

NOTE!

Two basic types of limited slip differentials are available depending on application and purpose.

type-**RS** type-**MZ**

1. Type-RS Low initial torque type using RS springs.
2. Type-MZ Initial torque created by cone plates.

NOTE!

Type RS for low initial torque

With the Type RS, the initial torque is taken by the RS springs therefore the initial torque comes on gently compared to the Type MZ which comes on stronger as it uses cone plates and response of the LSD is better, and the friction is lower.

¥Lower initial torque ¥Lower power loss ¥Reacts well to delicate pedal work ¥Durable and develops initial torque steadily.

NOTE!

Three ways to set your CUSCO limited slip differentials: 1 way, 1.5 way and 2 way

• 1 way LSD

Specially suited for front wheel drive cars and AWD car front axles. Activates under acceleration, and acts as a true LSD when the throttle is off. This CUSCO 1 way LSD will improve lap times without a doubt.

A CUSCO original design is patented.

• 1.5 way LSD

Activates under acceleration while the under-steer under deceleration is less than on a 2 way LSD. Recommended for those who have a hard time with under-steer.

• 2 way LSD

Recommended on rear wheel drive cars and AWD car rear axles. Activates on both acceleration and deceleration. Recommended for those who prefer aggressive driving and big angle drifting.

One Limited Slip Differential, Two Ways to Enjoy!

With CUSCO's LSD, you may change the setting during your overhaul with no additional parts required.

POSSIBLE CUSCO LSD SET UP

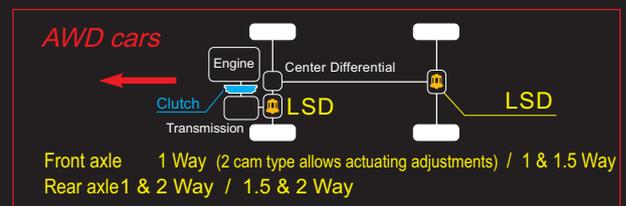
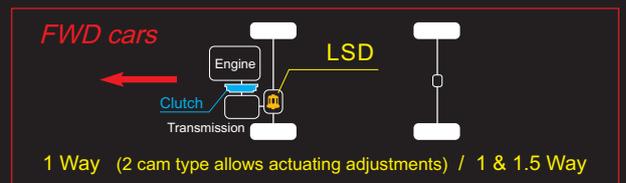
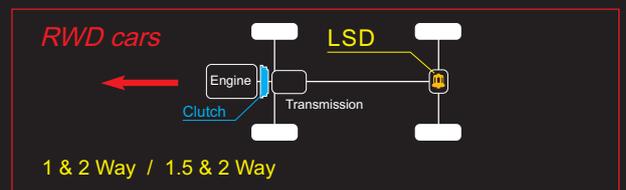
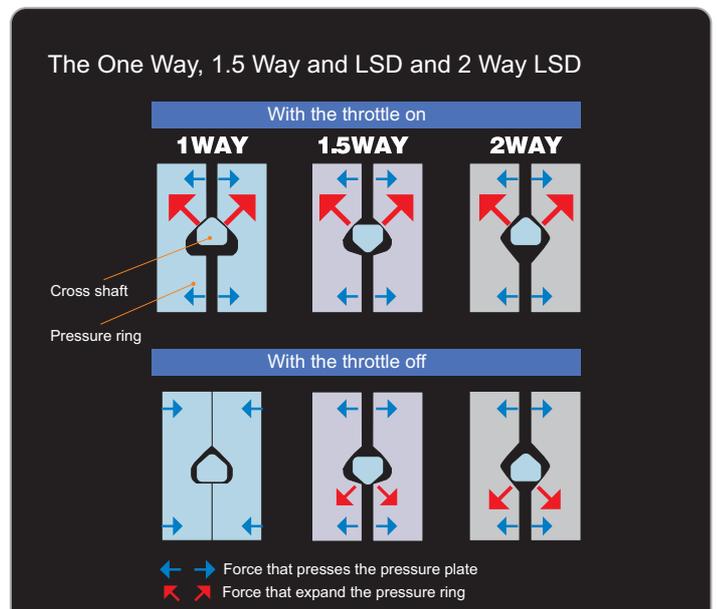
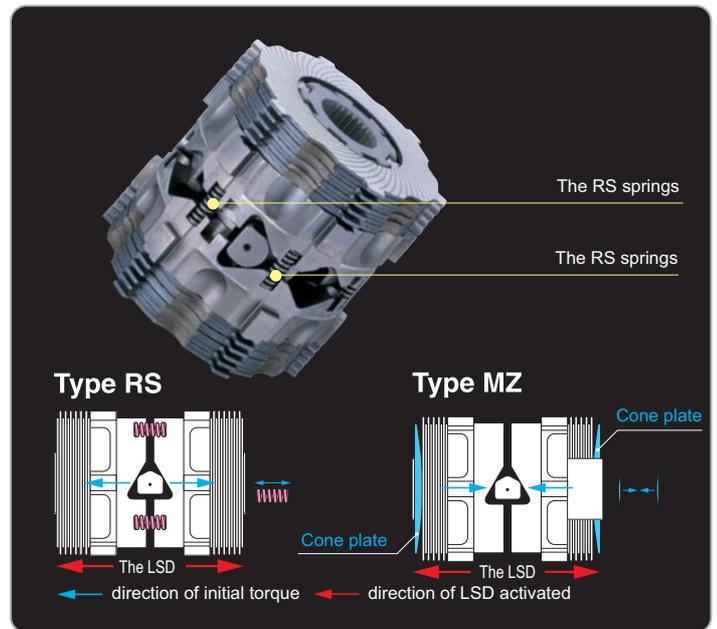
FWD cars	1 & 1.5 way
	1 Way (2 cam type allows actuating adjustments)
RWD cars	1 & 2 Way
	1.5 & 2 Way
AWD front axle	1 Way (2 cam type allows actuating adjustments)
	1 & 1.5 Way
AWD rear axle	1 & 2 Way
	1.5 & 2 Way

