



#### **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.





#### ÖHLINS HALL OF FAME

Moiseev in the 250cc Motocross championship. From that day, Öhlins has won world championships titles every year, first in Motocross, later in Superbike classes and Auto motorsport championships such as WRC with Tommi Mäkinen, Endurance, VLN, GT-Racing, Touring cars and Formula racing series. 2017 Öhlins teamed up together with Specialized, the Mountainbike manufacturer, to challenge the best for the world title. Öhlins took the title in both the ladies and the men's championship the first time we participated. The rest is history...



# 2019 PRODUCT OVERVIEW FRONT END PRODUCTS

We at Öhlins specialize in custom-made products to excel your riding experience, whether on tarmac or gravel. Our front forks or cartridge kits will give you blistering performance and increased safety on all surfaces. Every application found in our database has been in our factory for a custom fitment that is how ensure a perfect quality and design fitment. Our forks in not only one of the best performers on the market, in our sense it is also the best-looking forks out there.



FLUIDS ACCESSORIES



#### CARTRIDGE KITS



FKR 100 CARTRIDGE KIT



NIX 30 ADVENTURE CARTRIDGE KIT



FKC 102 CARTRIDGE KIT

**FKC 101** 

CARTRIDGE KIT



NIX 22 NIX 30
CARTRIDGE KIT CARTRIDGE KIT

#### FRONT FORKS



FGR 300 FRONT FORK



FRONT FORK



FRONT FORK



FRONT FORK ADVENTURE FRONT FORK

#### FRONT FORKS

**RETRO 43** 

FRONT FORK



UNIVERSAL USD 43 FRONT FORK

#### CARTRIDGE KITS



#### **2019 PRODUCT OVERVIEW**

#### SHOCK ABSORBERS

Öhlins shock absorbers comes in a wide range of designs and functionality, with and without adjusters. We manufacture more than 300 different shock absorber models to more than 1000 applications. Our technology starts its life in high-end racing such asMotoGP or WSBK. From the racing world comes our aftermarket shock absorbers that use the valves, alloys and functionality from our racing knowledge. All our shocks will improve your grip, stability and give a huge boost to the bikes performance.

















**TYPE TTX 36** 















# S36PR1C1L

#### TYPE STX 46







S46DR1LS

#### TYPE STX 46 H







S46HR1C1L

TYPE STX 46 H

S46ER1/DR1







S46HR1C1B

#### TYPE STX 46 P





S46DR1L/

DR1LS CUSTOM







S46PR1C1S

TYPE STX 36 P

S36E



S36PR1C1LB



S36HR1C1L



T36PR1C1LS



T36PR1C1LB



T36PR4C4LS

TYPE STX 36 P



T39PR4C4S1

**TYPE TTX 39** 

T39PR1C1S

#### TYPE STX 46 P









S46PR1C2L



S46PR1C2B

S46PR1C1Q1





S46PR1C1LB





#### **ÖHLINS TESTING** & DEVELOPMENT

At Öhlins, we are serious about suspension. In fact, we live it and breathe it. The amount of engineering that goes into our products is simply staggering, every single product is tested and measured prior to production, in order to make sure you get the best performance possible. Think computer simulations, rig tests and evaluation on either race track or on the street. Or both. It may be the latest development for MotoGP or a new street application for your daily ride, our strict program applies to everything we do.

Öhlins are proud of the amount of engineering that are put in to our products. Remember, a large portion of our revenue is reinvested directly into research and development.

Not only that. In order for you to be sure to enjoy perfect performance from your Öhlins product for many years to come, every component is subject to a number of tests, from corrosion to fatigue resistance. And of course, our products are fully rebuildable should the day come.





#### TTX GP SHOCK ABSORBER

Öhlins are continuously striving to improve their products on quality, consistency and performance. From our latest research and development we have made a number of component and setting improvements which we have combined into the 2018 shock. The 2018 TTX GP will feature a new type of valve which gives better feedback to the rider, also a new piston & band which together with the new valves enhances grip, stability, feedback and consistency. The new adjuster knobs makes it easier to make changes on the fly with or without tools compared to the current design.

#### **TOP FEATURES**

- > TTX-technology
- > Rebound and compression adjustment straight from MotoGP
- > Adjustment needles with different flow restriction behavior to improve chassis feedback
- > Wider and more precise adjustment range
- > Adjustment possible by hand or with hexagon tool





#### TTX RT SHOCK ABSORBER

**SUPERSPORT** 

The TTX Road & Track is developed for the latest supersport models as a complement to the top of the line TTX GP shock. The TTX RT has a competitive price but still offers great performance for the road and track day enthusiast. The shock is based on the TTX 36 with its race proven technology. It has a traditional C-spanner type pre load adjustment, easily accessible rebound and compression adjustment on the cylinder head. The result is a shock absorber with the long term technology developments from Öhlins experience in MotoGP and WSBK.

#### TOP FEATURES

- > TTX-technology
- > Wide adjuster range
- > Completely separated functions for rebound and compression damping
- > All adjustments are done on the cylinder head of the shock absorber
- > Length adjustable for most models





#### STX 46 SHOCK ABSORBER

The Öhlins STX 46 shock absorber is available for many different bikes in the smaller supersport segment, such as Yamaha R3, Ninja 250 Honda CBR 250. This shock absorber features the well-known Öhlins monotube design and build quality. With fully adjustable compression and rebound damping it has a great range of adjustment. Also you can fit the shock absorber with an optional hydraulic spring preloader! With enhanced cornering performance and improved comfort it will inspire you to go faster around the track but also works great on your daily commute and weekend rides.

#### TOP FEATURES

- > STX-technology
- > Monotube high pressure gas type of shock absorber with hose mounted external reservoir
- > Fully adjustable compression and rebound damping
- > Wide range of springs available
- > Optional: Hydraulic spring preloader adjuster





#### SUPERSPORT

## **STEERING DAMPER**

An essential ingredient in a complete performance package, the Öhlins steering dampers are still the ones to beat. Thanks to the superior pressurized design and extremely tight manufacturing tolerances, the damper delivers supreme performance and agility, and with the wide adjustment range it is easy to find that perfectly weighted steering feel and feedback.

