

DRIVE THE LEGEND.

MOTORSPORTS CATALOG.

Circle Track | Road Race | Off-Road Racing



US.bilstein.com



Setting the pace for over 50 years.

BILSTEIN introduced the very first monotube gas-pressure shock absorber to the racing world over 50 years ago. It didn't take long for racers to recognize the superior performance that this new technology provided and the wins started stacking up. In fact, ever since, the world's most renowned drivers have won on BILSTEIN shock absorbers.

After 50 years of continuously evolving monotube shock technology, the winning tradition continues with victories in 2016. From Daytona to Le Mans to Baja, the legendary BILSTEIN technology can be found in winners' circles around the globe.

Every BILSTEIN shock absorber featured in this catalog is a true monotube high pressure gas shock; no emulsion, no foam cells, just performance. No matter what you race, BILSTEIN has the technology and performance you need; count on BILSTEIN to deliver the winning results you're looking for. After all, we've been the leader since the very beginning.



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BILSTEIN's monotube technology.

Heat is one of the major detriments to the performance and longevity of any shock absorber. Conventional twin-tube designed shocks trap the heat within the shock body and do not let it adequately dissipate, making them prone to heat build-up, fade and eventual failure.

By contrast, BILSTEIN's superior monotube high gas-pressure design allows the excessive heat from the oil to transfer to the outer surface of the shock body and dissipate more efficiently. The dividing piston also permits the oil to expand as heat builds, preventing aeration (foaming) and viscosity loss. This allows the shock to maintain full damping characteristics as temperatures rise.



BILSTEIN's industry leading monotube design.
Provides superior tube strength while maximizing heat dissipation and shock life.

High pressure nitrogen gas & "floating" dividing piston.
Nitrogen gas maintains constant pressure against the low mass "floating" dividing piston and column of hydraulic oil, eliminating the possibility of oil foaming and performance loss.

Self-adjusting digressive piston.
Instantly reacts and adjusts for any condition. Provides maximum vehicle body motion control.

One piece aluminum rod guide & seal.
Keeps dirt out and maintains a nearly friction-free surface for longer life.

Hard chrome piston rod.
Features a super finished hard chrome plated surface with a maximum peak-to-valley measurement of .0002mm.

Pressure differentials.

Shock oils contain roughly 10% gas molecules. The compression and rebound strokes of the shock piston in the oil column may cause pressure differentials. When the piston rod is forced quickly into the shock tube, the pressure increases in front of the piston and decreases behind it.

These pressure differentials release gas molecules from the oil column which may cause small bubbles (foaming). The foaming can become so excessive that damping force is severely reduced. The shock becomes unresponsive with a corresponding loss of vehicle control.

In a monotube gas-pressure shock absorber, the nitrogen is separated from the oil by a dividing piston. This keeps the oil column under pressure at all times to prevent the release of gas molecules while enabling the shock to deliver consistent performance under all driving conditions.



Non-pressurized shock, foaming



Gas-pressurized shock, no foaming



BILSTEIN monotube piston



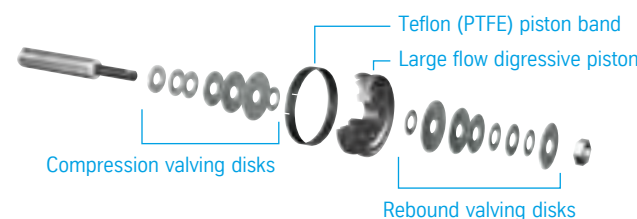
Twin-tube piston

Monotube vs. twin-tube.

BILSTEIN's monotube piston has 228% larger surface area than the average conventional twin-tube piston offering greater sensitivity, superior grip, and longer tire life.

BILSTEIN's working piston assembly.

The piston head design allows independent tuning of the compression and rebound damping forces to provide optimum performance without compromise. This simple, yet exceptionally functional design contributes to the extreme durability and performance of BILSTEIN shocks.



Why race on BILSTEIN Shock Absorbers?

1. Your setups will be more precise due to consistent and repeatable valving designs.
2. BILSTEIN's proprietary piston design and deflective disc technology develops control force when you need it. The combination provides superior weight transfer control at the slightest suspension movement as well as better control under braking.
3. BILSTEIN shocks use custom blended oil and deflective disc technology that prevents performance fading. Your shocks will handle as good at the end of the race as they did at the start.
4. BILSTEIN shocks are rugged. They last for years and are rebuildable (with exceptions for non-serviceable tamper proof designs).
5. When the advantages of BILSTEIN shocks are tallied up, you will have spent less money on shock absorbers and out-performed the competition.