NOTE!

WITH CUSCO'S 1 WAY LSD, YOU CAN ADJUST THE ANGLE OF ACTIVATION

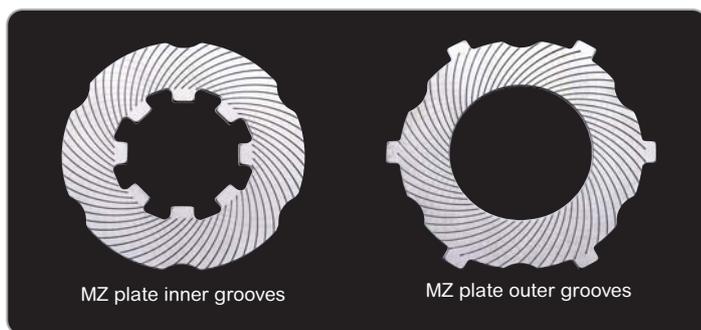
A two-cam type is available for FWD cars.

With CUSCO's 1 Way LSD for FWD cars, you can choose from two angles of activation: 35 degrees or 45 degrees. Angles may be selected on purchase or changed when the LSD is being overhauled.



NOTE!
RESPONSE AND DURABILITY GREATLY IMPROVED

CUSCO's unique and original groove technology
 CUSCO's MZ plate grooves are cut radially enabling instant oil movement, thus improving efficiency and durability. Pressure rings surface is polished for an even contact with the MZ plate, and with CUSCO's original design Oil Through System, it enhances the efficiency and performance of this LSD in comparison to other products available in the market. Thus, putting the CUSCO LSD on top of the market in quality and championship winning results in an untouchable class of its own!



NOTE!
IMPROVED STRENGTH AND RELIABILITY

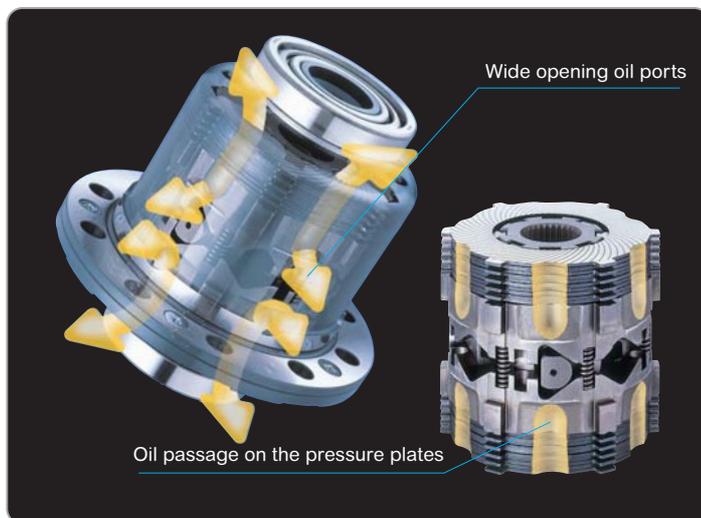
Highly resistant parts with extreme efficient manufactured
 CUSCO's Oil Through System was possible by using high quality chromoly steel. The internal side gears and pinion gears used are precise forged parts that enable compact yet durable gears that are able to cope with high horsepower applications. This in turn increases the internal oil capacity as well as the number of MZ clutch plates taking the load off each plate for further durability.



NOTE!
MAINTAINING STABILITY AND PERFORMANCE

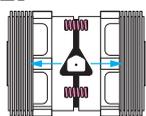
CUSCO Oil Through System enables stability in high performance LSDs.