Available as a bolt-on kit for many sport and supersport models, there is also an assortment of universal models in different lengths and a wide range of mounting brackets and parts for race bikes as well as custom builders.

#### **TOP FEATURES**

- > Unique, well proven design
- > Pressurized fluid avoids problem of free play
- > Adjustable in 16 well defined clicks
- > Available in 6 different lengths/strokes
- > Kits complete with mounting brackets available for certain bikes
- > Universal parts for race bikes available



### STEERING DAMPER EC

The Öhlins Smart EC aftermarket steering damper is designed to complement the Öhlins Smart EC system equipped on the Yamaha R1M.

The Smart EC software controlling for this steering damper is already pre-programmed into the Yamaha R1M's SCU. The steering damper is controlled by the Smart EC algorithms and reacts on speed as well as acceleration.

It constantly changes the damping settings in real time to suit the current riding conditions in the best possible way. The already excellent mechanical function in the steering damper is further improved by the Smart EC algorithms and the result is an ideal platform for any rider who wish to improve the performance on road as well as reduce the lap times on track.

#### **TOP FEATURES**

- > Öhlins Smart EC Software
- > Constantly changes damping settings in real time
- > Reacts on speed and acceleration
- > Unique, well proven design
- > Pressurized fluid avoids problem of free play
- > Improved riding experience



# **FKR 100**

**CARTRIDGE KIT** 

The FKR cartridge kit has technology derived straight from the Moto3, Moto 2 and World Superbike championships developed by our engineers at Öhlins HQ in Sweden. FKR is for riders who demand the best performance from their bike.

Designed for top level racing in Superstock and Supersport classes. Features include a spring pressurized system, compared to the old gas pressurized system, the spring pressure offers a more simplistic and user friendly design, which also makes for easier maintenance and setting changes. Also giving a more consistent performance curve and allows for a more compact design.

#### TOP FEATURES

- > TTX-technology
- > Fits most large displacement bikes
- > Easier maintenance
- > Spring pressurized system
- > Technology from Moto3 Moto2 and World Superbike
- > Complete setting library





# SUPERSPORT NIX 30

#### NIX 30 CARTRIDGE KIT

The Öhlins NIX 30 front fork cartridge kit was developed in racing series such as World Supersport and Superstock championships. Whether heading for a National Roadracing title or just taking your bike to the local race track, this cartridge kit offers loads of performance, stability and suppleness. This kit has a unique design, with the compression damping in the left fork leg while the right leg controls rebound damping. This allows not only for a more precise function and better stability, but also the ease of having all adjustments conveniently placed at the top of the fork.

#### TOP FEATURES

- > NIX-technology
- > External rebound, compression and spring preload adjusters
- > Easy to change settings for individual preferences, based on our Setting Bank
- > Wide range of spring rates available in the 08790-series
- > Easy to install and service
- > Available for most Supersport models

#### SUPERSPORT

#### NIX 22 CARTRIDGE KIT

The Öhlins NIX 22 front fork cartridge kit, for light-weight sportbikes with conventional forks, is based on experience gained from World Superbike and Supersport championships. This kit has many similarities with our NIX 30 product aimed towards the larger displacement supersport bikes. The NIX 22 Cartridge kit delivers loads of performance with a stable damping characteristics and great comfort contributing to rider confidence. Whether you are aiming for a title in light-weight roadracing or just want to have a great track day bike.

#### **TOP FEATURES**

- > NIX-technology
- > External compression & rebound adjustment
- > External 15 mm preload adjustment
- > 22 mm piston diameter
- > Range of fork springs available





**SUPERSPORT FSK 100** 

#### **SUPERSPORT**

# **FGR 300**

FRONT FORK

The FGR 300 is the very essence of advanced suspension technology. Packed with technical solutions developed in MotoGP and World Superbike, the FGR 300 improves on its predecessors in a number of ways to stay further ahead of the competition. Building on the technology from the pressurized TTX 25 front fork cartridge kit, the reinforced outer tube adds stiffness to the chassis, crucial for complete control in racing. Easily adjustable for both compression and rebound, together with a click setting function for the spring preload. The FGR 300 represents the pinnacle of front fork engineering.

#### TOP FEATURES

FORK SPRING KIT

This fork spring kit is an upgrade for small sports and street bikes with conventional

forks. The kit is designed to improve the handling, cornering and braking and give

top cap and higher performance rate springs. The replacement top cap also provides an external spring preload adjustment. It is available for small sports bikes

such as the Yamaha R25/R3, Kawasaki Ninja 400, Honda CBR 250/300R.

the rider a noticeable improved feeling in all areas. The kit consists of a replacement



#### > Full maintenance capability

- > Replacement top caps
- > Performance rate springs

- > TTX-technology
- > New stronger outer tube top
- > Longer, lighter design
- > Improved adjustment features
- > Different settings available from Öhlins setting bank





# FRONT FORK

Whether heading for a National Roadracing title or going for a quiet countryside trip, the Road & Track front fork will deliver loads of performance, consistent behaviour and a suppleness you wouldn't believe was possible. Featuring the race proven technology of our NIX 30 cartridge kit. This not only allows for superior dynamic behaviour, but also for keeping the adjusters conveniently on top of each leg. The new front fork improves on rider feedback, brake support and general handling of the bike. Not to mention the exquisite styling – the FGRT 200 is perfect in terms of both performance and design.

- > NIX-technology
- > Weight and stress optimized fork bottom design
- > All adjustments at the top of the fork
- > Proven in various racing applications
- > Available for most Supersport models
- > Different settings available from Öhlins setting bank









#### **ADVENTURE**

# **TTX ADVENTURE**

#### SHOCK ABSORBER

The thoroughly race proven TTX technology makes it into the Adventure segment, delivering unparalleled performance. Designed for the BMW R1200GS, the Öhlins TTX 36 and TTX 39 shock absorbers improve on feedback, control and comfort. Of course, both front and rear shocks benefit from all the TTX advantages, such as individually adjustable compression and rebound damping and eliminated risk of cavitation. Developed exclusively for the adventure segment, the rear TTX 39 shock is designed specifically to cope with the varying load conditions of on and off road use.

