dampers will get hot. That's one thing that you can be sure of. As the piston moves within the damper, it generates friction – and therefore, heat. Although we can't stop heat, we can deal with it, and this is yet another way that Öhlins differs from the competition. As the heat increases, the viscosity of the damper fluid can change, altering the car's handling characteristics. Our unique needle bleed valve expands with temperature, closing the gap that the fluid travels through, maintaining a consistent damping rate. The best thing of all? You won't even notice! All you'll feel is that the car responds consistently, lap after lap, turn after turn. Allowing you to concentrate on braking points and apexes whilst the Öhlins technology takes care of the damping.

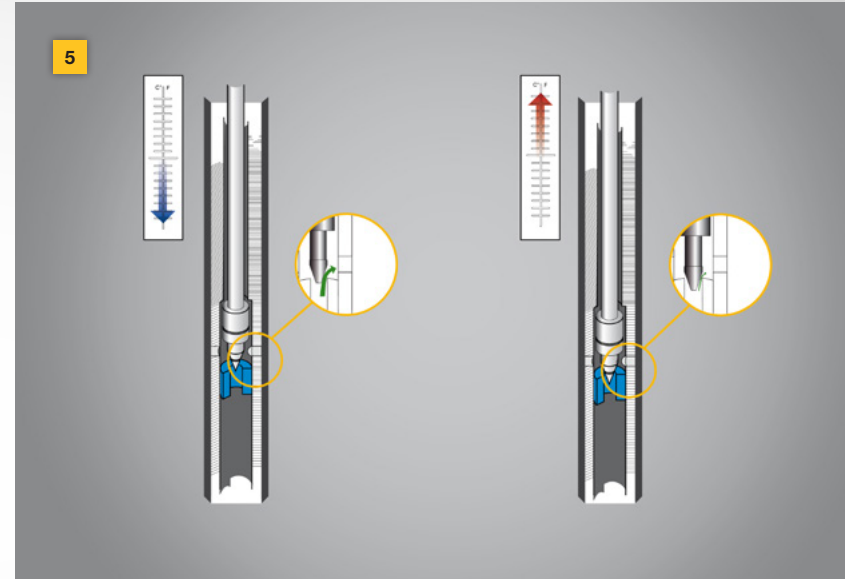


Figure 5: Thermal Expansion

These kits all work well 'out of the box', but there's still plenty of adjustment for you to set things your way. You like stiff and reactive? Or soft and forgiving? It's all there. Too much low speed rebound damping can have an adverse effect on grip, so the easily accessible adjuster at the base of the Öhlins units allows small, but positive increments of fine tuning, so you can take into account every single parameter. Sounds complicated? Nothing could be further for the truth. Just a few clicks either way from our factory settings will soon have your car responding precisely to your inputs and driving style.

The Road & Track McPherson struts also feature camber adjustable upper and lower mounts to give you the possibility to fine tune your wheels for the right occasion – whether you want to go for a ride in your neighborhood or take your car for a spin at the track on a weekend.

ÖHLINS AUTOMOTIVE HALL OF FAME

2014

André Lotterer/Marcel Fässler/Benoit	Tréluyer Audi R18 e-tron Quattro	Le Mans 24-hours
Anthony Davidson/Sebastian Buemi	Toyota TS 040	Hybrid FIA World Endurance Championship
José María López	Citroën C-Elyssé WTCC	FIA WTCC
Citroën Sport	Citroën C-Elyssé WTCC	FIA WTCC
Vitaliy Pushkar/Ivan Mishyn	Mitsubishi Lancer Evolution X R4	FIA ERC Production Cup
Joni Wiman	Ford Fiesta ST	Global Rallycross
Kevin Eriksson	RX Lites	World Rallycross RX Lites
Kazuki Nakajima	Toyota R14A	Super Formula
James Rossiter	Lexus RC F	Super GT 500
Petr Fulin	BMW 320 Si S2000	FIA ETCC
Sebastian Eriksson	Ford Fiesta ST	Swedish Rallycross Championship
Kevin Hansen	RX Lites	Swedish Rallycross Lites
JP Dayrault	Mini Cooper Countryman	Andros Ice Trophy
Romain Dumas	Norma	Pikes Peak
Matt Summerfield	MAN	British Truck Race Championship
Oily Clark	Subaru Impreza Gobstopper II	UK Time Attack Championship

2013

Tom Kristensen/Allan McNish/Loic Duval	Audi R18 e-tron Quattro	Le Mans
Sebastian Loeb	Peugeot 208 T16	Pikes Peak
Frankenhut/Radenmecker/Ricci	Peugeot 208 GTI	24h-Nürburgring VLN
Petr Fulin/Krenek Motorsport	BMW 320	FIA ETCC 2013
Tom Kristensen/Allan McNish/Loic Duval	Audi R18 e-tron Quattro	World Endurance
Yvan Müller	Chevrolet	WTCC
Naoki Yamamoto	Swift Honda	Super Formula Nippon
Yuji Tachikawa/Kohei Hirate	Lexus	Super GT500
Hideki Mutoh/Yuhki Nakayama	Honda Mugen	Super GT300
Timur Timerzyanov	Citroën DS3	European Rallycross
Gianni Morbidelli	Audi RS5	Italian Superstars
Jimmy Owens	Bloomquist	Dirt Late Model

2012

Tanner Foust	Global Rally Cross	Ford
Rob Huff	WTCC	Chevrolet
Fässler/Lotterer/Tréluyer	Le Mans	Audi
Kazuki Nakajima	Formula Nippon	Toyota
Johan Kristoffersson	STCC	Volkswagen
Fässler/Lotterer/Tréluyer	World Endurance	Audi
Jimmy Owens	Dirt Late Model	Bloomquist
Johan Kristoffersson	Italian Superstars	Audi

2011

Alain Prost	Andros Trophy	Dacia
Yvan Muller	WTCC	Chevrolet Cruze
Tréluyer/Fässler/Lotter	LeMans 24h	Audi R18
Boije Ovebrink	Speed World Record Hybrid Truck	Volvo VN
Boije Ovebrink	Swedish Flying Kilometer Hybrid Truck	Volvo VN
Rickard Rydell	Swedish Touring Car Championship	Chevrolet Cruze
Martin Tomczyk	DTM	Audi A4
Dirk Muller/Joey Hand	ALMS GT	BMW M3 GT2
Andrea Bertolini	Super Star International Championship	Maserati QP
Alberto Cerqui	Super Star Italian Championship	BMW M3

