

**International Mini-Z Masters
Prague 2020**

Technical Rules

Version: 1.0 – (updated 20.01.2020)

GENERAL RULES

Body Modifications:

Bodies may be functionally modified with minimal effect external appearance. The following non-comprehensive list of body modifications are allowed with exception for **Box Stock and HM Cup class**:

- The rear of the car may be removed up to Maximum 20mm from the ground.
- Wheel wells may be cut forward or backward to accommodate different wheelbase chassis.
- Wheel wells may be cut or chamfered internally for tire clearance.
- Lower portions of the body may be cut for ground clearance in front, sides or rear.
- Body material may be shaved or thinned internally for weight reduction. Technical inspection officials reserve the right to disqualify any modified body deemed to be too fragile due to excessive material removal.
- Body panels may be reinforced or strengthened internally without affecting external appearance.
- Original windshield and windows must be installed but can be modified by cutting unexposed internal areas.
- Original headlight covers must be installed, but headlight buckets may be removed or omitted. In the event of a headlight cover is lost, the hole may be covered with a decal.
- Taillights and taillight covers may be removed or omitted.
- Small body parts such as mirrors, canards, exhausts may be omitted or removed to prevent racing damage and debris on track.
- All rear wing comes with the body may be installed according to the no height limited. Custom wings allow to use on the body, according to the height limited 45mm from the ground.

The above list is non-comprehensive. The purpose and spirit of the rules is to allow functional performance modifications to the body while preserving the scale appearance and realism. The technical inspector has final authority in the judgment of body modification legality.

If you have modified your body and have questions regarding the legality of the modifications, please submit the body in question to technical inspection PRIOR to racing qualification or main event round. This is in order to prevent any inadvertent disqualifications.

The technical inspector will judge the legality of body modifications and photograph the body in its legal state if necessary.

If the body is further modified post-inspection, the modifications may or may not be legal. For the racer's protection, please re-submit the body in question to technical inspection IMMEDIATELY if significant modifications are made.

If the body is damaged, the condition of the body may or may not be legal. For the racer's protection, please submit the body in question to technical inspection IMMEDIATELY if significant damage occurs. If the damaged body is judged illegal, it must be repaired or replaced for the next qualification or main event round. Qualification or main event results during which racing damage occurs on track will be allowed, as long as the body is not judged to be intentionally designed to break away to benefit performance.

Tires:

No tire insert use. No traction compounds allowed on tire or on race surface. Tire warmers are allowed. Tires may be cleaned with a 70% alcohol solution. If a driver uses tire cleaner that has been deemed illegal, the driver will be subject to any penalties that apply.

Mini-Z Box Stock

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|-----------------------|--|
| Chassis | Kyosho MR-01, MR-015, MR-02, MR-03 (Sport, RWD, EVO) |
| Electronic | Only original Kyosho/Kopro PCB! Changes to the MOSFET, other modifications and soldering of any connections that are not originally soldered is not allowed. |
| Motor and Gear Ratio | Kyosho MZ9P and MZ9E. Opening motor and changes to the motor will result in disqualification. Only Kyosho Gear differential is allowed Gear ratio - Max. pinion 9t spur gear 44t by 48DP (4,888) |
| Rims and Tires | Front max. width 8.5mm and diameter maximum 20mm Rear maximum width 11mm and diameter maximum 20mm All wheel rims must be original design made for Mini-Z RACER, any modification is not allowed, any slot-car design wheel and 3D print wheel not allowed. Wheels must fit inside the body and must not exceed body outline. Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, etc.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed. |
| Body | Kyosho Autoscale, TRP, Route246 only. LM bodies not allowed Lexan bodies and 3D printed Bodies are not allowed. Lexan windows, lexan wings or 3D printed wings are not allowed. |
| Weight and Dimensions | Maximum Width – 80mm Maximum Length – 180mm Wheelbase – 86,90,94,98mm Minimum weight with batteries – 170g |
| Optional Parts | T-Plate, ball bearings, wheel nuts, aluminium front knuckles 0°, aluminium steering rod 0°, front suspension springs. |
| Batteries | AAA NiMH 4pcs |

