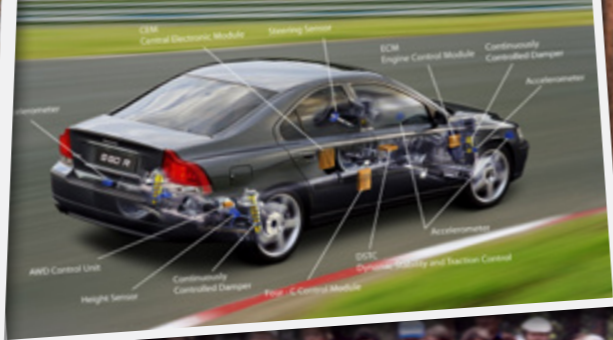




ADVANCED SUSPENSION TECHNOLOGY

# 2018 MOTOR- SPORT 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 350 world titles 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.



PASSION,  
PERFORMANCE,  
PERFECTION



**ÖHLINS  
HALL OF FAME**



# PRODUCT OVERVIEW

## 2018

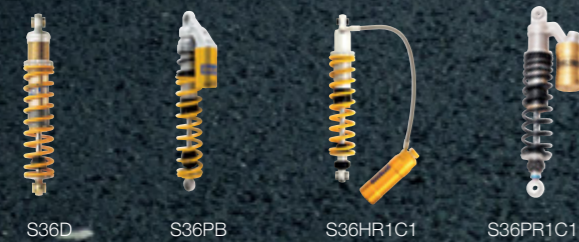
Öhlins shock absorbers are available in a many different versions, all of which can be tailor made to any competition car depending on your requirement, budget and the technical specification of the car.

Our shock absorbers are all rebuildable and serviceable and designed to be modified to different kind of competition vehicles and cover all kinds of motorsport disciplines. At Öhlins and at our trained Öhlins service centers there is experience from countless of years of motorsport success to find the winning suspension solution for you.

### TYPE STX 46



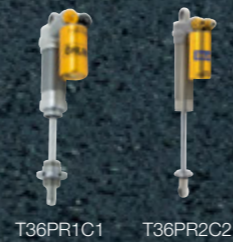
### TYPE STX 36



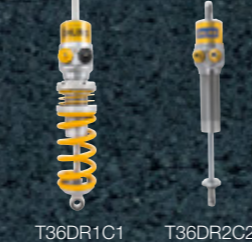
### TYPE STX 50



### TYPE TTX 36



### TYPE TTX 36 ILX



### TYPE TTX 40



### TYPE TPX



### TYPE TTX 46



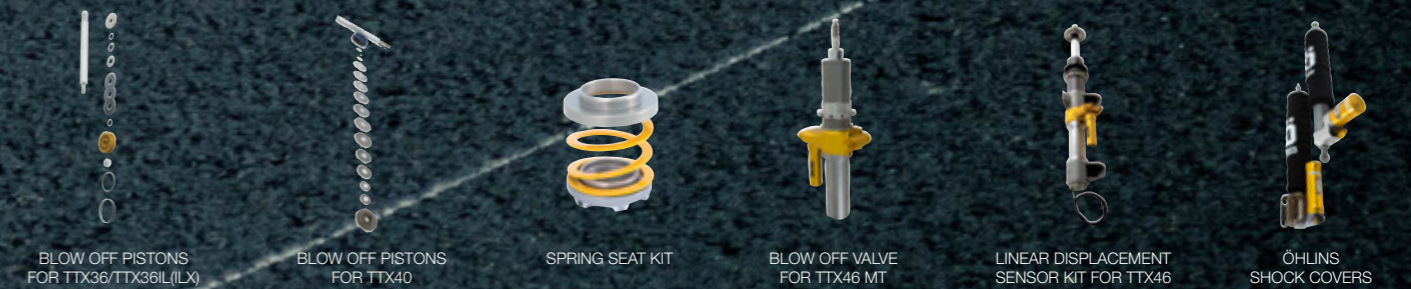
### TYPE DFV



### TYPE STOCKCAR



### OPTIONAL PARTS



# ÖHLINS TTX-TECHNOLOGY

Öhlins Racing developed the Twin Tube (TTX) technology back in 2002, first used in formula racing series. Since then, the TTX-technology has been developed further to maximize the performance on the track and are now widely featured in all top-level racing. With the TTX-technology you receive the highest level of suspension technology, a real racing product.