2010

Jason Plato	BTCC	Chevrolet
Richard Göransson	STCC	BMW
Rockenfeller/Bernhard/Dumas	Le Mans 24h	Audi R15
Jörg Müller/Augusto Farfus/Uwe	Nürburgring 24h	BMW
Alzen/Pedro Lamy		
Boije Ovebrink	Standing Kilometer For Trucks	Volvo FH16
Sverre Isachsen	European Championship RallyCross	Ford Focus
Scott Bloomqvist	Lucas Oil Dirt Late Model Series	Bloomqvist/Ford
Tanner Foust	X-Games Rally Car Racing	Ford Fiesta
Tanner Foust	Rally Car Super-Rally	Ford Fiesta
Rahal	ALMS GT2	BMW M3 E92 GT2
Yvan Muller	WTCC	Chevrolet Cruze
Chevrolet	WTCC	Chevrolet Cruze
Thomas Biagi	Superstars Series	BMW M3 E92
Cesar Ramos	Italian F3 Championship	Dallara F308

2009

Timo Scheider	DTM	Audi
Brabham/Géne/Wurz	Le Mans	Peugeot
Sverre Isachsen	Rally X EM	Ford
Kenny Bräck	X-Games	Ford
Tommy Rustad	STCC	Volvo

2008

Kristensen/McNish/Capello	Le Mans 24h	Audi
Timo Scheider	DTM	Audi

2007

Mattias Ekström	DTM	Audi
Lars Larsson	European Rallycross Champion	Skoda
Andy Priaulx	WTCC	BMW
Biela/Pirro/Werner	Le Mans 24h	Audi R10
Sebastien Bourdais	ChampCar	Newman Haas

2006

Lars Larsson	European Rallycross Champion	Skoda
Lars Larsson	Swedish Rallycross Champion	Skoda
Giandomenico Basso	European Rally Champion	Fiat S2000
P.Andreussi/A. Andreussi	Italian Rally Champion	Fiat S2000
Biela/Pirro/Werner	Le Mans 24h	Audi R10/LMP1

2005

Tony Stewart	Nascar Nextel Cup	Joe Gibbs Racing
Toshi Arai	Production Car WRC	Subaru
Dan Wheldon	IRL	Chip Ganassi
Yvan Muller/Paul Bourdais	Andros Thropee	Audi R8/LMP1
Letho/Werner/Kristensen	Le Mans 24h	

2004

Mattias Ekström	DTM	Audi
Antonio Liuzzi	FIA Formel 3000	Lola
Jussi Pihomäki	European Rally Cross	Renault
Buddy Rice	Indianapolis 500	Team Rahal
Ara/Kristensen/Capello	Le Mans 24h	Audi Sport
Kelly/Murphy	Bathurst 1000	Kmart Racing Team
Richard Lyons	Formula Nippon	DoCoMo Dandelion

2003

Kristensen/Capello/Smith	Le Mans 24h	Bentley
Martin Rowe	Production Cars WRC	Subaru
Scott Dixon	IRL	G-Force/Toyota
Paul Tracy	CART	Ford Cosworth/Lola
Brice Tirabassi	Rally Sper 1600	Renault
JJ Letho/Johnny Herbert	ALMS	Audi

2002

Biela/Kristensen/Pirro	Le Mans 24h	Audi R8
Tony Stewart	Nascar Winston Cup	Joe Gibbs Racing
Sam Hornish Jr.	Indy Racing League	Panther Racing

2001

G. Pozzo	Rally Grp.N	Mitsubishi
Gil De Ferran	CART	Team Penske
Helio Castroneves	INDY 500	Team Penske
Biela/Kristensen/Pirro	Le Mans 24h	Audi R8

2000

Juan Pablo Montoya	Indianapolis 500	Ganassi
Gil De Ferran	CART	Team Penske
Bobby Labonte	Sprint Cup Champion	Joe Gibbs Racing
Brendan Gaughan	Winston West Champion	
Tony Kasemets	SCCA Formula Continental	
Larry Connor	SCCA Formula Atlantic	
Jeff Clinton	SCCA 2000	
Manfred Stohl	World Rally Grp.N	Mitsubishi
Biela/Kristensen/Pirro	Le Mans 24h	Audi R8
Harri Luostarinen	FIA European Supertruck Champ.	TRD

1999

Tommi Mäkinen	Rally WRC	Mitsubishi
Juan Pablo Montoya	CART	Reynard
Bill Baird	ARCA	Chevrolet
Tony Hirschman	Nascar Modifieds	Pontiac
Anthony Lazzaro	Toyota-Atlantic	Swift
Mattias Ekström	STCC	Audi A4
Gustavo Trelles	Rally Grp.N	Mitsubishi
Manufacturers Championship	Rally WRC	Toyota

1998

Tommi Mäkinen	Rally WRC	Mitsubishi
Alex Zanardi	CART	Reynard
Mike Stefanik	Nascar Modifieds	Chevrolet
Eddie Cheever Jr.	Indianapolis 500	Dallara
Rickard Rydell	BTCC	Volvo S40
Fredrik Eklom	STCC	BMW 320
Gustavo Trelles	Rally Grp.N	Mitsubishi

1997

Tommi Mäkinen	Rally WRC	Mitsubishi
Alex Zanardi	CART	Reynard
Tim Steele	ARCA	Ford
Alex Barron	Toyota-Atlantic	Ralt
Laurent Aiello	STW	Peugeot 406

1996

Tommi Mäkinen	Rally	Mitsubishi
Tim Steele	ARCA	Ford
Patrick Carpentier	Toyota-Atlantic	Ralt
Steve Knapp	FF2000	VanDiemen
Emanuele Pirro	STW	Audi A4
Frank Biela	BTCC	Audi A4
Rinaldo Capello	Championata It. Superturismo	Audi A4
Jordi Gene	Campeonato Esp. Superturismo	Audi A4
Terry Moss	South African Touringcar Champ.	Audi A4
Jean-Francois Hemroulle	Belgian Procar	Audi A4
Brad Jones	Australian Supertouring	Audi A4
Steve Parrish	EC Truck Racing	Mercedes

1995

"Slim" Borgudd	EC Truck Racing	BMW M3 GT2
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1993