2WD Stock

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| Chassis | Any commercially available |
| Electronic | Any commercially available |
| Motor and Gear Ratio | <p>PN 70T, Kyosho MZ9P and MZ9E Brushless motor max. 3500kv or Kyosho MZW501. All PN Racing optional brushless rotors are allowed Sensor motors are not allowed.</p> <p>70t motor can be cleaned and break in, any other modifications or opening the motor will result in disqualification.</p> <p>Gear ratio – Open</p> |
| Rims and Tires | <p>Front rim maximum width 8.5mm and diameter maximum 20mm Rear rim maximum width 11mm and diameter maximum 20mm</p> <p>Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, etc.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed.</p> |
| Body | <p>Kyosho Autoscale, TRP, Route246 only. LM bodies not allowed Lexan bodies and 3D printed Bodies are not allowed. Lexan window and lexan wing are allowed. 3D printed wing, body holders and side clips and body reinforcement is allowed.</p> |
| Weight and Dimensions | <p>Maximum Width – 80mm Maximum Length – 180mm Maximum Rear Wing Height – 45mm Maximum Wheelbase – 98mm Minimum weight with batteries – 170g</p> |
| Optional Parts | Any commercially available |
| Batteries | AAA NiMH 4pcs |

2WD Le Mans

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|-----------------------|--|
| Chassis | Any commercially available |
| Electronic | Any commercially available |
| Motor and Gear Ratio | <p>PN 50T, Kyosho X-Speed Brushless motor max. 5500kv or Kyosho MZW504. All PN Racing optional brushless rotors are allowed Sensor motors are not allowed. Brushes can be changed to original part 10CR50. Neodymium magnets 10NM13 and 10NM14 are not allowed</p> <p>Gear ratio 64p maximum Gear 53t spur gear and 10t pinion (recommended PN parts MR2953WC and 416410WC) Kyosho and other gear must match ratio as close as possible to ratio 53/10 (Kyosho 44t spur gear/8t pinion etc.)</p> |
| Rims and Tires | <p>Front maximum width 8.5mm and diameter maximum 20mm Rear maximum width 11mm and diameter maximum 20mm</p> <p>Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, etc.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed.</p> |
| Body | <p>Kyosho Autoscale, TRP, Route246 LM type bodies only. Lexan bodies and 3D printed Bodies are not allowed. Lexan window and lexan wing is allowed. 3D printed wing, body holders and side clips and body reinforcement is allowed.</p> |
| Weight and Dimensions | <p>Maximum Width – 80mm Maximum Length – 180mm Maximum Rear Wing Height – 45mm Wheelbase – 102mm Minimum weight with batteries – 160g</p> |
| Optional Parts | Any commercially available |
| Batteries | <p>AAA NiMH 4pcs For motors: PN 50T, Kyosho X-Speed, Brushless max. 5500kv or Kyosho MZW504</p> <p>LiPo batteries - 2s LiPo (max. 8.4V) For motors: Brushless max. 3500kv</p> |