#### TOP FEATURES

- > TTX-technology
- > 36 mm front shock absorber for Adventure
- > 39 mm rear shock absorber specifically designed for the adventure
- > Reinforced cylinders
- > Individual setting of spring preload front and rear
- > Individual settings of both compression and rebound front and rear



#### STX 46 SHOCK ABSORBER

The classic monotube design of the Öhlins STX 46 shock absorber is a major upgrade to most bikes in the Adventure segment. The design is well proven, features a large 46mm piston delivering reliable performance in all possible environments. Available in a wide range of configurations, with piggyback or hose mounted reservoir and with or without spring preload adjuster, the STX 46 can be made to fit in virtually any mounting space no matter what the constraints are. The STX 46 is available for most major models in the adventure segment.

#### TOP FEATURES

- > STX-technology
- > Well proven monotube design
- > A number of different adjustment possibilities
- > Available in different configurations depending on bike model
- > Maintenance and service possibilities
- > Available for most major Adventure models





 $_{30}$ 

**ADVENTURE** 

#### **NIX 30 ADVENTURE** CARTRIDGE KIT

FKA 100 front fork cartridge kit for medium sized adventure bikes. Based on technology from Öhlins roadracing cartridges featuring our well proven NIX damping system. Among the advantages with this design is improved stability and control of the damping system, ease of use as all the adjusters, compression, rebound damping and spring preload, are located at the top of each fork leg. Fast gravel roads on a weekend or piloting around narrow trails to find that perfect stopover for the night - now you can do it with complete control over your bike.

#### TOP FEATURES

- > Fully adjustable from the top cap
- > Rebound in one leg, compression in the other leg
- > New hydraulic stop to prevent hard bottoming
- > Easy to install and service
- > Different spring rates available



#### NIX

#### **ADVENTURE**

# FRONT FORK ADVENTURE

FRONT FORK



The design features gold coloured, surface treated outer and inner tubes that drastically reduce friction and ensure a hard surface; perfect when you go off road.

- > NIX-techonology

- > NIX-technology
- > 48 mm gold outer tubes
- > Fully adjustable
- > Golden TiNitride surface treatments on inner tubes







STX 46 SHOCK ABSORBER

The all new STX 46 shock absorber for the Harley-Davidson softail gives an impressive increase in performance and comfort. Developed to make those long cruises more comfortable but also give the necessary support when hitting the winding roads. This STX 46 has some unique features such as a silver hydraulic preload adjuster, black spring, custom black preload handle with laser etched Ö logo and CNC machined Aluminum handle to look great on all versions of the new Softail!

#### TOP FEATURES

- > STX-technology
- > Hydraulic preload adjuster
- > Monotube shock absorber
- > A range of spring rates available
- > Maintenance possibilities
- > 46 mm piston diameter



STX

**CUSTOM & HERITAGE** 

# STX 36 P BLACKLINE

STX

SHOCK ABSORBER

Don't let the subtle styling fool you! The STX 36 P Blackline shock absorbers deliver well known Öhlins damping performance and quality. With a selection of spring rates, compression, rebound and preload adjustment you can fine tune these shocks to suit your riding style. From cruising mountain roads to being playful on the throttle the STX 36 P Blackline shocks are developed for Harley-Davidson riders wanting nothing but perfect ride characteristics.

#### **TOP FEATURES**

- > STX-technology
- > Piggyback gas pressurized reservoir
- > Adjustable compression and rebound damping
- > Optional length adjustability
- > Fully serviceable
- > Tested and tailor-made to suit each application



# STX 36 DR1L BLACKLINE SHOCK ABSORBER

For those who want the Blackline shocks but with a more the classic look the STX 36 DR1L Blackline is the answer. This is achieved by integrating the gas reservoir with the shocks main body for a slim design, while retaining all the Öhlins damping qualities. Adjustable rebound damping allows you to tune the shock to your liking, while rear height can be altered with the length adjuster. No matter where the road takes you, the STX 36 DR1L Blackline provides comfort, style and performance to your Harley-Davidson.

#### TOP FEATURES

- > STX-technology
- > Integrated gas pressurized reservoir
- > Adjustable rebound damping
- > Length adjustable
- > Fully serviceable
- > Tested and tailor-made to suit each application



**CUSTOM & HERITAGE** 

# STX 36 D BLACKLINE

STX

SHOCK ABSORBER

The STX 36 D Blackline shock absorber is the simplest shock in the Blackline range. It comes with the STX technology and is constructed to give you maximum comfort on long rides. It is an easy to set up shock without the confusing adjusters. Retaining all the Öhlins damping qualities the STX 36 D provides increased traction and safety for your Harley-Davidson in all conditions.

#### TOP FEATURES

- > STX-technology
- > Integrated gas pressurized reservoir
- > Fully serviceable
- > Tested and tailor-made to suit each application



STX 36 SHOCK ABSORBER

Developed for bikes with twin shock absorbers, the Öhlins STX 36 is a classic monotube design, featuring all the classical Öhlins qualities delivering top notch performance for your street bike. Available in emulsion, piggyback or hose versions, depending on application, it can also be specified with a number of different damping adjustment options with or without length adjustment. Suitable for any application from cruisers to café racers, the STX 36 shocks are one of Öhlins most successful designs of all times.

#### **TOP FEATURES**

- > STX-technology
- > Well proven monotube design
- > Emulsion, dividing piston, piggyback or hose type gas pressurized system
- > Each application tested and tailor made to suit
- > Designed for comfort and rideability on cruisers
- > Wide range of spring rates are available
- > Optional black, yellow and chrome springs are available to most models





# **NIX 22**

#### CARTRIDGE KIT

**CUSTOM & HERITAGE** 

Imagine – riding your Harley-Davidson down the country roads with the improved comfort, control and performance of Öhlins suspension. The NIX 22 cartridge kit extends Öhlins advanced suspension technology to the popular line of H-D Sportster and Dyna models. Designed with proven Öhlins NIX technology to maximize damping performance in the available confines of a fork leg, compression and rebound damping are separated between the legs. Just install and enjoy! Optional fork spring rates are available for individual rider weights, preferences and use of the bike. Whatever your needs are, you'll be surprised by the transformation.