Nigel Mansell	USA-Indy Car	Newman/Haas/Lola
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ÖHLINS ROAD & TRACK THE CONCEPT

Perfection in performance. That has been the Öhlins way since 1976. We have achieved this through an obsession with detail and quality. Every part of the Öhlins manufacturing process sets new standards for the automotive industry. Whether it's material choice, design, manufacture or even a small detail like packaging. Only when it is perfect can it leave the factory. Our Road&Track range puts Öhlins incredibly high standards of research, development and manufacture within the reach of the discerning enthusiast. This range is pure Öhlins, but the good news is – you won't need a race team budget to afford it! For us, the relationship with our customers is usually a long and fruitful one. We have supplied many of the top teams in motorsport, but also thousands of genuine enthusiasts. We only manufacture to one quality and every new client is as important as the last. In our view, the relationship doesn't end with that initial sale. We see our role as providing support and back up thereafter, for as long as our client needs it. That's why all Öhlins units are fully serviceable and adjustable, making sure that they give faithful and dynamic service for years to come. Our fully trained and approved service centers can make your old Öhlins units perform like new and even make changes in damper characteristics to suit your set-up preferences. Remember that our road and track range was born out of our Motorsport programme, where the impossible has to be made possible, so you can expect the same level of care and attention to detail on the R&T range.

The choice of materials used is one of the key factors behind Öhlins success. Each component is surface treated to ensure reduced friction and superior performance. The piston shaft and damper walls are micro-finished and plateau honed for optimum lubricity and low friction coefficient. This attention to detail is the same across the entire range of Öhlins products. Without this fine surface finishing, excessive friction can reduce the compliancy of the damper causing a loss of function.

Damping rate on the R&T units is fully adjustable and ties compression and rebound together as a matched setting, meaning that in 99% of cases, the units will work superbly, straight 'out of the box' with only the smallest adjustments required to suit the car or drivers individual preferences. Despite what other suspension manufacturers may tell you, comfort is king, even when you are trying to set-up a competition machine. Our vast experience on events like the World Rally Championship, Nürburgring and Isle of Man TT races has shown us that the fastest drivers and riders are those that aren't being shaken to bits as they go flat out. The 'science of compliance' is a hugely important part of our design work.

And last but not least, is durability. But hey, we're Swedish, so chances are you have already guessed that we're used to building components that survive one of the toughest environments in the World. The carbon steels bodies are salt spray tested and can service 240 hours of abuse, whilst still retaining function. Don't let those stunning race car looks fool you. These are real-world units for daily driven cars.

That is probably why our Road&Track products have proven to be as popular with manufacturers making the ultimate track day car as they are for aftermarket tuners and drivers wanting to upgrade the chassis performance of their cars even further.





MEGANE R.S.





ÖHLINS ROAD&TRACK

BESPOKE SHOCK ABSORBERS FOR YOUR CAR

Is your model not in the following application list? Don't worry, Öhlins Road & Track products featuring DFV technology are now available to offer as a bespoke package for any vehicle.

From a total of 12 different dampers with different piston diameters, including McPherson struts, certified Öhlins centers can now put together an Öhlins Road&Track suspension solution for just about any car. With a wide range of Öhlins springs and attachment parts to add to the different shock absorbers, Road&Track is now available for any car. Applications in larger numbers are put together at the Öhlins factory whilst others are bespoke solutions by a certified and approved Öhlins center. The result is the same – an Öhlins Road&Track DFV upgraded suspension solution to fit your car of any make and model.



FEATURES

- Öhlins Road & Track DFV shock absorbers.
- Universal McPherson dampers, 36 and 40 mm piston diameter. Four different lengths each.
- 46 mm Road&Track shock absorber in four different lengths.
- Wide range of Öhlins Road&Track springs.
- Attachment parts.
- Bespoke Road & Track suspension application to fit any vehicle.
- Öhlins Road & Track DFV technology inside.

FOR MORE DETAILS AND PRICES, TALK TO YOUR NEAREST ROAD & TRACK CERTIFIED ÖHLINS CENTER.







BMW 3-SERIES E90/E92



FRONT



REAR

BMW 3-SERIES E46
BMW M3 E46



FRONT



REAR

BMW M3 E92



FRONT



REAR

BMW 3-SERIES F30



FRONT



REAR

BMW 3-SERIES E46, E90/E92, F30, E46 M3, E92 M3

3-SERIES (325i) – PART NO BMZMN01, E46, 2000-2007

3-SERIES – PART NO BMSMI00, E90/E92, 2005-

3-SERIES (320D) – PART NO BMSMP00, F30, 2009-2012

M3 E46 – PART NO BMSMI30, E46, 2001-2006

M3 E92 – PART NO BMSMI40, E92, 2007-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable, E46,E92

FRONT

- McPherson Strut • Single bleed adjuster • Spring preload adjuster (approx. 15 mm lower than standard) E90/E92, M3 E92 • Spring preload adjuster (approx. 20 mm lower than standard) M3 E46, E46, F30 • Coil Springs (60 E90/E92, M3 E92, E46, F30 - 70 M3 E46) N/mm • Dustcovers
- Use with original top mounts, E90/E92, M3 E46, M3 E92, F30 • Use with original BMW M3 (E46) top mounts* (only for 3-SERIES E46)

REAR

- Conventional Shock Absorber • Single bleed adjuster • Separate spring preload adjuster (approx. 20 mm lower than standard) M3 E46, E46 (approx. 15 mm lower than standard) E90/E92, F30 (approx. 10 mm lower than standard) M3 E92 • Coil Springs (70 E90/E92 – 110 M3 E46, E46 - 120 M3 E92 – 160 F30) N/mm • Dustcovers • Use with original top mounts, E90/E92, M3 E46, M3 E92, F30 • Use with original BMW M3 (E46) top mounts* (only for 3-SERIES E46)



EDC CANCELLATION KIT, BMW M3 E92



BMW 1M/Z4

1M – PART NO BMZMN01, E82, 2011-2013

Z4 (30i) – PART NO BMSMP50, E89, 2009-2012

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable • High speed valve, E82 • Adjustable compression and rebound, E82

FRONT

- McPherson Strut • Single bleed adjuster • Spring preload adjuster (approx. 15 mm lower than standard) • Coil Springs (60 N/mm) • Dustcovers • Use with original top mounts