BILSTEIN's unique deflective disc valving system allows for exact damping of both compression and rebound movements.

The following are some commonly asked questions and their corresponding answers concerning BILSTEIN monotube gas pressure shock absorbers:

Q. Why is the shaft on a BILSTEIN shock always extended?

A. As monotube gas shocks, BILSTEIN shocks are under nitrogen pressure to deliver the most responsive damping for ultimate control. This pressure, called the gas reactive force, and BILSTEIN's low friction seals, force the shaft to extend.

Q. Is the car more difficult to scale with BILSTEIN shocks?

A. BILSTEIN shocks have no effect on the results as you weigh the four corners. The gas reactive force in BILSTEIN shocks may raise your car's ride height slightly. Simply adjust the chassis downward to the desired ride height.

Q. Does BILSTEIN offer specific applications for the various dirt and asphalt racing series?

A. BILSTEIN has shocks specifically valved for both dirt and asphalt surfaces of various track lengths and bankings. For more information, please contact the BILSTEIN Racing Department or refer to the supplemental setup charts at US.bilstein.com.

Q. Are BILSTEIN shocks difficult to understand and use?

A. After reviewing the setup charts, you'll be ready to select the proper shocks for your specific race car. BILSTEIN valving is precise. Once you purchase your BILSTEIN shocks, you can be certain they will perform at peak performance throughout their long life.

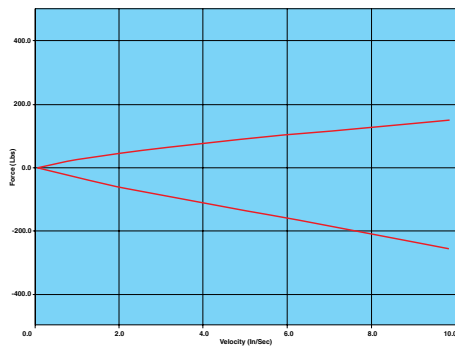
Q. How can I learn more about tuning BILSTEIN shocks?

A. If you are interested in learning more about assembling and tuning BILSTEIN products, contact us to learn more about our BILSTEIN Technical Training School. Through a combination of classroom and hands-on training, participants gain further insight into tuning for track conditions and how handling dynamics can be addressed through shock choices. The hands-on experience includes assembly and disassembly of a variety of BILSTEIN shocks as well as dyno testing and diagnostics.

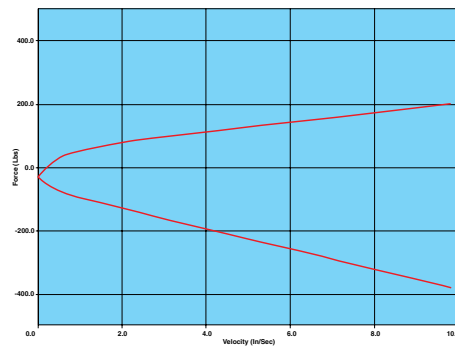
BILSTEIN pistons and valving.

Shock absorbers produce damping force by forcing oil, under pressure, through orifices in the piston. Shock damping forces increase as the vertical velocity of your suspension increases. In other words, when the shock's piston speed through the oil increases, so do the damping forces. Shock dynamometers measure the amount of damping force generated by the piston as it accelerates and decelerates from a dead stop to a chosen peak velocity (usually 10" to 12" per second). The forces are normally depicted in the form of a graph that plots shaft velocity, in inches per second, on the horizontal, and damping forces in pounds on the vertical. Compression forces are normally expressed from zero going up, and rebound forces from zero going down, although that can be reversed by the "dyno" operator with a single key stroke. Below, study the shock dyno graphs that illustrate the different style performance curves using two, unique piston designs, available from BILSTEIN.

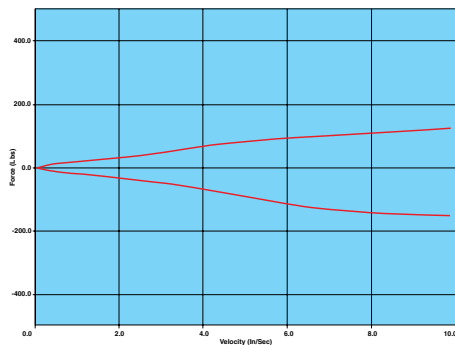
Bleed: The unrestricted flow of oil through the piston that bypasses the valve disc stack is referred to as "bleed", or sometimes as "bypass". The bleed characteristic in the shock's piston design determines the amount of "slow piston speed" control available before the shock's valving begins to control the higher velocity forces. High bleed pistons create small amounts of damping force at low piston speeds, and low bleed pistons create large amounts of damping force at low piston speeds.