#### TOP FEATURES

- > NIX-technology
- > External compression & rebound adjustment
- > 22 mm piston diameter
- > Range of fork springs available
- > Improved feel, control and comfort
- > Easy to install





#### FKC 101 CARTRIDGE KIT

The heart and soul of a Harley-Davidson with the comfort and control of Öhlins suspension. The FKC 101 cartridge kit introduces Öhlins advanced suspension technology to the front forks of the popular Harley-Davidson FLH/FLT Touring Baggers.

Designed with proven Öhlins NIX technology which maximizes damping performance in the available confines of a fork leg, compression and rebound damping are separated between the legs. We also did away with the hassle of external adjusters. Just install and enjoy! Optional spring rates are available for individual rider weights, preferences and use of the bike, you'll be surprised by the transformation.

#### **TOP FEATURES**

- > NIX-technology
- > 25 mm pistons
- > Aluminum damping tubes
- > Improved feel, control and comfort
- > Easy to install
- > Range of fork springs available

**CUSTOM & HERITAGE** 

#### FKC 102 CARTRIDGE KIT

NIX

The heart and soul of a Harley-Davidson with the comfort and control of Öhlins suspension. The FKC 102 cartridge kit introduces Öhlins advanced suspension technology to the front forks of the popular line of Harley-Davidson FLH/FLT Touring Baggers. Designed with proven Öhlins NIX technology which maximizes damping performance in the available confines of a fork leg, compression and rebound damping are separated between the legs. We also did away with the hassle of external adjusters. Just install and enjoy! Optional spring rates are available for individual rider weights, preferences and use of the bike, you'll be surprised by the transformation.

#### **TOP FEATURES**

- > NIX-technology
- > 25 mm pistons
- > Aluminum damping tubes
- > Improved feel, control and comfort
- > Easy to install
- > Range of fork springs available





# RETRO 43 FRONT FORK

Öhlins 43 mm conventional universal fork for the custom bike builder that wants supreme suspension performance. Retro 43 gives you the familiar Öhlins design in black or gold version. Inside the fork we use NIX technology featuring compression damping in the left leg and rebound damping in the right leg, also spring preload all easily accessible at the top caps. This fork ensures great bump absorption giving the rider a smooth and comfortable ride. The forks are delivered without brake caliper and fender mountings, this enables the fork to be easily adapted to various models by the bike builder.

#### TOP FEATURES

- > NIX-technology
- > Stroke 130 mm, length 800 mm
- > Triple clamp diam. 43 mm
- > Wheel axle 32 mm
- > Spring rate 9,5 N/mm. Range of optional spring rates available
- > Fully adjustable

**CUSTOM & HERITAGE** 

# **UNIVERSAL USD 43**

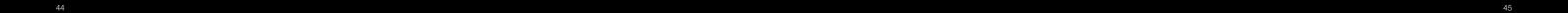
FRONT FORK

Öhlins offer a range of front fork options. For custom builds, the fully adjustable FG 324 and FG 424 features compression and rebound damping as well as adjustable spring preload, easily tuned for your specific requirements. The front fork offers complete control and race proven performance for your bike.

#### **TOP FEATURES**

- > Stroke 120 mm
- > Length 800 mm
- > Top clamp diam. 50 mm
- > Lower clamp diam. 54 mm
- > Wheel axle 32 mm
- > Spring rate 8,5 N/mm
- > Available in black or gold design
- > Fully adjustable





NIX

# FRONT FORK

A unique 48 mm front fork that originally was developed for the Ducati Diavel and has been a popular option for custom builders. Performance in spades from the latest Öhlins NIX 30 technology matches the aggressive and beefy looks. The front fork has compression and rebound adjustments, and is easily adjustable with rebound in one leg and compression in the other. Spring preload adjustment is done from the top cap.

This front fork does not only improve the looks but also delivers performance improving tire feel, brake support and general handling.

- > NIX-technology
- > Compression and rebound adjustable, with rebound in one leg and compression in the other
- > Spring compression adjustments in the top cap
- > Weight and stress optimized fork bottom design









A well proven monotube design, the Öhlins STX 46 shock absorber sets the standard for performance, quality and durability. A major suspension upgrade for your sports bike suspension, it features a large 46 mm main piston and an internal gas reservoir within the main body of the shock. With adjustable damping, you can change the behavior of the shock to suit your taste and even fit a hydraulic spring preloader to change the stance of the bike. This is the perfect choice for the naked sports bike, or as we call it: the Street Performance Line.

#### TOP FEATURES

- > STX-technology
- > Monotube shock absorber
- > Adjustable rebound damping and compression
- > A range of spring rates available
- > Optional hydraulic spring preloader
- > Available for more than 100 different bike models





#### CARTRIDGE KIT

**NIX 22** 

STREET PERFORMANCE LINE

Öhlins NIX 22, for street bikes. This kit shares many similarities with our NIX 30 products for larger displacement supersport bikes. The NIX 22 Cartridge kit delivers loads of performance with stable damping characteristics and great comfort contributing to rider confidence. Features include compression damping in the left leg and rebound damping in the right leg, which allows for a more precise function and stability. Adjustments are made at the top together with the spring preload, all to make it easier for you. The cartridge system is easy to install in standard front forks.

- > NIX-technology
- > External compression & rebound adjustment
- > External 15 mm preload adjustment
- > 22 mm piston diameter
- > Range of fork springs available
- > Öhlins Setting Bank





STREET PERFORMANCE LINE

# NIX 30 STREET CARTRIDGE KIT

The "NIX" technology is developed from world championship racing such as SBK to deliver the utmost performance. NIX 30 cartridges fits in the standard front legs giving you adjustable compression and rebound damping separated in each leg, as well as preload adjustment, all accessible from the new designed black top caps giving the bike a more subtle look. Öhlins have tested the NIX 30 cartridge extensively. On road as well as track, to make a kit that gives the best performance on your favourite road but also a comfortable ride when cruising or commuting to work.

#### **TOP FEATURES**

- > NIX-technology
- > External Compression & rebound adjustment
- > External preload adjustment
- > 30 mm piston diameter
- > Range of springs available
- > Öhlins Setting Bank

STREET PERFORMANCE LINE

## **FSK 100**

FORK SPRING KIT

This fork spring kit is an upgrade for small sports and street bikes with conventional forks. The kit is designed to improve the handling, cornering and braking and give the rider a noticeable improved feeling in all areas. The kit consists of a replacement top cap and higher performance rate springs. The replacement top cap also provides an external spring preload. It is available for street bikes such as the Yamaha MT-07, Honda CB650F and the Kawasaki ER6N.