REAR

- Conventional Shock Absorber • Single bleed adjuster • Separate spring preload adjuster (approx. 10 mm lower than standard) E82 • Separate spring preload adjuster (approx. 20 mm lower than standard) E89 • Coil Springs (120 E82, 110 E89) N/mm • Dustcovers • Use with original top mounts



FRONT

BMW 1M E82



REAR



FRONT

BMW Z4 E89



REAR





www.tarox.com

YOKOHAMA

J'S RACING

OHLINE
SPEC RACING totally dynamic PERFORMANCE
TDI NORTH GUMIPOWER SPEC-R CARBONETIC FIREWORM

HONDA CIVIC R



FRONT



REAR

HONDA S2000



FRONT



REAR

HONDA CIVIC R/S2000

CIVIC R - PART NO HOSMI30, FD2, 2007-

S2000 - PART NO HOSMI20, AP1, 1999-

GENERAL FEATURES

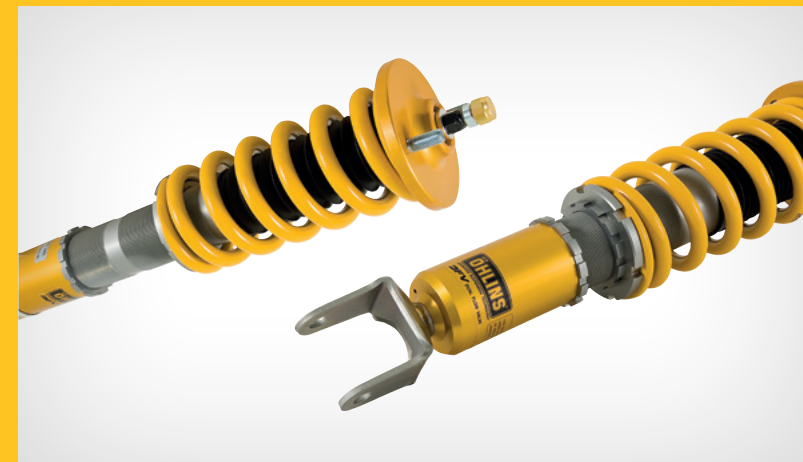
- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- Conventional Shock Absorber S2000 • McPherson Strut CIVIC R • Top mounts S2000 • Top mounts with camber adjustments CIVIC R • Height adjuster S2000 • Height adjuster (approx. 15mm lower than standard) CIVIC R • Length adjuster (approx. 15mm lower than standard) S2000 • Single bleed adjuster • Spring preload adjuster • Coil Spring (80 CIVIC R, 100 S2000) N/mm • Dustcovers

REAR

- Conventional Shock Absorber • Top mounts S2000 • Height adjuster • Length adjuster (approx. 15 mm lower than standard) • Single bleed adjuster • Spring preload adjuster S2000 • Coil Spring (Progressive CIVIC R, 80 S2000) N/mm • Dustcovers





LEXUS IS 250/IS 350

IS 250/IS 350 - PART NO LESMI00, 1999-

GENERAL FEATURES

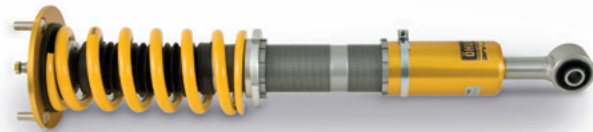
- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable

FRONT

- Conventional Shock Absorber • Single bleed adjuster • Spring preload adjuster • Coil Springs (100 N/mm) • Length adjuster (approx. 20 mm lower than standard) • Dustcovers • Including top mount

REAR

- Conventional Shock Absorber • Single bleed adjuster • Separate spring preload adjuster • Coil Springs (60 N/mm) • Length adjuster (approx 20 mm lower than standard) • Dustcovers • Use with original top mounts