The TTX products comes in a variety of dimensions, lengths and designs, all tested by our qualified test drivers. With the individual adjusters for the compression- and rebound valve you have the best possible option to set up your racecar.

When driving on the limit, it puts immense stress on your equipment, tires, suspension, brakes, bushings etc. Öhlins TTX-technology allows you to push the car to the limit.

Shock absorbers can experience loss of damping, cavitation when pushed over the limit of optimal performance. With Öhlins TTX-technology we are proud to say that we have eliminated cavitation with our unique design. The TTX technology always keeps the pressure balanced within the shock absorber. Hence you will never experience a pressure drop or loss of damping performance when pushing your car to the limit to set the fastest laptime.

The Öhlins TTX shock absorbers are racer friendly shock absorbers, easy to set up, dial in and rebuild. Support is always available from the Öhlins distributors worldwide.



TTX



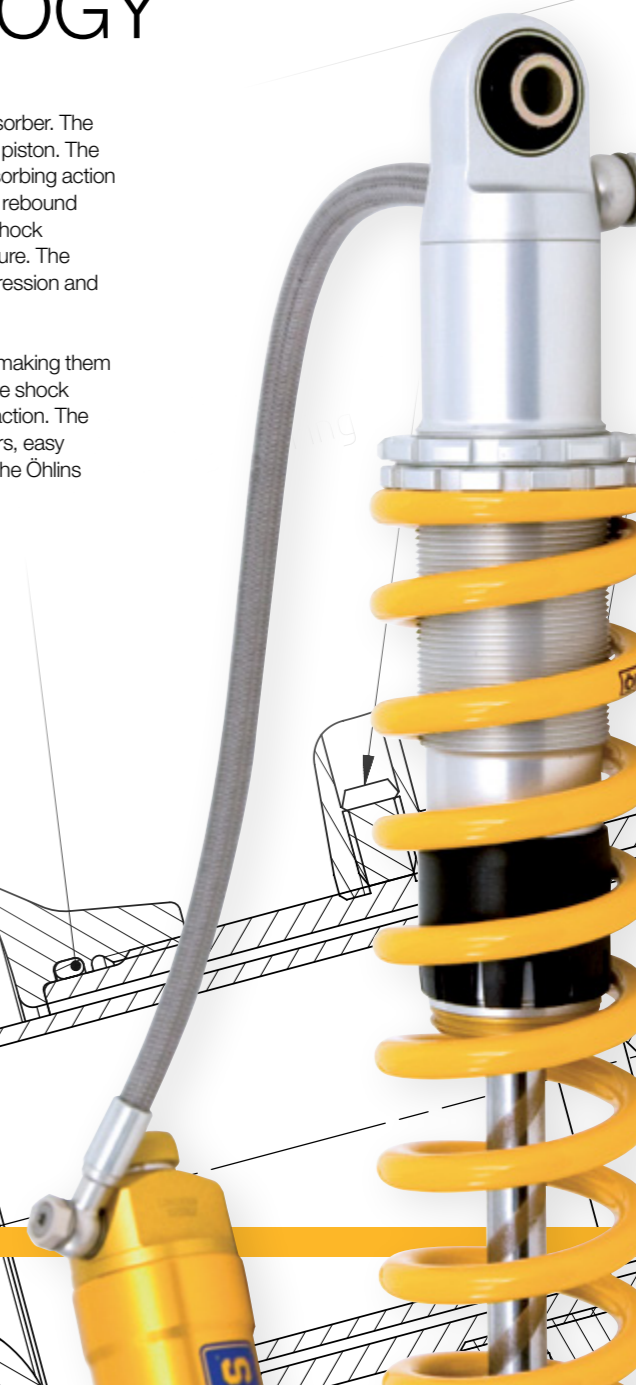
# ÖHLINS STX-TECHNOLOGY



STX

The STX-series are a high-pressure monotube type shock absorber. The fluid is under gas pressure and is kept separated by a dividing piston. The pressurisation prevents cavitation of the oil, and the shock absorbing action is, therefore, more even. Öhlins shock absorbers with external rebound adjustment have integrated temperature compensation. The shock absorbing effect is consequently independent of the temperature. The more advanced models permit individual adjustment of compression and rebound damping.