CUSCO's unique Oil Through System enables better oil flow inside the LSD for better efficiency. The casing made from CUSCO's unique technology allows the oil to flow from the wide end to the pressure rings and the MZ clutch plate for efficient lubrication. Making the LSD more stable and durable!
 This was only possible with CUSCO's unique technology in manufacturing chromoly steel casings and gears that enabled a higher level of durability and a better flow of oil due to the large oil openings.



Whether the Type-RS or Type-MZ, both LSDs are full of CUSCO's know how.

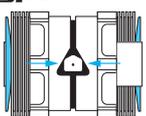
type-RS



Four types to choose from

- For RWD cars and rear axle on AWD cars
- 1 & 2 way types
- 1.5 & 2 way types

type-MZ



- For FWD cars and front axle on AWD cars
- 2 cam type 1 way type
- 1 & 1.5 way types

All four types use MZ plates



High-tension chromoly steel used in high precision forged production!



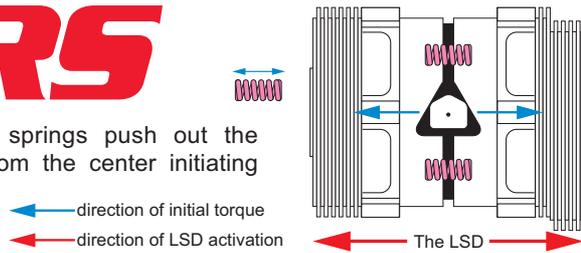
The Oil Through System



TWO TYPES OF LSD's AVAILABLE

type-**RS**

Special precision springs push out the pressure plates from the center initiating torque.



WHAT MAKES CUSCO DIFFERENT!

The low initial TYPE RS

- * Low power loss means better lap times for even the mild tuned of cars.
 - * Chattering is kept low.
 - * Improved durability as clutch plates are low pressured.
- The LSD efficiency is higher with smoother oil flow between plates.

▼ THE BENEFITS ▼

According to CUSCO's in house research, initial torque is 50 to 70% lower compared to the conventional cone plate type LSD enabling lower drive friction and better response.

WHAT MAKES CUSCO DIFFERENT!

The Type RS's durability

- * Special precision springs set in the pressure plate assure steady coil movement.
- * Clutch plates do not stick together like conventional cone plate type LSDs therefore no clutch plate wear or deterioration occurs.
- * Performance remains stable thanks to the extremely durable RS springs.

▼ THE BENEFITS ▼

The Type RS LSD had proved to be capable of competition use in the All Japan Gymkhana Championship without overhauling a single time during the season. With all drivers and teams finishing with good or championship results at the end of the season.

WHAT MAKES CUSCO DIFFERENT!

Uncompromising characteristics of the Type RS LSD:

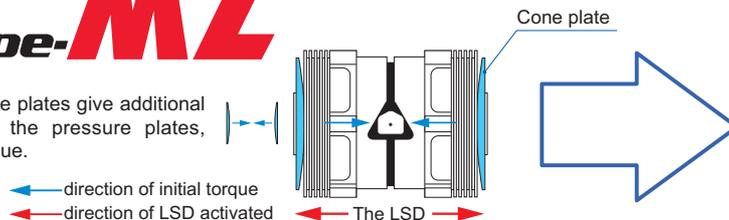
- * Reacts to throttle work directly.
 - * Transfers high power without slippage.
 - * No clutch slipping in 0-400 meter accelerations.(1/4 mile competition)
- Transfers steady power in long drifts.

▼ THE BENEFITS ▼

The Type RS limited slip differential's direction of initial torque and LSD movement are the same, thus, transferring power smoothly without fear of any power loss at any given time!

type-**MZ**

The end cone plates give additional pressure to the pressure plates, initiating torque.



The Type MZ has evolved!

The Type MZ LSD had been greatly improved using most parts that comprise the Type RS. It has evolved as well through countless R+D tries, tests and races to create the most balanced LSD for your specific use.

The Oil Through System uses the same forged parts used in the Type RS. The Type MZ differs in the way the initial torque is developed.

Increased MZ plates!

The clutch plates have been increased from eight to ten plates on each side increasing the LSD performance. It responds more to the high power with higher durability.

* Please check with your local CUSCO dealer for use on your car.

Pressure ring (level finished grinding)

Side gear (precision forged)

Pinion gear (precision forged)

Cross shaft

RS springs

Pressure ring

Two Way Cam

One Way Cam

MZ Plates

Cone Plate

Pressure ring level finished grinding

Side gear precision forged

Pinion gear precision forged

Cross shaft

Pressure ring

Two Way Cam

One Way Cam

MZ Plates