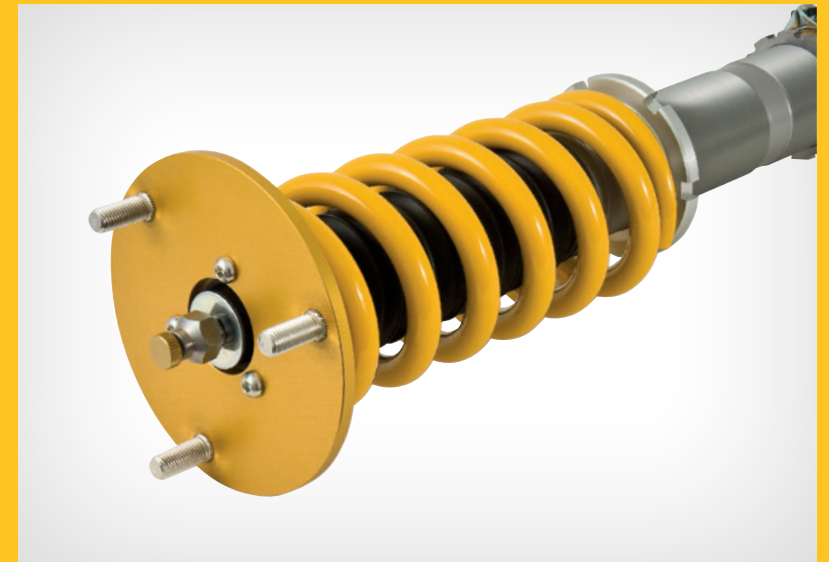


FRONT

IS 250/IS 350



REAR





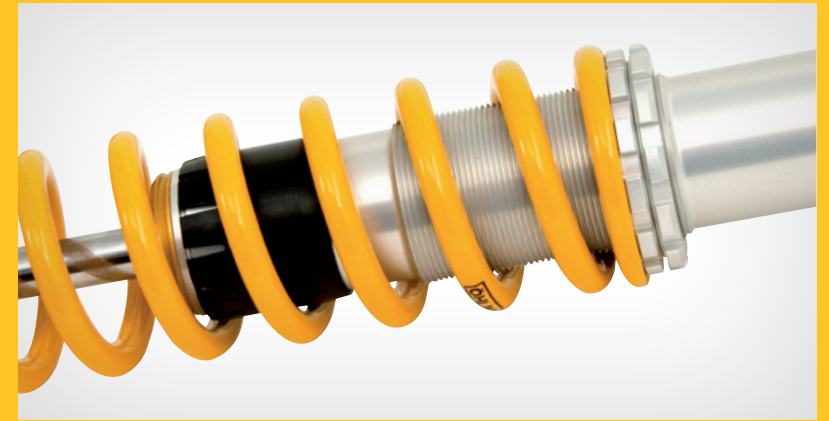
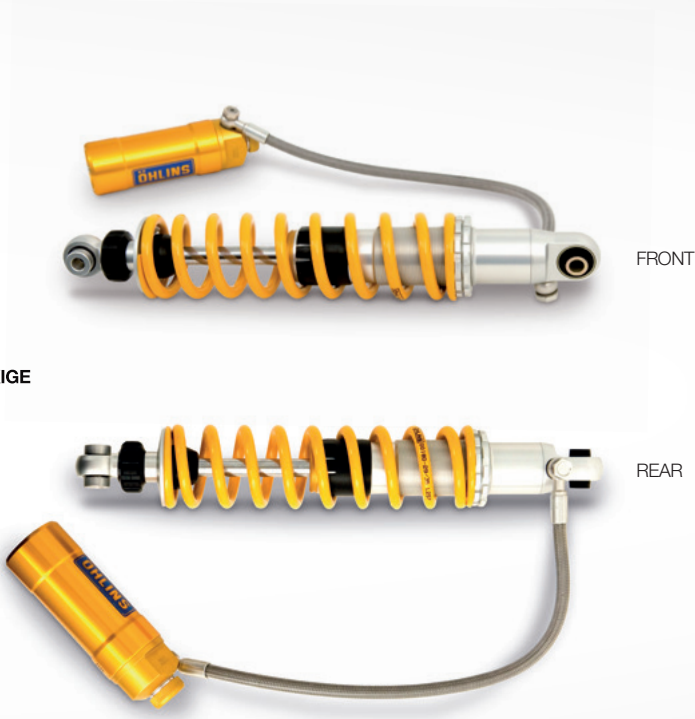
LOTUS ELISE/EXIGE

ELISE/EXIGE - PART NO LOV1-4D00

GENERAL FEATURES

- Light weight
- One way compression adjuster
- One way rebound adjuster (shaft bleed) also acts as temperature adjuster
- Height adjustable (spring preload)
- Coil springs (front 35 N/mm, rear 60 N/mm)
- Rebuildable
- Revalveable

LOTUS ELISE/EXIGE





MAZDA MIATA/MX5 1998-2005



FRONT



REAR

MAZDA MIATA/MX5 2005-

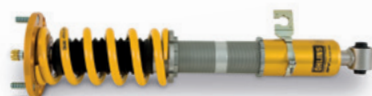


FRONT

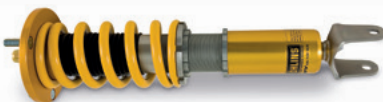


REAR

MAZDA RX-7

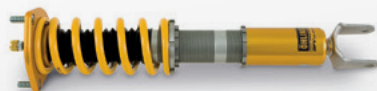


FRONT



REAR

MAZDA RX-8



FRONT



REAR

MAZDA MIATA/MX5/RX-7/RX-8

MIATA/MX5 - PART NO MASMI20, NA 1989-1998, NB 1998-2005

MIATA/MX5 - PART NO MASMI30, NC/EC, 2005-

RX-7 - PART NO MASMI10, FD3S, 1991-2002

RX-8 - PART NO MASMI00, SE3P, 2003-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- Conventional Shock Absorber • Top mounts • Height adjuster • Length adjuster (approx. 15 mm lower than standard) NA/NB, NC/EC, FD3S • Single bleed adjuster • Spring preload adjuster NA/NB, NC/EC, FD3S • Spring preload adjuster (approx. 15 mm lower than standard) SE3P • Coil Springs (80 NA/NB, 70 NC/EC, 110 FD3S, 80 SE3P) N/mm • Dustcovers

REAR

- Conventional Shock Absorber • Top mounts NA/NB, FD3S • Height adjuster • Length adjuster (approx. 15 mm lower than standard) NA/NB, NC/EC, FD3S • Single bleed adjuster • Spring preload adjuster NA/NB, NC/EC, FD3S • Spring preload adjuster (approx. 15 mm lower than standard) SE3P • Coil Springs (60 NA/NB, 40 NC/EC, 110 FD3S, Progressive SE3P) N/mm • Dustcovers





MINI R56



FRONT



REAR

MINI R50/R53



FRONT



REAR

MINI COOPER/COOPER S

COOPER - PART NO BMSMI20, R56, 2007-

COOPER S - PART NO BMSMI10, R50/R53, 2002-2007

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- McPherson Strut • Single bleed adjuster • Spring preload adjuster (approx. 15 mm lower than standard) • Coil Springs (60 R56, 70 R50/R53) N/mm • Dustcovers • Use with original top mounts • Top mount (Aluminium; Ball Bearing) R50/R53

REAR

- Conventional Shock Absorber • Single bleed adjuster • Spring preload adjuster (approx. 15 mm lower than standard) • Coil Springs (50N/mm) • Dustcovers • Use with original top mounts





MITSUBISHI LANCER EVO VII-IX/LANCER EVO X

LANCER EVO VII-X - PART NO MISMI00, CT9A, 2001-2007

LANCER EVO X - PART NO MISMI10, CZ4A, 2007-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- McPherson Strut • Top mounts with camber adjustments • Height adjuster (approx. 15 mm lower than standard) • Spring preload adjuster • Single bleed adjuster • Coil Springs (rate 100N/mm) • Dustcovers

REAR

- Conventional Shock Absorber • Top mounts • Height adjuster • Length adjuster (approx. 15 mm lower than standard) • Single bleed adjuster • Spring preload adjuster • Coil Springs (80 EVO VII-IX, 70 EVO X) N/mm • Dustcovers



MITSUBISHI LANCER EVO VII-IX



FRONT

REAR

MITSUBISHI LANCER EVO X



FRONT

REAR



NISSAN SKYLINE GT-R

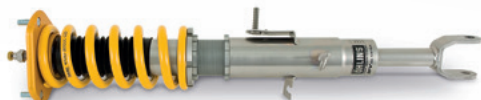


FRONT



REAR

NISSAN 350Z

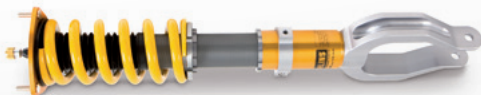


FRONT



REAR

NISSAN GT-R



FRONT



REAR

NISSAN 350Z/SKYLINE GT-R/GT-R

SKYLINE GT-R - PART NO NISMI10, BNR34, 1999-2002

350Z - PART NO NISMI00, Z33, 2002-

GT-R - PART NO NIZMI30, R35, 2007-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable GT-R