Öhlins shock absorbers provide the possibility of adjustment, making them adaptable to most vehicles, drivers and ranges of use. All of the shock absorbers with springs have adjustable preload of the spring action. The Öhlins STX shock absorbers are racer friendly shock absorbers, easy to set up, dial in and rebuild. Support is always available from the Öhlins distributors worldwide.



# RACING



# TTX 46 MT/CR

The updated TTX 46 is featured in GT, sports car, club racing and touring car racing, where McPherson struts are used, and is accompanied by the TTX 40, TTX 36 and ILX 36. This shock absorber features a 46 mm solid piston with a through rod of 30 mm, providing a rigid and lightweight strut. To further improve the rigidity, the outer tube is made from a high strength aluminum alloy. The all new upgraded seal head with its design and seals reduces friction and by that improve grip and track performance.

The TTX 46 comes in two versions which both benefits from a positive pressure build up. The four-way adjustable (TTX 46 MT) provides a wide range of adjustments without even taking the strut off the car. The second version is a 2-way adjustable (TTX 46 CR) and aims towards Touring cars like TCR, GT4 and club racers and is accompanied with the TTX 36 piggyback or ILX 36 depending on the needs. These are also available with a blow-off piston kit which reduces peak loads and makes driving over curbs much smoother and in the end saves tires and improves tyre performance.

## FEATURES

- > TTX-technology
- > 46 mm solid piston, through rod 30 mm
- > 4-way adjustable
- > McPherson strut suspension
- > Valve Reference Program
- > Also available as a 2-way adjustable version


**TTX**
[OHLINS.COM](http://OHLINS.COM)

# TTX 40

Ever since the introduction this high-end level racing damper has been a winner in top level racing around the globe.

The TTX 40 twin tube damper features a 40 mm solid piston and a through rod shaft which eliminates the requirement of an external reservoir. The design is fully pressure balanced with a positive pressure build-up throughout the adjustment range, eliminating the risk for cavitation as well as enabling the use of low gas pressure, keeping the internal friction at bay. The top eye can easily be re-clocked without opening the damper.

The TTX 40 is a fully independent 4-way adjustable damper. The shock also comes with a Valve Reference Program. This computer model of a dyno will allow you to find damping curves without a dynamometer. It reduces building time tremendously and allow exact damping adjustment out in the pit lane.

The TTX 40 is also available with a Blow Off piston kit. The advantage with this kit is that it reduces peak loads. This makes driving over curbs smoother, saves tires and reduces the risk of getting flat tires. The damper can be modified to suit most of the different types of racing cars and covers a wide range of car types and models. The TTX 40 is also available in a 2-way adjustable version for some models.

## FEATURES

- > TTX-technology
- > 40 mm solid piston
- > 4-way adjusted, compression and rebound
- > High end racing damper
- > Comes with Valve Reference Program
- > Available with a blow-off piston kit
- > Suitable for Le Mans style prototypes, single seaters, touring cars, sports cars and GT-cars


**TTX**

# TTX 36 INLINE

The TTX 36 is a popular choice, especially for GT-cars and prototypes as well as in single seater applications.

This version with an inline reservoir is particularly well suited for cars where size and fitment is an issue. The damper has an inline reservoir with improved internal oil flow and is of a non-through rod type. The configuration out of the box is 2-way adjusted; 1-way compression and 1-way rebound, but is easy to upgrade to become 3- or even 4-way adjusted.

The big advantage with the damper is the integral reservoir that makes it very compact and easy to package and also be possible to use it in applications that do not allow external reservoirs. This program will guide you through the "build" of the damper and shows all parts needed to build a complete damper for your specific need. Five lengths available. The length is measured without end- and top-eye.

## FEATURES

- > TTX-technology
- > Integrated reservoir
- > 2-way adjusted, compression and rebound
- > Possible to upgrade to 3- and 4-way adjustable
- > Available in different lengths
- > Suitable for single-seaters, GT cars and also historical racing and vehicles where external reservoirs are not allowed or can be fitted



**TTX**

OHLINS.COM

# TTX 36 PIGGYBACK

The TTX 36 is also available in a piggy back version with an external reservoir. Still with a compact light weight design this versatile racing shock absorber is 2-way adjustable that can be upgraded to 3- and 4-way adjusted.