#### **TOP FEATURES**

- > Full maintenance capability
- > Replacement top caps
- > Performance rate springs



52

NIX



#### **SCOOTER PERFORMANCE LINE**

**STX 46** SHOCK ABSORBER

Öhlins offers a sturdy and cost effective STX 46 shock absorber for scooter. These upgrades deliver increased handling, comfort and performance.

The STX 46 rear shock absorber with monotube design sets the standard for performance quality and durability. With adjustable rebound damping, you can alter the behavior to suit your riding style.

#### TOP FEATURES

- > STX-technology
- > External preload adjustment
- > Adjustable rebound damping
- > A range of spring rates available
- > Maintenance possibilities
- > 46 mm piston diameter

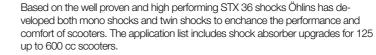






**SCOOTER PERFORMANCE LINE** 

MONO & TWIN SHOCK ABSORBER



The STX 36 is a classic monotube design available in emulsion, piggyback or hose versions depending on application and it can also be specified with a number of different damping adjustment options with or without length adjustment.

- > STX-technology
- > Well proven monotube design
- > Each application tested and tailor made to suit
- > Design for comfort and performance
- > Available for Honda MSX, Forza and PCX 150, with other applications being developed for machines such as the Yamaha X-Max range.





#### **SCOOTER PERFORMANCE LINE**

# NIX 30 STREET

CARTRIDGE KIT

The Öhlins NIX 30 Street cartridge kit gives you adjustable compression and rebound damping separated in each leg, as well as preload adjustment.

We at Öhlins have tested the NIX 30 Street cartridge kit extensively. On road as well as track, to make a kit that gives the utmost performance on your favourite road but also gives a comfortable ride when cruising or commuting to work.

#### TOP FEATURES

- > NIX-technology
- > External Compression & rebound adjustment
- > External preload adjustment
- > 30 mm piston diameter
- > Range of springs available
- > Öhlins Setting Bank

#### **SCOOTER PERFORMANCE LINE**

#### FDK 100 CARTRIDGE KIT

Öhlins FDK 100 cartridge kit is a great performance upgrade for your bike. Improved handling, cornering and braking are immediately noticed.

Full maintenance capability. Alternative spring rates available.

#### TOP FEATURES

- > Compression insert
- > Rebound insert
- > Replacement Öhlins top caps
- > Higher performance rate springs

# 



one of the most important aspects of tuning the suspension of the bike to your weight and riding style is to choose the correct spring. Öhlins offer a wide range of springs, not only for our own shock absorbers and front forks but also replacement springs for standard applications. Depending on use, different lengths and spring rates are available.

Öhlins experienced service centers are happy to help you in making the correct decision, as well as installing the springs.

#### FLUIDS ACCESSORIES

Needless to say, the fluid used in the shock is a crucial part of the performance. Leaving nothing to chance, we develop our own suspension fluids, using the more precise Centistoke scale of viscosity rather than the conventional SAE scale. But to help you out a little bit if cSt is not your thing, we did put a small number on the lower right corner of the bottle, to make a reference.

Made with the same precision as other Öhlins products, we believe that our fluids not only do the job of bringing the best out of our shocks.



# ÖHLINS ORIGINAL MERCHANDISE

From the road to the comfort of your home - Öhlins have got you covered with our exclusive line of merchandise. With an assortment ranging from hoodies to beanies and practical tote bags, it's now possible to always have the true Öhlins feeling with you (or on you).

Designed, tested and scrutinized by our Öhlins crew we can guarantee that our products are high quality, durable and most important – extremely comfy and stylish. With a wide variety of sizes we have a fit for everyone. Stay on track, even off track with Öhlins merchandise as the perfect addition to your wardrobe.









#### **ÖHLINS STICKERS**

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



#### **ÖHLINS BLUE/YELLOW MEDIUM**

Part No: 01196-02 **Size:** 74 x 28 mm



#### **ÖHLINS BLACK/WHITE**

Part No: 01196-01 **Size:** 74 x 28 mm



#### **ÖHLINS BLUE/YELLOW MEDIUM**

Part No: 11221-01 **Size:** 210 x 79 mm



#### ÖHLINS RETRO BLACK

Part No: 11221-04 **Size:** 63 x 47 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 BLACK/WHITE MEDIUM**

Part No: 11221-02 **Size:** 210 x 79 mm





#### **ÖHLINS RETRO WHITE**

Part No: 11221-05 **Size:** 63 x 47 mm







#### **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.











## **MOTORSPORT**

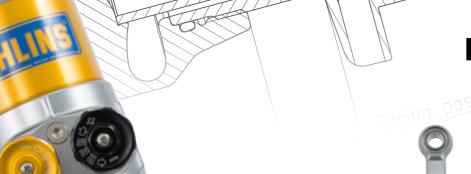
# **EXCLUSIVE SUSPENSION SUPPLIER**

Öhlins provide products from a wide range for all kinds of Motorsport activities from non-adjustable light weight products all the way to the most advanced adjustable shock absorbers.

Our products can be equipped and upgraded with several external adjusters, progressive damping system, blow off functions etc. This to meet each customer needs and price targets and to the requested function and performance. Öhlins are the supplier to many of the exclusive Motorsport, racing, rally, offroad and track day car builders, both for homologated racing/rally classes such as TCR, GT4, GT3 and R-classes as well as pure track day cars.

Please contact Öhlins for a quotation for your next project.





# 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 car for the track.

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.





# ÖHLINS STX-TECHNOLOGY

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.





 $_{9}$ 



# **ÖHLINS**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 to 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 Öhlins Road & Track 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.

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.

# "KEEPS YOU ON THE RACING LINE"

The Öhlins Dual Flow Valve (DFV) damping system is Öhlins answer to entry level circuit racing, one make classes, cups etc. The damping system gives the car improved grip control and stability. The DFV system keeps you on the racing line when hitting curbs and you will experience precise steering and high speed stability in all conditions. Developed for racing series, national base classes and similar with lightweight cars, front or rear wheel drive, where you need to be able to fine tune the damping characteristics which is possible with the external adjuster for each specific track or conditions. This product has a well proven function on many kind of surfaces and has great performance also on demanding tracks such as Nürburgring etc.