FRONT

- Conventional Shock Absorber • Top mounts • Height adjuster • Length adjuster (approx. 10 mm lower than standard) GT-R • Length adjuster (approx. 15 mm lower than standard) Skyline GT-R • Single bleed adjuster • Spring preload adjuster • Coil Springs (160 GT-R, 90 Skyline GT-R, 100 350Z) N/mm • Dustcovers

REAR

- Conventional Shock Absorber • Top mounts • Height adjuster Skyline GT-R, GT-R • Length adjuster (approx. 10 mm lower than standard) Skyline GT-R • Length adjuster (approx. 15 mm lower than standard) GT-R • Single bleed adjuster • Spring preload adjuster • Coil Springs (90 GT-R, 80 Skyline GT-R, 70 350Z) N/mm • Dustcovers





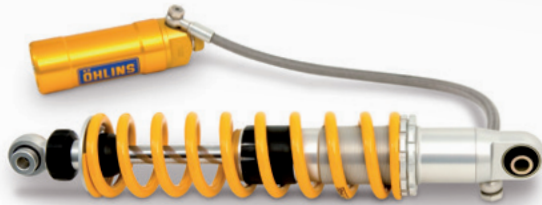
OPEL/VAUXHALL SPEEDSTER/VX220

SPEEDSTER/VX220 - PART NO OPV1-4E00

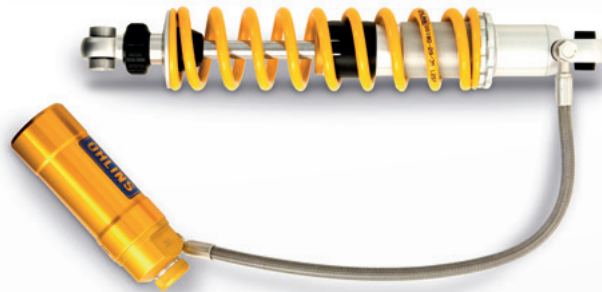
GENERAL FEATURES

- Light weight
- One way compression adjuster
- One way rebound adjuster (shaft bleed) also acts as temperature adjuster
- Height adjustable (spring preload)
- Coil springs (front 62 N/mm, rear 85 N/mm)
- Rebuildable
- Revalveable

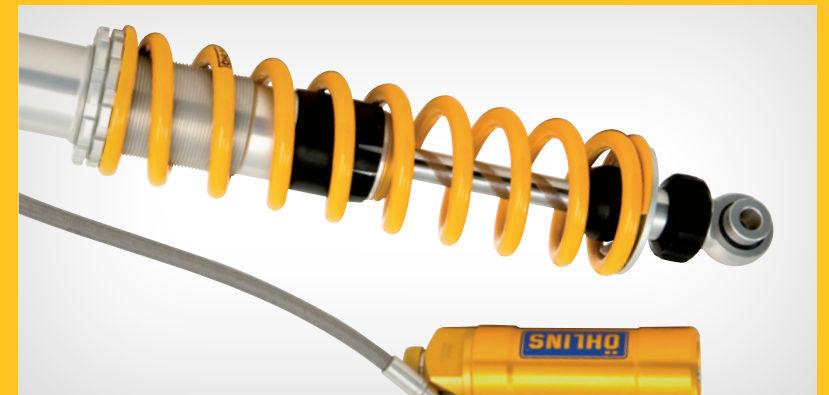
OPEL/VAUXHALL



FRONT



REAR





PORSCHE 996 CARRERA



FRONT



REAR

PORSCHE 996 GT3



FRONT



REAR

PORSCHE 996 CARRERA/ TARGA/TURBO/GT3/GT2

996 CARRERA / TARGA / CARRERA CAB - PART NO POZMI00, 996, 1998-2005

996 GT3 / GT3 RS / GT2 - PART NO POSMI10, 996, 1999-2004

996 CARRERA 4/4S / CARRERA 4/4S CABRIOLET - PART NO POZMN02, 996, 1999-2005

996 TURBO / TURBO S / TURBO CAB / TURBO S CAB

- PART NO POZMN02, 996, 2001-2005

GENERAL FEATURES

• DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable • 20 mm lower than standard

FRONT

• McPherson Strut • Single bleed adjuster • Spring preload adjuster • Coil Springs • Dustcovers
• Use with original top mounts

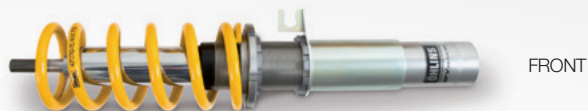
REAR

• Conventional Shock Absorber • Single bleed adjuster • Spring preload adjuster • Coil Springs
• Dustcovers • Use with original top mounts





PORSCHE 997 CARRERA



FRONT



REAR

**PORSCHE 997 GT3 RS
CLUB RACE KIT TTX**



FRONT



REAR

PORSCHE 997 CARRERA/ TURBO/GT3 RS/GT2

997 CARRERA / CARRERA S / CARRERA CAB / CARRERA S CAB

- PART NO POSMI20, 997, 2004-2011

997 GT3 / GT3 RS / GT3 RS 4.0 / GT2 / GT2 RS - PART NO POZMN04, 997, 2007-2011

997 CARRERA 4/4S / TARGA 4/4S / CARRERA 4/4S CAB

- PART NO POZMN05, 997, 2006-2011

997 TURBO / TURBO S / TURBO CAB / TURBO S CAB

- PART NO POZMN05, 997, 2006-2012

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty • Height adjustable • 20 mm lower than standard

FRONT

- McPherson Strut • Single bleed adjuster • Spring preload adjuster • Coil Springs • Dustcovers
- Use with original top mounts

REAR

- Conventional Shock Absorber • Single bleed adjuster • Spring preload adjuster • Coil Springs
- Dustcovers • Use with original top mounts

TRACKDAY & ADVANCED MOTORSPORT KIT - TTX TECHNOLOGY

997 GT3 RS - CLUB RACE KIT - PART NO POF5N01/POF6N01, 997, 2007-

FRONT

- 46 mm solid piston twin tube through rod damper • 30 mm rod • Compression and Rebound adjusters • Fully pressure balanced • High end performance • Ride height fully adjustable
- TTX technology