It's one of our most versatile dampers and is used for many different applications for spanning from single-seaters and GT-cars to touring cars, sports cars and prototypes.

## FEATURES

- > TTX-technology
- > 2-way adjusted, compression and rebound
- > Possible to upgrade to 3- and 4-way adjustable
- > Length calculation program available
- > Available in different lengths
- > Suitable for a wide range of cars from GT- and sports cars to single seaters, touring cars and prototypes



**TTX**



# RALLY & OFFROAD



# ALR TPX/TTX

## RALLY & RALLYCROSS

They have proven themselves in the toughest of conditions. This range with a set of universal struts and dampers are aimed at the rally and rallycross markets but they are also suitable for racing applications, especially for demanding circuits such as the Nürburgring Nordschleife. The strut is a twin piston McPherson strut (TPX 44) with a 44 mm diameter piston. It is 3-way adjusted, 1-way rebound and two-way compression. The damper is a 3-way adjusted twin tube damper (TTX 44). The rod adjuster is a course rebound adjuster, while the single adjuster in the cylinder head is a fine tuner with a 2-way compression adjuster. The damper has a 44 mm piston.

These shock absorbers has the Öhlins PDS-system, this system is designed to control bottom damping forces.

These are fully pressure balanced, eliminating the risk of cavitation and due to low gas pressure they keep the internal friction level minimized. There is a whole range of optional parts to tailor the dampers to any specific needs. The dampers can be built and modified for more or less any rally or rallycross vehicle and have been winners since the launch.

Typical applications:

- > Rally (WRC, FIA R-class, National Series and others)
- > Rallycross (WRX, Supercar, Supercar Lites, National Series and others)
- > Racing (Demanding applications)

Please contact your local Öhlins distributor for further information.

### FEATURES TPX

- > McPherson strut
- > TPX-technology
- > 44 mm piston
- > 3-way adjustable
- > Fully pressure balanced
- > Progressive Damping System (PDS)

### FEATURES TTX

- > Conventional shock
- > TTX-technology
- > 44 mm piston
- > 3-way adjustable
- > Fully pressure balanced
- > Progressive Damping System (PDS)



# GROUP N

For this class Öhlins has developed the Group N dampers to also suit the Subaru and Mitsubishi cars. The front strut is a Twin Piston McPherson strut with a 44 mm diameter piston (TPX 44), 3-way adjusted with 1-way rebound and 2-way compression. The rear damper is a Twin Tube damper (TTX 44) with a 44 mm piston and it is 3-way adjusted.

Both front and rear are fully pressure balanced, eliminating the risk of cavitation and due to low gas pressure they keep the internal friction minimized.

### FEATURES FRONT

- > TPX 44 McPherson strut
- > 44 mm twin piston
- > PDS (Progressive Damping System)
- > 3-way adjusted, 1-way rebound and 2-way compression

### FEATURES REAR

- > TTX 44 Twin Tube shock
- > 44 mm single piston
- > PDS (Progressive Damping System)
- > 3-way adjusted, 1-way rebound and 2-way compression



# ORQ 16/46

The ORQ-series Off-Road damper has proven a success in all kinds of Rally Raid events. The damper has a swiveling hose, for increased flow potential for easy mounting on the vehicle.

The ORQ range of dampers is designed with Off-Road and Rally Raid Cars in mind, as well as similar kinds of vehicles where this layout is suitable. These dampers are available in three different lengths. The dampers are of 46 mm piston type with remote reservoirs. They have compression and rebound adjusters together with the Progressive Damping System, PDS. The damper comes with a protecting sleeve and two circlips to help prevent spring wear. Springs, spring platforms and spacers for the spherical bearings need to be ordered separately.

This ORQ shock absorber can be built up for more or less any Off-Road vehicle by your Öhlins service center. Öhlins has also a range of springs to suit different type of use.