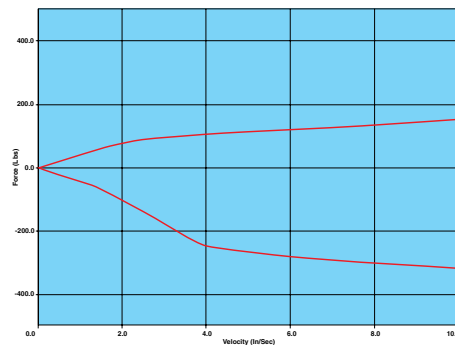
This graph was generated by a BILSTEIN linear piston using 36.4mm diameter cover plates resulting in a high bleed (or high frequency) style, short track linear valving.



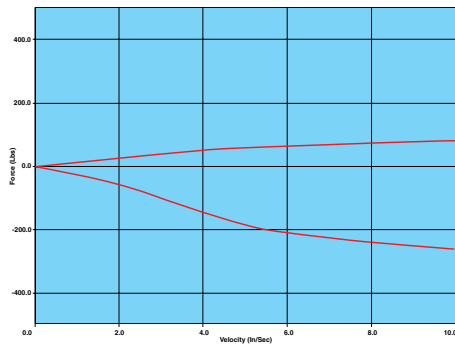
This graph depicts the BILSTEIN linear piston combined with 37.4mm cover plates. The result is valving with more "low-speed" control.



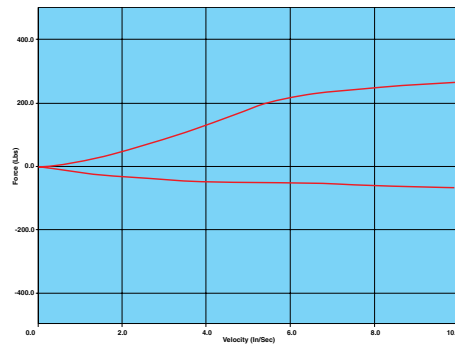
Our standard digressive valvings can be built with a wide range of bleed patterns. The one shown here is a very high bleed valving typical of one that would be used on the rear suspension to promote traction.



Shown here is a standard digressive valving using a low amount of bleed. Notice the large amount of force developed on both compression and rebound at slow piston speeds.



The new BILSTEIN "COB" Digressive piston utilizes a check valve, that when installed on the compression side of the piston creates less bleed and therefore more force on the rebound side.



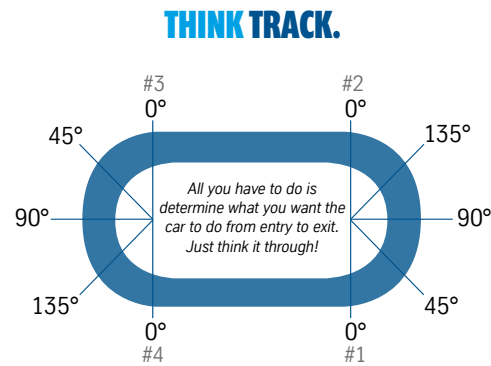
When the "COB" Digressive piston's check valve is installed on the rebound side, there is less bleed and therefore more force created on the compression side.

How to shock tune your chassis.

Study the current BILSTEIN setup recommendations for your particular type of racing. These combinations are tested and race proven to be successful, but due to the many variables that come into play under racing conditions, it is to your advantage to have a basic understanding of how shock damping rates affect your lap times. Adjustments can then be made with reason and understanding of how they will affect the car. Simply stated, shock absorbers convert the kinetic energy of the spring movements into heat. This heat is then dissipated into the air through the shock tube or body. In practical application, shock absorbers are necessary to maintain maximum tire patch contact to the track as the car corners and negotiates irregularities on the race track surface.

Spring rates determine how far your chassis rolls, pitches or squats. Shock rates determine the length of time it takes for each of these movements to occur.

Rebound damping controls the movement of that part of the car's sprung mass that is stored in a compressed spring. The rebound damping rate determines how long it takes for the compressed spring to return to the static ride height. The larger the rebound figure, the more the shock resists the compressed spring's effort to rebound, and the longer it takes for the chassis to return to the static ride height.



Compression damping controls only the oscillation of the car's unsprung weight. Therefore, it is normal to use less compression damping than rebound damping. The exception occurs when we choose to slow the downward movement on a particular corner of the car to mimic the effect of a stiffer spring.