REAR

- 36 mm solid piston twin tube damper • 14 mm solid rod • Compression and Rebound adjuster • Fully pressure balanced • High end performance • Ride height fully adjustable
- TTX technology



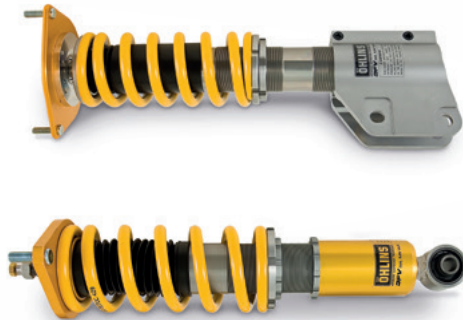
SUBARU LEGACY



FRONT

REAR

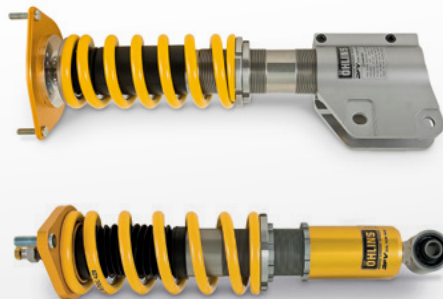
SUBARU IMPREZA
STI RACING



FRONT

REAR

SUBARU WRX STI



FRONT

REAR

SUBARU LEGACY / IMPREZA STI RACING / WRX STI

LEGACY – PART NO SUSMI00, BR5, 2003-2009

IMPREZA STI RACING – PART NO SUSMI10, GRB, 2007-

WRX STI – PART NO SUSMI10, VAF, 2014-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- McPherson Strut • Top mounts with camber adjustments • Height adjuster • Spring preload adjuster (approx. 15mm lower than standard) Legacy, Impreza • Spring preload adjuster (approx. 25mm lower than standard) WRX STI • Single bleed adjuster • Coil Springs (70 Legacy, 90 Impreza, 90 WRX STI) N/mm • Dustcovers

REAR

- Conventional Shock Absorber • Top mounts • Height adjuster • Spring preload adjuster (approx.. 15 mm lower than standard) • Single bleed adjuster • Coil Springs (70 Legacy, 70 Impreza, 70 WRX STI) N/mm • Dustcovers





SUZUKI SWIFT SPORT

SWIFT SPORT - PART NO SZSMI00, ZC31S, 2005-

GENERAL FEATURES

- DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

- McPherson Strut • Spring preload adjuster (approx. 15 mm lower than standard) • Single bleed adjuster • Coil Springs (50N/mm) • Dustcovers

REAR

- Conventional Shock Absorber • Single bleed adjuster • Coil Springs (progressive) • Dustcovers



FRONT



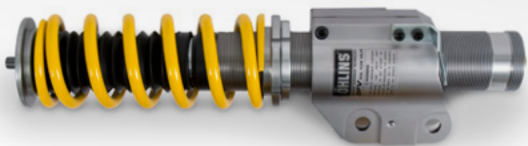
REAR

SUZUKI SWIFT SPORT





TOYOTA GT86

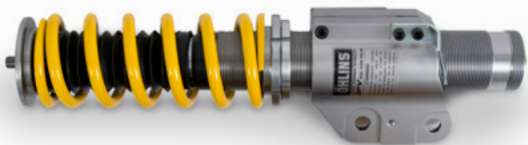


FRONT



REAR

SUBARU BRZ



FRONT



REAR

TOYOTA/SUBARU GT86/BRZ

GT86 - PART NO SUSMP20, ZN6, 2012-

BRZ - PART NO SUSMP20, ZC6, 2012-

GENERAL FEATURES

• DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

• McPherson Strut • Top mounts with camber adjustments • Height adjustable • Spring preload adjuster (approx. 20mm lower than standard) • Single bleed adjuster • Coil Springs • Dustcovers

REAR

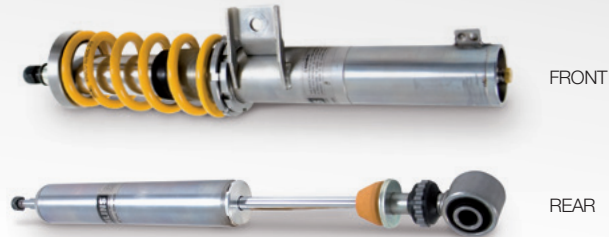
• Conventional Shock Absorber • Top mounts • Height adjustable • Length adjuster • Spring preload adjuster (approx. 15mm lower than standard) • Single bleed adjuster • Coil Springs • Dustcovers



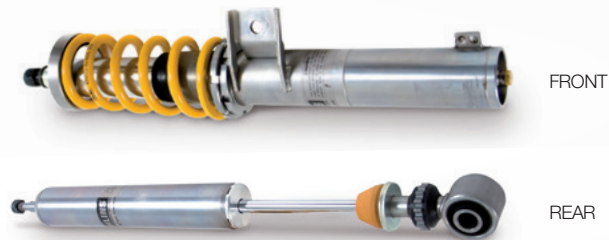
NOTICE! Top mounts are not included, can be ordered separately. Part No: 25633-43 front left, 25633-44 right and 25633-45 rear.



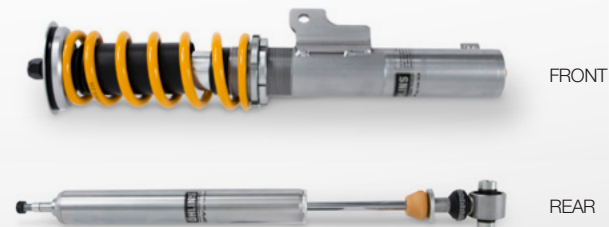
**VOLKSWAGEN
SCIROCCO**



**VOLKSWAGEN
GOLF V/VI**



**VOLKSWAGEN
GOLF VII**



VOLKSWAGEN GOLF V GTI/GT / GOLF VI GTI/GT / GOLF VII GTI / SCIROCCO

GOLF V – PART NO VWSMI10, 1KAXX, 2003-2008

GOLF VI – PART NO VWSMI10, 1KCCZ, 2009-2012

GOLF VII – PART NO VWSMP20, 5G, 2012-

SCIROCCO – PART NO VWSMI10, 2008-

**ALL VW GROUP MODELS INCLUDING VW/AUDI/SEAT/SKODA
WITH A MCPHERSON STRUT DIAMETER OF 54,6MM**

Note: No 4WD models have yet been tested. Please handle these case by case as we have no specific information regarding fitment on 4WD models.