# ÖHLINS HALL OF FAME

Öhlins Racing won its first World Championship Title in 1978 with Gennady Moiseev in the 250cc Motocross championship. From that day, Öhlins has won world championships titles every year, first in Motocross, later in Superbike classes and Auto motorsport championships such as WRC with Tommi Mäkinen, Endurance, VLN, GT-Racing, Touring cars and Formula racing series. 2017 Öhlins teamed up together with Specialized, the Mountainbike manufacturer, to challenge the best for the world title. Öhlins took the title in both the ladies and the men's championship the first time we participated. The rest is history...

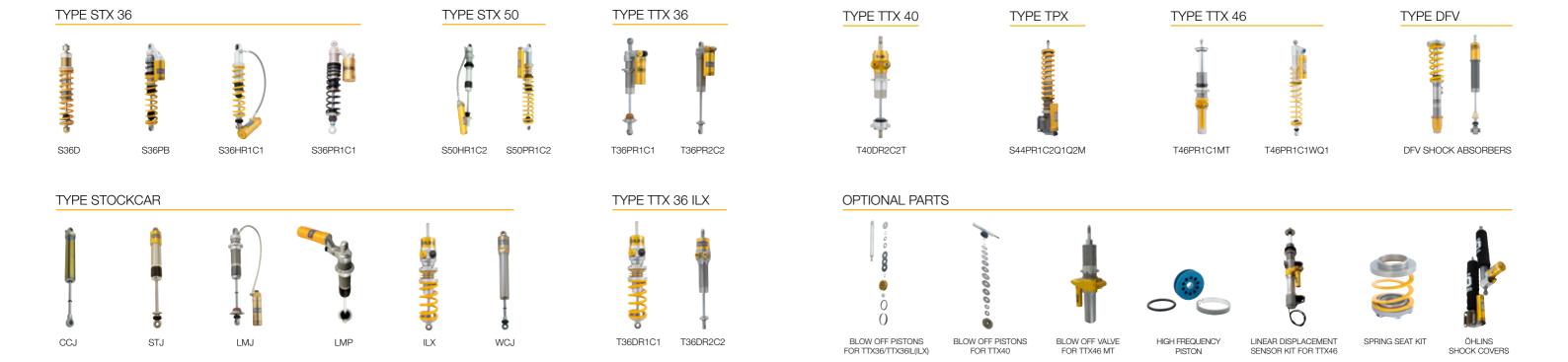


# **PRODUCT OVERVIEW** 2019

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.

## S46DR1 S46HR1C1 S46PR1C1 S46PR1C2 S46HR1C2 S46HMR1C1 S46HMR1C2Q1



TYPE STX 46



# 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.



#### **FEATURES**

- > TTX-technology
- > Integrated reservoir
- > 2-way adjusted, compression and rebound
- > Possible to upgrade to 3- and 4-way adjustable
- > Available in different lengths
- > Available with a internal blow-off piston kit
- > Available with high frequency piston
- > Suitable for single-seaters, GT-cars and historical racing



# 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.

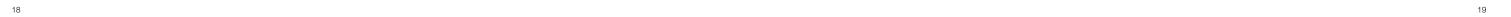
It's one of our most versatile dampers and is used for many different applications for spanning from single-seaters and GT-cars to touring cars, sports cars and prototypes.



- > TTX-technology
- > 2-way adjusted, compression and rebound
- > Possible to upgrade to 3- and 4-way adjustable
- > Available in different lengths
- > Available with a internal blow-off piston kit
- > Available with high frequency piston
- > Suitable for a wide range of cars from GT- and sports cars to single seaters, touring cars and prototypes









# TTX 36/46 TCR

TCR Racing is the fast growing Touring class were Öhlins has a strong damper concept. The use of in most cases the well proven TTX 46, two way adjusted in the front and TTX 36 or ILX in the rear also here two way adjusted to follow the homologation for this series. Already most of the manufacturers has choosen Öhlins as a first fitment or as and option were we have seen many victories already by different car makes and series.



### **FEATURES TTX 36**

- > TTX-technology
- > 2-way adjusted, compression and rebound
- > Available in different lengths

### **FEATURES TTX 46**

- > TTX-technology
- > 2-way adjusted, compression and rebound
- > 46 mm solid piston, through rod 30 mm
- > McPherson strut suspension
- > Possible to update with non adjustable Blow Off and high frequency piston
- > Additional height adjustability, for BOP (Balance Of Performance)







# **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.

Available with a external blow-off piston kit. The advantage with this kit is that it reduces peak loads. This makes driving over curbs smother, 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.

### **FEATURES**

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



# **TTX 46**

The 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
- > 2-way or 4-way adjustable
- > McPherson strut suspension
- > Available with high frequency piston
- > Can be updated with external blow off (adjustable or non adjustable)





23

# RALLY & OFFROAD



## **RALLY & OFFROAD**



# **AUTOMOTIVE TTX FLOW**

The Öhlins Flow-technology is now available to our customers in the Rally and Rallycross market. With our TTX-technology and patent-pending internal pressure regulation, this new shock is a step forward compared to other shock absorbers. We retained our TTX-technology but redesigned the 'check-valve' system to balance wide valve openings and quick open/close actions to handle a large volume of oil flow.

The Automotive TTX Flow gives the car improved traction, comfort and predictability which enhance the stability of the car. It's also easy to adjust to find the perfect setting for the stage and driving style. The base model comes equipped with a general damping adjuster on the shaft and a low-speed compression adjuster on the cylinder head.

### **FEATURES**

- > TTX-technology
- > Patent pending pressure technology
- > 46 mm piston
- > PDS (Progressive Damping System)
- > Modular based
- > Wide range of springs





## **RALLY & OFFROAD**

# ALR TPX/TTX RALLY & RALLYCROSS



**GROUP N** 

TX

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 curcuits 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 2-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	FEATURES TTX
> TPX-technology > McPherson strut > 44 mm piston > 3-way adjustable > Fully pressure balanced > Progressive Damping System (PDS)	> TTX-technology > Conventional shock > 44 mm piston > 3-way adjustable > Fully pressure balanced > Progressive Damping System (PDS)



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.