Here are some guidelines to use when shock tuning your chassis at the track or making the best decisions during initial setup. We are making the assumption that you have removed as many variables as possible and are using the best combination of springs, weights, wheel spacers, tire compound, stagger, etc.

Utilizing the "Think Track" to the left, study the following list of suggestions. These are not rules, but tendencies that are more often true than not when racing late models and modifieds on asphalt or dirt surfaces.

TROUBLESHOOTING THE CAR AT THE TRACK.

If your car is:

Loose (Oversteer) from 0° to 90°

- Increase compression rate on front.
- Decrease rebound rate on rear, or only on left rear.

Tight (Understeer) from 0° to 90°

- Decrease compression rate on front, or only on right front.
- Increase rebound rate on rear, or only on left rear.

Loose (Oversteer) from 90° to 0°

- Decrease rebound rate on front.
- Decrease compression rate on rear.

Tight (Understeer) from 90° to 0°

- Increase rebound rate on front.
- Increase compression rate on rear, or only on right rear.

When analyzing corner entry, or deceleration handling, realize that the chassis is affected by:

- Compression rate in front.
- Rebound rate at rear.

When analyzing corner exit, or acceleration handling, realize that the chassis is affected by:

- Rebound rate in front.
- Compression rate at rear.

BILSTEIN shocks are famous for their superior performance on very rough asphalt or rutted dirt tracks. You may need to choose a shock with more compression damping than found on our setup sheets under extreme rough track conditions.

We have included this section in our catalog to broaden your understanding of the function of shock absorbers and to show you the effect they have on handling. Keep in mind

that there are many adjustments on your chassis other than shock absorbers. The oversteer/understeer balance may be affected by stagger, tire compound, wheel spacing, spring rates, sway bar, panhard and others. Shocks can be used to fine tune your chassis to gain that last few tenths of a second on the track.

If you have any questions, contact our technical department at 877-666-7662.



Technology icon guide.

Technologies.



BILSTEIN gas-pressure technology.

In the 1950s, we developed gas-pressure technology to prevent damping power reduction caused by oil foaming.



BILSTEIN monotube technology.

Our monotube shocks provide greater damping power due to a larger surface area on the piston resulting in improved handling and consistent performance.



BILSTEIN road test.

BILSTEIN shock absorbers undergo rigorous testing for objective criteria including safety, braking, steering behavior, dynamic driving, and comfort.



BILSTEIN-Triple-C-Technology®.

BILSTEIN-Triple-C-Technology® is a high-performance, three layer coating. It's been specially developed for lasting corrosion protection on our coilovers.



BILSTEIN zinc and nickel plating.

Featured on select suspension systems, zinc or nickel plated coatings increase durability and expands the lifetime of the shock.



BILSTEIN ride height adjustment.

Our ride height adjustment products are thoroughly tested by BILSTEIN engineers. The two icons above indicate a lifting or lowering kit.



BILSTEIN 1-way adjustment.

BILSTEIN 1-way adjustment provides damping power refinement through an easily accessible adjustment knob.



BILSTEIN 2-way adjustment.

Both rebound and compression forces can be adjusted independently via the two easily accessible knobs offered with BILSTEIN 2-way adjustment technology.

Off-Road.



Large off-road piston.

Due to its increased surface area, our large off-road piston design enables a finer, controlled ride over rough terrain.



Remote reservoir.

With a remote reservoir, oil capacity is expanded, increasing wheel travel and creating greater heat dissipation for long-term durability.

PROFESSIONAL RACING.



SN2 Series.

For applications requiring steel body shocks, the SN2 features optimized shock lengths and a lightweight aluminum cap.

Features & benefits:

- 46mm extruded modular steel body maintains tighter tolerances
- Body design allows for standard and coilover applications (coilover kit sold separately: B4-BOA-0000117)
- 14mm hard chromed shaft reduces seal drag and breakaway stiction
- Single and double adjustable shafts available
- Linear and digressive pistons available for valving versatility¹
- Monotube design provides maximum heat dissipation



¹depending on application



AS2 Series.

The AS2 features a completely modular aluminum design making it lightweight and quick to repair.

Features & benefits:

- 46mm lightweight extruded aluminum body maintains tighter tolerances for superior performance
- Fine thread body provides precise adjustments in coilover applications (coilover kit sold separately: B4-KT1-Z245A01 for non-adjustable shaft)
- Single and double adjustable shaft options available
- Hard anodized coating reduces friction while increasing durability and strength
- Monotube design provides maximum heat dissipation
- Integrated bump stop cap



Spring Seat Kit

For 2.5" springs, fits non-adjustable shafts.