## FEATURES

- > 46 mm piston and 16 mm piston rod
- > Remote reservoirs
- > Available in three different lengths
- > PDS, Progressive Damping System
- > 2-way adjustable



# ORQ 18/50

A high performing Off-road damper in the Öhlins ORQ series. The ORQ 18/50 is suitable for off-road and rally raid and features a 50 mm piston and a 18 mm piston rod. The whole design is very robust to withstand the high forces and demands presented in off road such as rally raid and similar events. Details such as ball joint and the rebound adjustment has been reinforced and dimensioned for this application. The ORQ 18/50 also features the PDS, Progressive Damping System, featured on Öhlins rally dampers.

It is available in three lengths but it is also possible for Öhlins Service Centers to custom build dampers with up to approx. 350 mm stroke. Piggy back cylinder head will be available as optional component which makes it possible to rebuild a hose damper to piggy back.

This ORQ shock absorber can be built up for more or less any Off-Road vehicle by your Öhlins service center. Öhlins has also a range of springs to suit different type of use.

## FEATURES

- > 50 mm piston and 18 mm piston rod
- > PDS, Progressive Damping System
- > 3-way adjustable, 2-way compression and 1-way rebound
- > Available in three lengths
- > Piggy back cylinder head available as optional component to rebuild a hose damper to piggy back version



# HISTORIC RALLY

With Öhlins kit system we can build you the Öhlins legendary suspension system for your historic rally car. We have numerous different applications that are hand built and extensively tested to withstand the forces from serious rallying. One of the application is Porsche 911 Historic Rally car among many other applications.

Our suspension is rebuildable and it is possible to build the suspension after your drivers' preferences and type of use. Like all of our suspensions they need to be serviced to withstand the brutal force that are thrown at a historic rally car.

The Porsche dampers are available in two versions, with or without adjustment possibilities. The adjustable version has a 16 mm piston shaft hollowed with a valve and jet that is externally adjustable. It features a single adjuster knob that affects both rebound and compression circuits with the use of a bleed system and also benefits from a temperature compensating system.

The rear shock has a 46 mm damping piston together with a 16 mm piston shaft with compression and rebound adjustable with one external adjustment knob and benefits from the temperature compensating system. The Öhlins rear shocks is rebuildable and is tailor made for the car as well as the settings to suit the drivers' preferences.

The non-adjustable version is based on a 40 mm cylinder tube that fits into the original Porsche McPherson outer tube. The piston shaft is 12 mm and has a balanced setting developed for both Tarmac and Gravel.



# STOCK CAR



STOCK CAR

# WCJ

This high performance light weight stock car shock absorber is designed for use in Asphalt oval series in anything spanning from the highest series in NASCAR to Late Model. It features as a regular winner in NASCAR.



## FEATURES

- > Light weight aluminum body
- > Large reservoir for improved cooling
- > Quick response for better handling
- > Consistent on long runs
- > Easy to dial in, reshim, rebuild and service
- > Infinite valve and piston combinations
- > Options include a variety of different pistons, 1-way shaft jets, parallel compression valve and base valve

OHLINS.COM

STOCK CAR

# OTJ

A new shock absorber for oval track racing replacing the STJ.



## FEATURES

- > Adjustable or non-adjustable
- > Light weight aluminum body
- > Large reservoir for improved cooling
- > Easy to dial in, reshim, rebuild and service
- > Infinite valve and piston combinations
- > Options include a variety of different pistons, 1-way shaft jets and base valve

STOCK CAR

# ILX-SERIES

The design of the TTX 36 Inline with the compact design and with an inline reservoir makes it suitable for asphalt oval racing.

## FEATURES

- > TTX-technology
- > Integrated reservoir
- > 2-way adjusted, compression and rebound
- > Possible to upgrade to 3- and 4-way adjustable
- > Compact design
- > Available in different lengths
- > Used in asphalt oval racing as the NASCAR-series and Late Model



**TTX**

OHLINS.COM

STOCK CAR

# LMJ/LMP-SERIES

Designed for use in Late Model and Modified but also for use in NASCAR Sprint Cup, Nationwide and Truck series. The LMJ & LMP-series are also available in Dirt oval applications for use in Dirt Late Model, Modified and Sprint racing.

The shock absorbers are 2-way adjustable with LMP available as a piggy back version and LMJ series in hose version with remote reservoir. The shock absorber features separate rebound and compression damping adjusters.