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.

FEATURES TPX	FEATURES TTX
> TPX-technology > McPherson strut > 44 mm twin piston > Progressive Damping System (PDS)	> TTX-technology > Conventional shock > 44 mm single piston > Progressive Damping System (PDS)
> 3-way adjustable	> 3-way adjustable



 $^{28}$  29



# **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 vechicle.

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
- > 16 mm piston rod
- > Remote reservoirs
- > Available in different lengths
- > Progressive Damping System (PDS)
- > 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 lenghts 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
- > 18 mm piston rod
- > Progressive Damping System (PDS)
- > 3-way adjustable
- > Available in different lengths
- > Available in piggy-back or remote reservoir via hose connection



## **MOTORSPORT**

# **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.

Please contact your local Öhlins distributor for more information.





# **WCJ**

This high performance light weight stock car shock absorber is designed for use in Asphal 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
- > High speed rebound shaft
- > 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





# **OTJ**

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

### **FEATURES**

- > Adjustable or non-adjustable
- > Light weight aluminum body
- > High speed rebound shaft
- > 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



38 39

# **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



**亚X** 

## **RACING**

# **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 jetsto allow smaller compression or rebound valve
- > Optional parallel compression valve to allow for smaller rebound valve



0 41

# 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



# **KIT SYSTEM**FOR YOUR SPECIAL PROJECT

Öhlins provide products for all kinds of motorsport disciplines via Öhlins Kit System applications, from non-adjustable light weight products all the way to our most advanced fully adjustable shock absorbers.

Specially trained distributors have the possibility to perfectly tailor make the suspension kit to your specific design and personal preference.

Please contact your local distributor for support.







# **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)

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

# 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 smother and reduces the risk of getting flat tires.

# **EXTERNAL BLOW OFF VALVE** FOR TTX 40

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



# **EXTERNAL BLOW OFF VALVE** FOR TTX 46

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

## **HIGH FREQUENCY PISTON**

The High Frequency Piston changes the dynamic in the shock absorber, creating less damping force on both compression and rebound in very small piston movements, increasing the grip level of the car.

The High Frequency Piston provides similar damping forces as the solid piston in the upper frequency range of the piston movement.

## LINEAR DISPLACEMENT SENSOR KIT FOR TTX 46

The advantage with this pistion is that it reduces peak loads. This makes the driving over curbs smother 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.









46 47

# ÖHLINS ORIGINAL MERCHANDISE

From the road to the comfort of your home - Öhlins have got you covered with our exclusive line of merchandise. With an assortment ranging from hoodies to beanies and practical tote bags, it's now possible to always have the true Öhlins feeling with you (or on you).

Designed, tested and scrutinized by our Öhlins crew we can guarantee that our products are high quality, durable and most important extremely comfy and stylish. With a wide variety of sizes we have a fit for everyone. Stay on track, even off track with Öhlins merchandise as the perfect addition to your wardrobe.









# ÖHLINS STICKERS

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



### Ö YELLOW SMALL

**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

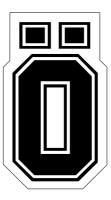


ÖHLINS

CONGRATULATIONS ON YOUR NEW OHLINS ROADSTRACK KITT

### 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 MEDIUM**

**Part No:** 01196-02 **Size:** 74 x 28 mm



### **ÖHLINS BLACK/WHITE**

**Part No:** 01196-01 **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 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

50 51







# 2019 PRODUCT OVERVIEW

Tailor made for you! We have the perfect part for your bike, delivering outstanding performance at a competitive price. Öhlins manufactures more than 300 different shock absorber models, every one compensive price. Onlins manufactures more than 1900 differences hook absorber models, every one uniquely fitted to your bike and suited to fit without interfering. We make sure that the product behaves the way it should, through the design of the shirm stacks and valves as well as the calibration of the adjusters. This is no guesswork. We try the settings out, in real life, and adjust them until everything adjusters. This is no guesswork, we try the settings out, in real life, and adjust the frontier everythe works perfect for each and every specific model. Then we assemble the products with utmost precision to ensure superior control of the damping force. That is the key to our success.



**TTX 30** SHOCK ABSORBER



**STX 46** SHOCK ABSORBER



TTX FLOW WITH PDS SHOCK ABSORBER



**TTX FLOW** SHOCK ABSORBER



**STX 22** CARTRIDGE KIT



**TTX 22** CARTRIDGE KIT



**RXF 48 S** FRONT FORK





**FLUIDS** ACCESSORIES







# RXF 48 S FRONT FORK

With RXF 48 S, we are happy to provide our top level performance and offer the with the 400, we are happy to provide our top level performance and one of stable, same components as used by Supercross pros. Our keywords have been 'stable, defined and settled without harshness'. Our 2019 model continues with our proven dynamic performance gained in 2018 as well as our golden TiNitride surface treatments on the lower fork legs for **best durability**, scratch resistance and low friction in high load situations.

The golden appearance with blue contrasts is our way of showing our Swedish origin.

- > TTX-technology
- > Great dynamic performance > Gold colored surface treatment
- Compression adjuster, angled for easy of reach
   Rebound adjuster underneath the fork

- Nebound adjuster underneath the fork
   Hydraulic stops for great bottoming resistance
   Top-out springs and rubbers for smooth top out feeling
   Gold and blue color scheme



# TTX 22 CARTRIDGE KIT

The same technology we equip our Öhlins front forks with is available as The same technology we equip our Ohlins front forks with is available as cartridge kits to be fitted in your bike's standard front forks. We continue with our proven performance from 2018, gained from redesign of internal valve pars and corresponding valving. We now offer **stability**, **hold-up**, **defined position**, defined front wheel feedback, settled movement and ability to handle bigger impacts as an easy upgrade to maximise your ride experience. Of course with our trade marks traction and **no harshness** untouched.

- > TTX-technology
  > Great dynamic performance
  > Compression adjuster, angled for easy of reach
  > Rebound adjuster underneath at the cartridge bottom
  > Rebound adjuster underneath at the cartridge bottom
  > Hydraulic stops for great bottoming resistance
  > Top-out springs and rubbers for smooth top out feeling
  > Available for most major MX and Enduro models



# STX 22 CARTRIDGE KIT

Öhlins STX 22 cartridge kits share a lot of features from our big bike's kits and are powerful upgrades available for KTM/Husqvarna/Kawasaki 85cc and Yamaha 65cc. **Designed with racing in mind,** quick and continuous responses in damping are key features which directly slow down upcoming motions without harshness. STX 22 is designed to rise low above the triple clamps, allowing the forks to be mounted far up in the triple clamps with a small handlebar clearance.