XVA Series.

Large bulb aluminum shock body that maximizes stroke in a compact package through greater nitrogen capacity and more controlled fluid flow.

Features & benefits:

- Dual Zone gas bulb results in decreased gas pressure ramp up while increasing grip levels
- Optimized floating piston offers improved driver feel and response
- 46mm extruded aluminum threaded body improves durability and heat dissipation
- Floating rod guide for decreased side load friction
- Racer rebuildable
- Threaded body design allows for standard or coilover applications (coilover kit sold separately: B4-KT1-Z245A01)
- Optional ACV base valve allows for ultra low rod pressure



Adjustment Options

Available with non, single, and double adjustable shafts.



1



AK Series.

Combines a direct fit (OE) mounting design with the performance edge of a premium race damper.

Features & benefits:

- Monotube technology dissipates heat for consistent, fade-free performance
- Direct fit (OE) mounting design
- Race-winning valvings for optimum weight transfer, feel and grip in various track conditions
- Proprietary spring steel valving discs provides superior damping performance
- Steel body¹ for increased durability
- Revalvable inverted monotube strut provides strength and maximum performance



SZ | SL Series.

Meets the demand of racing divisions that require steel body, non-take-apart shock absorbers without Schrader valves while still providing superior quality and performance.

Features & benefits:

- 46mm steel monotube technology for consistent, fade-free performance
- Body design allows for standard or coilover applications (coilover kit sold separately: B4-BOA-0000117)
- Floating rod guide decreases side load and friction
- Zinc plated body for corrosion resistance, extra durability, and heat dissipation
- Proprietary spring steel valving discs provide superior damping performance
- Available in linear and digressive setups with variable standard valving





SN2 | SNS2 Series.

For applications requiring steel body shocks, the SN2 and SNS2 Series features optimized shock lengths, and a modular monotube design that enables the flexibility to revalve and rebuild as needed. End caps are available in aluminum (SN2 Series) or steel (SNS2 Series) to meet various sanctioning body requirements.

Features & benefits:

- 46mm extruded modular steel body maintains tighter tolerances for superior performance
- BILSTEIN's SNS2 fill tool allows plug installation for sanctioning body requirements that restrict Schrader valves (fill tool sold separately: B4-BOA-0001227)
- Body design allows for standard and coilover applications (coilover kit sold separately: B4-BOA-0000117)
- 14mm hard chromed shaft reduces seal drag and breakaway stiction
- Single and double adjustable shafts available
- Linear and digressive pistons available for valving versatility¹
- Monotube design provides maximum heat dissipation
- Optional ACV base valve allows for ultra low rod pressure



SNS2 Series Shown

SZ | SL Series.

Meets the demand of racing divisions that require steel body, non-take-apart shock absorbers without Schrader valves while still providing superior quality and performance.

Features & benefits:

- 46mm steel monotube technology for consistent, fade-free performance
- Body design allows for standard or coilover applications (coilover kit sold separately: B4-BOA-0000117)
- Floating rod guide decreases side load and friction
- Zinc plated body for corrosion resistance, extra durability, and heat dissipation
- Proprietary spring steel valving discs provide superior damping performance
- Available in linear and digressive setups with variable standard valving



¹depending on application



AS2 Series.

The AS2 features a completely modular aluminum design making it lightweight and quick to repair.

Features & benefits:

- 46mm lightweight extruded aluminum body maintains tighter tolerances for superior performance
- Fine thread body provides precise adjustments in coilover applications (coilover kit sold separately: B4-KT1-Z245A01 for non-adjustable shaft)
- Single and double adjustable shaft options available
- Hard anodized coating reduces friction while increasing durability and strength
- Monotube design provides maximum heat dissipation
- Integrated bump stop cap



Spring Seat Kit

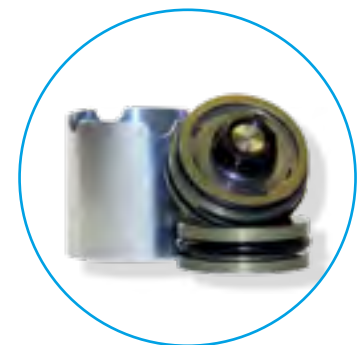
For 2.5" springs, fits non-adjustable shafts.

XVA Series.

The new standard in Dirt Modified. Large bulb aluminum shock body that maximizes stroke in a compact package through greater nitrogen capacity and more controlled fluid flow.