## FEATURES LMJ

- > Late Model and Modified
- > Dirt and Asphalt applications
- > 2-way adjustable damping
- > Easy to dial-in, rebuild, reshim and service
- > Available with several different piston options
- > Options include 1-way shaft jets, parallel compression valve and 2-way reservoir

## FEATURES LMP

- > Late Model and Modified
- > Dirt and Asphalt applications
- > BOB-R compression valve for increased adjustment range
- > Large reservoir for better cooling
- > Easy to dial-in, reshim, rebuild and service
- > Options include 1-way shaft jets to allow smaller compression or rebound valve
- > Optional parallel compression valve to allow for smaller rebound valve



STOCK CAR

# CCJ

An economical non-adjustable shock absorber for use in dirt oval racing, sprints and asphalt oval racing. The base stock car version is non adjustable and can be used in all forms of stock car oval racing.

## FEATURES

- > Late Model and Modified classes
- > Dirt and Asphalt applications
- > Steel body
- > Easy to dial in, reshim, rebuild and service
- > Large number of valve and piston combinations available
- > Optional internal reservoir with floating piston
- > Optional external reservoir
- > Options include different optional pistons and one-way shaft jets



TTX

OHLINS.COM



# OPTIONAL PARTS

## SPRING ASSORTMENT

Öhlins has spring assortment of various dimensions and spring stiffness. Please contact your local distributor for more information.



## SPRING SEAT KIT

New spring seat kits are launched which include bearings and helper springs. The kit is made for Öhlins TTR, TTX40, TTX36 and TTX36 Inline racing shock absorbers.



## BLOW OFF PISTONS FOR TTX 36 / TTX 36 IL (ILX)

The advantage with this piston is that it reduces peak loads. This makes the driving over curbs smoother and reduces the risk of getting flat tires.



## BLOW OFF PISTONS FOR TTX 40

Öhlins presents a blow off piston for the TTX 40 Touring car damper. The advantage with this kit is that it reduces peak loads. This makes the driving over curbs smoother and reduces the risk of getting flat tires.



## BLOW OFF VALVE FOR TTX 46 MT

This blow off valve reduces peak loads, makes the driving over curbs smoother and reduces the risk of getting flat tires.

*Note: 06200-11 valve housing required.*



## LINEAR DISPLACEMENT SENSOR KIT FOR TTX 46

The advantage with this piston is that it reduces peak loads. This makes the driving over curbs smoother and reduces the risk of getting flat tires.



## ÖHLINS SHOCK COVERS

To prevent dirt, dust and mud from clogging up the shock absorber it can be dressed up with Öhlins shock covers. The flexible neoprene material is an effective blocker and it fits many different shock absorber types including McPherson struts.



# ÖHLINS ORIGINAL MERCHANDISE

Öhlins Original Merchandise is designed to keep you stylish, comfortable, functional and durable. Its designed, tested and scrutinized by Öhlins crew and represent our values and heritage.

**To see the whole Merchandise collection visit [www.ohlins.com](http://www.ohlins.com) or your local Öhlins distributor.**

# ÖHLINS STICKERS

Öhlins stickers range gives you the option to personalize your car or shock. Stickers can be found through the Öhlins network.