GENERAL FEATURES

• DFV (Dual Flow Valve) • Rebuildable • Corrosion salt spray tested (ISO 9227) • 2 year Limited Warranty

FRONT

• McPherson Strut • Single bleed adjuster • Spring preload adjuster • Spring preload adjuster (approx. 15 mm lower than standard) Golf VII • OEM/Aftermarket springs should be used (not included) Golf V/VI, Scirocco • Coil Springs (70 N/mm) • Dustcovers • Use with original top mounts

REAR

• Conventional Shock Absorber • Length adjuster • Single bleed adjuster • Spring preload adjuster • Spring preload adjuster (approx. 20 mm lower than standard) Golf VII • Coil Springs (60 Golf V/VI, Scirocco – 50 Golf VII) N/mm • Dustcovers • Use with original top mounts



PRODUCT RANGE

MODEL	CHASSI PART NO	MODEL CODE	YEAR
BMW 1M	BMZ MN01	E82	2011-2013
BMW 3-SERIES (325i)	BMZ MI35	E46	2000-2007
BMW 3-SERIES (320d)	BMS MP00	F30	2009-2012
BMW Z4 (30i)	BMS MP50	E89	2009-2012
BMW 3-SERIES	BMS MI00	E90/E92	2005-
BMW M3	BMS MI30	E46	2001-2006
BMW M3	BMS MI40	E92	2007-
HONDA CMC R	HOS MI30	FD2	2007-
HONDA S2000	HOS MI20	AP1	1999-
LEXUS IS250/IS350	LES MI00		1999-
LOTUS ELISE/EXIGE	LOV 1-4D00		
MAZDA ROADSTER/MX5	MAS MI20	NA NB	1989-1998 1998-2005
MAZDA ROADSTER/MX5	MAS MI30	NC / EC	2005-
MAZDA RX-7	MAS MI10	FD3S	1991-2002
MAZDA RX-8	MAS MI00	SE3P	2003-
MINI COOPER	BMS MI20	R56	2007-
MINI COOPER/COOPER S	BMS MI10	R50 / R53	2002-2007
MITSUBISHI LANCER, EVO VII-IX	MIS MI00	CT9A	2001-2007
MITSUBISHI LANCER, EVO X	MIS MI10	CZ4A	2007 -
NISSAN GT-R	NIZ MI30	R35	2007 -
NISSAN FAIRLADY 350Z	NIS MI00	Z33	2002-
NISSAN SKYLINE GT-R	NIS MI10	BNR34	1999-2002
OPEL SPEEDSTER/VAUXHALL VX220	OPV 1-4E00		
PORSCHE 911 CARRERA	POS MI20	997	2004-2011
PORSCHE 911 CARRERA	POZ MI00	996	1998-2005

MODEL	CHASSI PART NO	MODEL CODE	YEAR
PORSCHE 996 GT3/GT3 RS/GT2	POS MI10	996	1999-2004
PORSCHE 996 CARRERA 4/CARRERA 4S /CARRERA 4 CABRIO/CARRERA 4S CABRIO	POZ MN02	996	1999-2005
PORSCHE 997 CARRERA 4/CARRERA 4S /TARGA 4/TARGA 4S/CARRERA 4 CABRIO /CARRERA 4S CABRIO	POZ MN05	997	2006-2011
PORSCHE 997 GT3 RS	POF 5N01/6N01 CLUB RACE	997	2007 -
PORSCHE 997 GT3/GT3 RS /GT3 RS 4.0/GT2/GT2 RS	POZ MN04	997	2007-2011
PORSCHE 997 TURBO/TURBO S /TURBO CABRIO/TURBO S CABRIO	POZ MN05	997	2006-2011
PORSCHE 996 TURBO/TURBO S /TURBO CABRIO/TURBO S CABRIO	POZ MN02	996	2001-2005
SUBARU IMPREZA STI RACING	SUS MI10	GRB	2007-
SUBARU LEGACY	SUS MI00	BP5	2003-2009
SUBARU WRX STI	SUSMI10	VAF	2014-
SUZUKI SWIFT SPORTS	SZS MI00	ZC31S	2005-
TOYOTA GT86 / SUBARU BRZ	SUS MP20	ZN6, ZC6	2012 -
VOLKSWAGEN GOLF V GT/GTI	VWS MI10	1KAXX	2003-2008
VOLKSWAGEN GOLF VI GT/GTI	VWS MI10	1KCCZ	2009-2012
VOLKSWAGEN GOLF VII GTI	VWS MP20	5G	2012-
VOLKSWAGEN SCIROCCO	VWS MI10		2008 -

ÖHLINS®



FOR MORE CONTACT INFORMATION PLEASE VISIT

For full information about witch models Öhlins products are available for, please contact your local Öhlins Distributor.

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SOUTH AFRICA VMP Motorsport

KENYA Aztek Motorsport International

ASIA

CHINA

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HONG KONG Power Motorcycle Specialist

JAPAN Labo Carrozzeria

MALAYSIA Trans Techno Enterprise S/B

SINGAPORE Sporting Motors

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BULGARIA Öhlins DTC

CYPRUS RSD

CZECH REPUBLIC Öhlins DTC

DENMARK Gunnar Aaskov Competition Parts

FINLAND Öhlins Auto Norden

FRANCE PFP Ohlins France

GERMANY Öhlins DTC

GREECE Öhlins DTC

HUNGARIA Öhlins DTC

ISRAEL Outback Technologies Ltd

ITALY Andreani Group International s.r.l

LATVIA Motofavorits

LITHUANIA Kajma Racing

LUXEMBOURG Öhlins DTC

NORWAY Öhlins Auto Norden

POLAND P.T.M. Sp.zo.o.

PORTUGAL Maxi Shocks

REPUBLIC OF ISLAND Öhlins DTC

ROMANIA L.T.L. Sport

RUSSIA Kajma Racing

SLOVAKIA Öhlins DTC

SLOVENIA Öhlins DTC

SPAIN Andreani MHS Ibérica, SL

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SOUTH AMERICA

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