Click adjusters and air breather are easily reachable as they are angled out from underneath the handlebar.

- > Efficient hydraulic stop for improved bottoming resistance
- > Spring pressurized system to compensate for heat changes and provide
- > Converts Air-forks to spring type forks for better reliability and constant performance.
- > Full maintenance and service capability









# TTX FLOW SHOCK ABSORBER

The TTX FLOW of 2019 follows in the footsteps of the 2018 version and further improves on component quality and specification. The TTX FLOW utilizes our patent pending FLOW-Valve technology giving you improved traction, comfort and predictability. Properties that boost your confidence and make you faster, while making your ride safer. The compression and rebound adjusters of the TTX While Thaking your fide saler. The compression and rebound adjusters of the TTX FLOW provide you with effective, easy to use, tools to adapt your setup to different conditions. The TTX FLOW of 2019 lets you tap into all the latest knowledge that we have acquired from Enduro all the way Supercross.

- > Patent pending FLOW valve dynamic control
- > Great bottoming resistance > Compression and rebound adjusters with indicators
- > Easy spring change due to unique spring clip design > Easy spring preload adjustment
- > Wide range of optional springs











HLINE 06320-18-68-120

TTX FLOW WITH PDS
SHOCK ABSORBER

2019's PDS version for KTM EXC's has received model specific updates from previous year models. 2019's 3D-layout has been changed for easier access to the compression adjuster along with an additional step in bottoming control by a material change in the bump rubber. This change is to give a smoother transition and gentler bottoming feeling. Our 2019 version continues to use the well proven Position Damping System (PDS) from 2018 with its 2nd piston stepping in at the Position Damping System (PDS) from 2010 with its 2—pistom stepping final the bottom part of the stroke for an increased damping level. As this shock is charged with our patent pending FLOW-valve technology, for improved traction, comfort with our patent pending FLOW-valve technology. with our patent pending PLOW-valve technology, for **Improved traction, comfort**and predictability, its rebound and effective compression adjusters have made it

easy to find a great setup every day. This is where TTX FLOW shines.

- > Patent pending FLOW valve dynamic control
- > Compression and rebound adjusters with indicators > Easy spring change due to unique spring clip design
- > Easy spring preload adjustment
- > Wide range of optional springs



# STX 46 SHOCK ABSORBER

For the young and promising racers, we are offering our performance charged shock called STX 46. The shocks are fully adjustable with rebound, high- and low speed compression adjusters. Our 2019 shock continues with the successful PDS design, introduced at TTX Flow in 2018, providing smooth and gentle PDS design, introduced at TTA Flow in 2018, providing smooth and gentle bottoming feeling. These shock's dynamics and settings are fine-tuned to be able to deliver what we have learned riders are asking for; Excellent comfort, stability and bottoming control to allow riding hard in the safest possible way.

- > STX-technology > Great dynamics equals optimum function > PDS design for smooth bottoming feeling
- > 2-way compression adjuster
- > Rebound adjuster > Wide range of low speed compression adjustment, 3 clicks high speed adjustment

  > Full maintenance and service capability









# TTX 30 SHOCK ABSORBER

Öhlins are proud to offer our family of shocks for 50 & 65 cc MX-bikes - TTX 30! Thanks to the small diameter the TTX-technology can be brought in a small manks to the small diameter the FTX-technology can be brought in a small package to fit these bikes. Having good suspension is vital when you begin and start honing your race craft and speed. A comfortable performance driven shock absorber means the rider can use less energy to go fast, giving better control, higher safety and of course in the end more energy towards the end of the control, higher safety and of course in the end more energy towards the end of the race to fight for victories.

- > TTX-technology > Compression and rebound adjusted separately > Different spring rates available > Full maintenance and service capability

# SPRINGS ACCESSORIES

One of the most important aspects of tuning the suspension of the bike to your weight and riding style is to choose the correct spring. Öhlins offer a wide range of springs, not only for our own shock absorbers and front forks but also replacement springs for standard applications. Depending on use, different lengths and spring rates are available.

Öhlins experienced service centers are happy to help you in making the correct decision, as well as installing the springs.





MX & ENDURO

# FLUIDS ACCESSORIES

Needless to say, the fluid used in the shock is a crucial part of the performance.

Leaving nothing to chance, we develop our own suspension fluids, using the more precise Centistoke scale of viscosity rather than the conventional SAE scale. But precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale. But precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale. But precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale. But precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale but precise Centistoke scale of viscosity rather than the conventional SAE scale but precise centists and conventional SAE scale but precise centists are conventional scale but precise centists and conventional scale but precise centists are conventi

# ÖHLINS ORIGINAL MERCHANDISE

From the road to the comfort of your home - Öhlins have got you covered with our exclusive line of merchandise. With an assortment ranging from hoodies to beanies and practical tote bags, it's now possible to always have the true Öhlins feeling with you (or on you).

Designed, tested and scrutinized by our Öhlins crew we can guarantee that our products are high quality, durable and most important – extremely comfy and stylish. With a wide variety of sizes we have a fit for everyone. Stay on track, even off track with Öhlins merchandise as the perfect addition to your wardrobe.





# ÖHLINS STICKERS

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



### ÖHLINS BLUE/YELLOW MEDIUM

**Part No:** 01196-02 **Size:** 74 x 28 mm



## ÖHLINS BLACK/WHITE

**Part No:** 01196-01 **Size:** 74 x 28 mm



### ÖHLINS BLUE/YELLOW MEDIUM

**Part No:** 11221-01 **Size:** 210 x 79 mm



## ÖHLINS RETRO BLACK

**Part No:** 11221-04 **Size:** 63 x 47 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 BLACK/WHITE MEDIUM

**Part No:** 11221-02 **Size:** 210 x 79 mm



### **ÖHLINS RETRO WHITE**

**Part No:** 11221-05 **Size:** 63 x 47 mm