Features & benefits:

- Dual Zone gas bulb results in decreased gas pressure ramp up while increasing grip levels
- Optimized floating piston offers improved driver feel and response
- 46mm extruded aluminum threaded body improves durability and heat dissipation
- Floating rod guide for decreased side load friction
- Racer rebuildable
- Threaded body design allows for standard or coilover applications (coilover kit sold separately: B4-KT1-Z245A01 for non-adjustable shaft)
- Optional ACV base valve allows for ultra low rod pressure



Optional ACV Base Valve Assembly







SZ | SL Series.

Meets the demand of racing divisions that require steel body, non-take-apart shock absorbers without Schrader valves while still providing superior quality and performance.

Features & benefits:

- 46mm steel monotube technology for consistent, fade-free performance
- Body design allows for standard or coilover applications (coilover kit sold separately: B4-BOA-0000117)
- Floating rod guide decreases side load and friction
- Zinc plated body for corrosion resistance, extra durability, and heat dissipation
- Proprietary spring steel valving discs provide superior damping performance
- Available in linear and digressive setups with variable standard valving



AS2 Series.

The AS2 features a completely modular aluminum design making it lightweight and quick to repair.

Features & benefits:

- 46mm lightweight extruded aluminum body maintains tighter tolerances for superior performance
- Fine thread body provides precise adjustments in coilover applications (coilover kit sold separately: B4-KT1-Z245A01 for non-adjustable shaft)
- Single and double adjustable shaft options available
- Hard anodized coating reduces friction while increasing durability and strength
- Monotube design provides maximum heat dissipation
- Integrated bump stop cap



Adjustment Options

Available with non, single, and double adjustable shafts.





SN2 Series.

Designed for applications requiring steel body shocks, the BILSTEIN SN2 Series features optimized shock lengths, modular monotube design, and a lightweight aluminum cap.

Features & benefits:

- 46mm extruded modular steel body maintains tighter tolerances
- Body design allows for standard and coilover applications (coilover kit sold separately: B4-BOA-0000117)
- 14mm hard chromed shaft reduces seal drag and breakaway stiction
- Single and double adjustable shafts available
- Linear and digressive pistons available for valving versatility¹
- Monotube design provides maximum heat dissipation
- Optional ACV base valve allows for ultra low rod pressure



XVA Series.

Large bulb aluminum shock body that maximizes stroke in a compact package through greater nitrogen capacity and more controlled fluid flow.

Features & benefits:

- Dual Zone gas bulb results in decreased gas pressure ramp up while increasing grip levels
- Optimized floating piston offers improved driver feel and response
- 46mm extruded aluminum threaded body improves durability and heat dissipation
- Floating rod guide for decreased side load friction
- Racer rebuildable
- Threaded body design allows for standard or coilover applications (coilover kit sold separately: B4-KT1-Z245A01)
- Optional ACV base valve allows for ultra low rod pressure



Adjustment Options

Available with non, single, and double adjustable shafts.





AS2 Series.

The AS2 features a completely modular aluminum design making it lightweight and quick to repair.

Features & benefits:

- 46mm lightweight extruded aluminum body maintains tighter tolerances for superior performance
- Fine thread body provides precise adjustments in coilover applications (coilover kit sold separately: B4-KT1-Z245A01 for non-adjustable shaft)
- Single and double adjustable shaft options available
- Hard anodized coating reduces friction while increasing durability and strength
- Monotube design provides maximum heat dissipation
- Integrated bump stop cap



Spring Seat Kit

For 2.5" springs, fits non-adjustable shafts.



SN2 Series.

Designed for applications requiring steel body shocks, the SN2 Series features optimized shock lengths, modular monotube design, and a lightweight aluminum cap.

Features & benefits:

- 46mm extruded modular steel body maintains tighter tolerances
- BILSTEIN's fill tool allows plug installation for sanctioning body requirements that restrict Schrader valves (fill tool sold separately: B4-BOA-0001227)
- Body design allows for standard and coilover applications (coilover kit sold separately: B4-BOA-0000117)
- 14mm hard chromed shaft reduces seal drag and breakaway stiction
- Single and double adjustable shafts available
- Linear and digressive pistons available for valving versatility¹
- Monotube design provides maximum heat dissipation
- Optional ACV base valve allows for ultra low rod pressure



XVA Series.

Large bulb aluminum shock body that maximizes stroke in a compact package through greater nitrogen capacity and more controlled fluid flow.