## STICKERBOX

**Part No:** 10207-02

**Size:** 73 x 30 mm



## Ö YELLOW SMALL

**Part No:** 11221-08

**Size:** 17 x 32 mm



## Ö BLACK SMALL

**Part No:** 11221-09

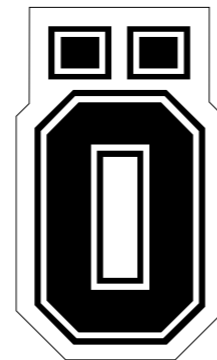
**Size:** 17 x 32 mm



## Ö YELLOW

**Part No:** 11221-06

**Size:** 43 x 80 mm



## Ö BLACK

**Part No:** 11221-07

**Size:** 43 x 80 mm



## ÖHLINS BLUE/YELLOW

**Part No:** 01196-02

**Size:** 74 x 28 mm



## ÖHLINS BLUE/YELLOW MEDIUM

**Part No:** 11221-01

**Size:** 210 x 79 mm



## ÖHLINS BLACK/WHITE MEDIUM

**Part No:** 11221-02

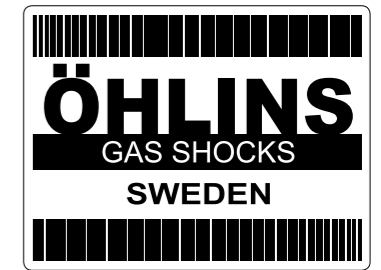
**Size:** 210 x 79 mm



## ÖHLINS BLACK/WHITE

**Part No:** 01196-01

**Size:** 74 x 28 mm

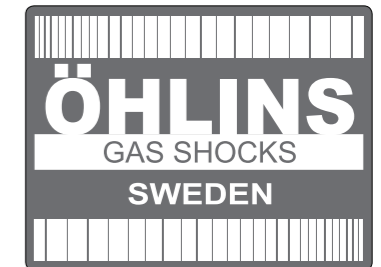


## ÖHLINS RETRO BLACK

**Part No:** 11221-04

**Size:** 63 x 47 mm

(TRANSPARENT BACKGROUND)



## ÖHLINS RETRO WHITE

**Part No:** 11221-05

**Size:** 63 x 47 mm

# FOR MORE CONTACT INFORMATION PLEASE VISIT

Full information about which models Öhlins products are available for, please contact your local Öhlins distributor.

## AFRICA

**KENYA** Azar Anwar Motorsport  
**SOUTH AFRICA** VM Innovation Ltd

## ASIA

**CHINA** Gusto Technik Co.  
**HONG KONG** Gusto Technik Co.  
**INDONESIA** PT. Madani Sentra Multi Jasa  
**JAPAN** Carozzeria Japan Co., Ltd  
**MALAYSIA** Trans Techno Enterprise S/B  
**PHILIPPINES** Access Plus / T.A. Marketing  
**SINGAPORE** Sporting Motors Pte Ltd  
**SOUTH KOREA** Neobis Int Co., Ltd  
**THAILAND** Öhlins Asia  
**TAIWAN** Capricore Trading Co., Ltd  
**VIETNAM** Dia Hoang Gia, HCM

## EUROPE

**AUSTRIA** Öhlins DTC  
**BELGIUM** Öhlins DTC  
**BULGARIA** Öhlins DTC  
**CROATIA** Öhlins DTC  
**CYPRUS** Öhlins DTC  
**CZECH REPUBLIC** Öhlins DTC

**DENMARK** Öhlins DTC  
**ESTONIA** VTR Motors OÜ  
**FINLAND** Öhlins Auto Norden  
**FRANCE** PFP Racing  
**GERMANY** Öhlins DTC  
**GREECE** Öhlins DTC  
**HUNGARIA** Öhlins DTC  
**ITALY** Andreani Group International s.r.l

**LATVIA**  
Bairons Sia  
Motofavorits

## LITHUANIA

UAB Proracing  
Jiezno UAB Juta

**LUXEMBURG** Öhlins DTC

**THE NETHERLANDS** Öhlins DTC

**NORWAY** Öhlins Auto Norden

**POLAND** FF-Sport

**PORTUGAL** Maxi-Shocks

**REPUBLIC OF IRELAND** Öhlins DTC

**ROMANIA** Öhlins DTC

## RUSSIA

Kajma Racing  
Master-Sport Ltd

**SLOVAKIA** Öhlins DTC

**SLOVENIA** Öhlins DTC

**SPAIN** Andreani MHS Ibérica, SL

**SWEDEN** Öhlins Auto Norden

**SWITZERLAND** Öhlins DTC

**TURKEY** Öhlins DTC

**UKRAINE** Öhlins DTC

**UNITED KINGDOM** Öhlins DTC

## MIDDLE EAST

**DUBAI** Automotive Design & Development  
**ISRAEL** G-Force Motorsport  
**LEBANON** Lead Race Engineering

## NORTH & CENTRAL AMERICA

**CANADA** Öhlins USA Inc.

**MEXICO** Conequis SA

**USA** Öhlins USA Inc.

## PACIFIC

**AUSTRALIA** Steve Cramer Products

**NEW ZEALAND** Kiwi Suspension Solutions

## SOUTH AMERICA

**ARGENTINA** Alpes Racing

**BRAZIL** JP3 Motorsport

**EQUADOR** RPM Imports

**PARAGUAY** Gotze Ingenieria S.A.





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