Formula 1

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| Chassis | Kyosho MF-xxx. Chassis with similar geometry are welcome, but must follow MF-xxx or GLF outline geometry and body must be similar size to Kyosho F1 or GLF. GL-Racing GLF. |
| Electronic | Any commercially available |
| Motor and Gear Ratio | PN Racing 50T, Kyosho X-Speed Brushless motor max. 5500kv or Kyosho MZW504. All PN Racing optional brushless rotors are allowed Sensor motors are not allowed. Brushes can be changed to original part 10CR50. Neodymium magnets 10NM13 and 10NM14 are not allowed Gear ratio 64p maximum Gear 53t spur gear and 10t pinion (recommended PN parts MR2953WC and 416410WC) Kyosho and other gear must match ratio as close as possible to ratio 53/10 (Kyosho 44 spur gear/ 8pinion etc.) |
| Rims and Tires | Kyosho F1 rims or GL-Racing GLF rims or similar design, size and diameter Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, etc.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed. |
| Body | Kyosho F1 bodies, GLF Lexan Body Other custom bodies or Lexan bodies that match size and follow F1 design. Body must not cover wheels. 3D printed wing, body holders and side clips and body reinforcement is allowed. Ball bearings or similar design on the front wing that allow for sliding on track rails is not allowed. |
| Weight and Dimensions | Maximum Width – 85mm Maximum Length – 205mm Maximum Rear Spoiler Height – 50mm Maximum Wheelbase – 132mm Minimum weight with batteries – no limit |
| Optional Parts | Any commercially available |
| Batteries | AAA NiMH 4pcs For motors: PN 50T, Kyosho X-Speed, Brushless max. 5500kv or Kyosho MZW504 LiPo batteries - 2s LiPo (max. 8.4V) For motors: Brushless max. 3500kv |

2WD / 4WD Open

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|-----------------------|--|
| Chassis | Any commercially available |
| Electronic | Any commercially available |
| Motor and Gear Ratio | Any commercially available Gear ratio – Open |
| Rims and Tires | Front rim maximum width 8.5mm and diameter maximum 21mm Rear rim maximum width 11mm and diameter maximum 21mm Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, etc.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed. |
| Body | Kyosho Autoscale, TRP, Route246 only. LM bodies not allowed Lexan bodies and 3D printed bodies are allowed. Lexan window and lexan wing is allowed. 3D printed wing, body holders and side clips and body reinforcement is allowed. |
| Weight and Dimensions | Maximum Width – 85mm Maximum Length – 180mm Maximum Rear Spoiler Height – no limit Maximum Wheelbase – 106mm Minimum weight with batteries – no limit |
| Optional Parts | Any commercially available |
| Batteries | Any battery to maximum 8.4V Additional battery for transponder allowed |

2WD HM

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|-----------------------|--|
| Chassis | Kyosho MR-01, MR-015, MR-02, MR-03 (Sport, RWD, EVO) |
| Electronic | Only original Kyosho/Kopro PCB! Changes to the MOSFET, other modifications and soldering of any connections that are not originally soldered is not allowed. |
| Motor and Gear Ratio | Kyosho MZ9P and MZ9E. Opening motor and changes to the motor will result in disqualification. Only Kyosho Gear differential is allowed Gear ratio - Max. pinion 7T spur gear 44t (6.285) |
| Rims and Tires | Front rim maximum width 8.5mm and diameter maximum 20mm Rear rim maximum width 8.5mm and diameter maximum 20mm All wheel rims must be original design made for Mini-Z RACER, any modification is not allowed, any slot-car design wheel and 3D print wheel not allowed. Wheels must fit inside the body and must not exceed body outline. Any Brand of Rubber Mini-Z production tire ONLY. (PN, MARKA, KYOSHO, atd.) Homemade tires, Foam tires, Silicon tires, Urethane tires, Ethyl Carbamate tires NOT allowed. |
| Body | Only commercially available HM variants or some AWD: New Beatle, Mini Cooper, Toyota Yaris, Honda Fit, Lancia Delta, Fiat Abarth, Citroen DS3, VW Golf, etc. Lexan bodies and 3D printed Bodies are not allowed. Lexan windows, lexan wings or 3D printed wings are not allowed. |
| Weight and Dimensions | Maximum Width – limited to allowed bodies Maximum Length – limited to allowed bodies Wheelbase – 86,90,94mm Minimum weight with batteries – no limit |
| Optional Parts | Any commercially available |
| Batteries | AAA NiMH 4pcs |
| Additional Info | Motor holder only Kyosho MZ-154 Front axle – no shims under the knuckle to lower the ride height. Front axle must be shimmed to 0 droop. Rear axle – no shims under the rear motor pod to lower ride height. No weights on the chassis or body. No modification to the body to reduce weight, no cutting windows. No modification to body clips and their placement to reduce body height on chassis. |