Features & benefits:

- Dual Zone gas bulb results in decreased gas pressure ramp up while increasing grip levels
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- Floating rod guide for decreased side load friction
- Racer rebuildable
- Threaded body design allows for standard or coilover applications (coilover kit sold separately: B4-KT1-Z245A01)
- Optional ACV base valve allows for ultra low rod pressure



Adjustment Options

Available with non, single, and double adjustable shafts.





MDS Series.

Features multiple tuning options as well as durability and consistency in various racing applications.

Features & benefits:

- 2-way independent rebound and compression adjustment system
- In-line damping adjustment requires no external reservoir
- Easy Clip System (ECS) spring retainer maintains position in zero preload spring applications and allows rapid changes
- Bump stop cap protects threaded body
- Precision machine tolerances minimize friction
- Ultra low friction rod guide with redundant seal pack provides durability in harsh environments
- Available in 36mm and 46mm variants



PROFESSIONAL OFF-ROAD RACING.



BILSTEIN B8 8125.

For the off-road enthusiast.

The ideal shock absorber for custom coilover applications that demand competition-level performance. Featuring the highest quality machined components, BILSTEIN B8 8125 shock absorbers provide durability, strength and performance in the harshest environments.

Features & benefits:

- Available in 46mm and 60mm monotubes for consistent, fade-free performance
- Threaded body with dual-rate coilover hardware
- Remote reservoir for greater resistance to heat and increased travel length
- High temperature seal extends life of shock
- 22mm case hardened piston rod provides brute tensile strength while resisting sand blasting and rock chipping
- Zinc plated for resistance to off-road elements
- High temperature, size -8 hose
- All components are billet machined; no cast parts
- Industry standard 5/8" bearing
- Owner rebuildable
- Made in the USA

Shock travel:

5-16in



BILSTEIN B8 8125 Technical Manual

Download the complete B8 8125 Technical Manual for detailed rebuild and revalve instructions, as well as a complete components list at <https://goo.gl/3PK9ES>.



BILSTEIN B8 8125 uses industry standard coilover springs

- 46mm shock uses a 2.5" ID coilover spring
- 60mm shock uses a 3.0" ID coilover spring



BILSTEIN M 9200 (Bypass).

Performance dialed in.

BILSTEIN M 9200 (Bypass) shock absorbers are position sensitive and adjustable, offering 6 zones of damping control and 4 external adjusters: 2 rebound and 2 compression. Utilizing an externally adjustable bypass shock absorber is the easiest and most effective way to tune your off-road suspension for ultimate performance.

Features & benefits:

- 60mm¹ and 70mm¹ monotube designs for consistent, fade-free performance
- 4 and 3 tube, position sensitive with adjustable rebound and compression
- Multiple stroke lengths available ranging from 8" to 18"
- 60mm¹ piggy back or remote reservoir
- Case hardened, centerless ground piston rod
- All machine billet aluminum components
- 5/8" stainless uniball mounts with 1/2" step spacers
- 3 stage high-temp seal
- Red synthetic high-temp racing oil
- Zinc plated
- Owner rebuildable
- Made in the USA

Shock travel:

8-18in



¹BILSTEIN measures shock size by piston diameter. Outer body diameter is the industry standard measurement for off-road shocks.

BILSTEIN Piston Diameter	Outer Body Diameter
60mm	2.65"
70mm	3.0"

BILSTEIN M 9200 (Coilover).

Created to compete.

Developed for professional off-road racing. The superior design of BILSTEIN M 9200 (Coilover) is comprised of aerospace-class materials and engineered to the tightest tolerances. Available in multiple lengths and valvings for a wide range of custom race applications.

Features & benefits:

- Available in 46mm¹ and 60mm¹ monotubes
- Threaded body with dual rate coilover hardware
- Multiple stroke lengths available ranging from 8" to 16"
- Case hardened, centerless ground 22mm piston rod
- Machine billet aluminum components
- 5/8" uniball mounts with 1/2" step spacers
- 60mm remote reservoir
- 3 stage high-temp seal
- Red synthetic high-temp racing oil
- Zinc plated
- Multiple valvings available
- Owner rebuildable
- Made in the USA

Shock travel:

8-16in



¹BILSTEIN measures shock size by piston diameter. Outer body diameter is the industry standard measurement for off-road shocks.

BILSTEIN Piston Diameter	Outer Body Diameter
46mm	2.0"
60mm	2.65"

BILSTEIN M 9200 (Coilover) uses industry standard coilover springs

- 46mm¹ shock uses a 2.5" ID coilover spring
- 60mm¹ shock uses a 3.0" ID coilover spring



BILSTEIN M 9300 Black Hawk®.

Technology meets power.

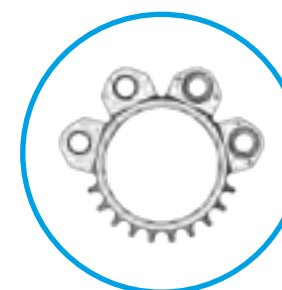
BILSTEIN M 9300 Black Hawk® shock absorbers are the ultimate in off-road race shock technology. Its Radial Bypass Damping™ (RBD) design provides a superior level of performance and tuning capability. It's big and bold with an unmistakable hard anodized finish.

Features & benefits:

- One piece 6061 extruded aluminum body with hard anodized finish
- 30% faster heat dissipation
- 10-25% lighter than similar welded bypass steel shocks
- 4.5" diameter aluminum reservoir with anti-cavitation valve (ACV)
- Bypass tubes allow for position sensitive damping adjustability
- Completely owner tunable and rebuildable
- Made in the USA

Shock travel:

12-18in



Shock Body (U.S. Patent 7191877)

- Rapid heat dissipating, one piece extruded 6061 aluminum construction featuring Radial Bypass Damping™ (RBD) technology
- Approximately 30% faster cooling efficiency than steel and up to 100° lower peak operating temperatures
- Stronger and 10%-25% lighter than similar welded steel bypass shock bodies without the distortion from welding



Parts and tools.

BILSTEIN offers a wide array of high quality parts and accessories to rebuild or repair your BILSTEIN motorsport shock absorbers.

- Pistons
 - Piston shafts
 - Rod guides
 - Shims and brakes
 - Valving kits
 - Coilover kits
 - O-Rings and seals
 - Retaining rings
 - Heim bearings
 - Jam nuts
 - Rod ends
 - Adjustable shaft assemblies
 - Replacement take-apart components
 - Tubes
 - Body caps
- Contact your BILSTEIN distributor for more information regarding the correct components for your application.**

BILSTEIN also offers a variety of tools for various shock assembly and disassembly tasks.

- Fill needles
- Disassembly collars
- Nitrogen fill tools
- Graduated oil beakers



Download the Motorsports Technical Guide and Price list.

<https://goo.gl/KGR1o3>



To see our full off-road product range, please download the BILSTEIN Off-Road and Light Truck Catalog.

<https://goo.gl/ENgQCA>

Motorsports disclaimer.

With the purchase of BILSTEIN motorsport components, you have received a product representing the best in German design and engineering. You can be sure that this product has been developed and produced with the greatest possible care, and that top quality materials have been used. Continuous manufacturing controls and inspections of supplier components are standard in our company. This is how we, as a manufacturer of suspension components, comply with ISO9001.

Motorsport products are for off-highway use only, and not subject to any corrosion or endurance testing at all. They are designed specifically for use in motorsport, and have been greatly optimized for weight.

Even on the basis of the varied use in all areas of motorsport, it is not possible to make any binding predictions or warranties on the durability of motorsport products. For this reason, EXCEPT AS OTHERWISE PROVIDED, IN SUCH WARRANTIES, ALL MOTORSPORT PRODUCTS ARE SOLD "AS IS, WITH ALL FAULTS." ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, DESCRIPTION OR QUALITY NOT EXPRESSLY SET FORTH HEREIN, ARE HEREBY EXCLUDED TO THE EXTENT PERMITTED BY LAW.



In order to prevent physical injury or material damage with serious consequences, you must observe the following:

Never under any circumstances adapt or modify motorsport products. Depending on the intended purpose or the level of stress, always test motorsport products before and after every use!!!! Springs and shock absorbers may become damaged after frequent driving over rough terrain such as curbs, rocky surfaces and especially during rallying.

After collisions or accidents, please immediately check suspension or axle components for damage. If parts are defective or can no longer be used, replace them immediately with new parts which are in perfect condition. Only in this way is it possible to ensure proper functioning of the systems. If you are not sure that proper functioning is occurring, send the affected parts for testing to BILSTEIN or to suitably equipped companies. In order to prevent contact corrosion, we advise that when cleaning suspension components the use of aggressive cleaning agents and high pressure cleaners is avoided.

Failure to comply with these instructions can result in severe material damage and/or physical injury.

BILSTEIN Motorsport parts are not TÜV approved and are designed for Off-highway use only. BILSTEIN disclaims any and all liability for unintended use of Motorsport products.

DRIVE THE LEGEND.



thyssenkrupp Bilstein of America

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