

Classic Slot Car Racing Association

1/32 Scale Car Standards

For Hard Bodied Cars

GRAND PRIX AND INDY CARS

Definitions

Grand Prix Car;

Any car which competed in an International Grand Prix or Formula 1 race. Prior to WWII all major international races in Europe, especially those counting towards the 'European Drivers Championship which was the forerunner to the current 'Drivers World Championship', carried the title of Grand Prix. This has continued into the modern era.

Formula 1 Car;

Introduced in 1948 and originally based upon the pre WWII Voiturette class. Formula 1 has since gone through many changes but has, since it's introduction in 1950, always been the class used for the 'Drivers World Championship'. The only exception being 1952/3 when the championship was run for Formula 2 cars due to lack of Formula 1 entries.

Indy Car;

Any car which raced in the Indianapolis 500 or competed in the Indy Car or Champ Car series. Indianapolis is the home of American open wheel car racing and the Indy 500 is probably the biggest single motor sporting event in the world, even today. The Indy 500 has, from time to time, been included in the 'Drivers World Championship'.

Voiturette;

A common pre WWII class of open wheeled racing car. Generally smaller than a GP car and usually powered by a 1.5 litre supercharged engine. This class was adopted as the basis for the first **Formula 1** class in 1948.

Other Classes;

There have been many other, lesser, classes of open wheeled racing cars such as Formula 2, Formula 3, Formula 5000, Formula A and Formula 3000 and event organizers may choose to allow any such cars to race if they wish. Event organizers may also choose to allow cars built for any of the above events or classes, but which never actually raced, to enter, the 1942 Alfa 512 for example.

CAR STANDARDS

1. SCALE & DIMENSIONS

All cars to be accurate 1/32 scale representations of a full size car.

As most racers are very much reliant on manufactured bodies, which are not always perfect, there is no specific requirement for exact scale length and width for body shells. They are, however, expected to be reasonably to scale. If you push the boundaries too far you may be asked to run something else.

Wheelbase and **Track** measurements **must** be 1/32 scale within + or - 2mm.

“Wheelbase” is the distance between the centre lines of the front and rear wheels.

“Track” is the distance between the centre lines of the left and right hand wheels at the front and at the rear of the car.

No car should exceed the maximum width permitted for each class.
Cars will be measured over the outside width of the tyres.

When the car, in race ready condition, is placed on a flat and level section of track to be used for the event all tyres must touch the track surface and roll when the car is pushed forwards.

It is the entrant's responsibility to prove the accuracy of any car.
If there is any doubt the scrutineer may ask you to run something else.
The scrutineer's decision is final.

2. BODIES

All body shells must be of hard plastic, glass fibre, resin, wood, metal or similar material.
Vacuum formed bodies are not permitted.

All cars must be finished in a style sympathetic to the period being represented and carry at least two racing numbers.

All cars must have clear windscreens etc fitted where they appear on the prototype.
Vacuum formed windscreens etc are permitted.

All cars must have a suitably decorated and period correct, 3 dimensional, representation of a driver consisting of at least a head, shoulders, arms, hands and the upper part of a steering wheel.

Vacuum formed interiors and drivers are permitted but must be realistic.

The chassis, motor and all running gear must not be visible from above or through the cockpit opening and engine bay unless that which can be seen represents parts of the real car.
Suspension components and exhaust systems for example and, on the later period cars, the rear floor and diffuser.

The slot guide must not protrude beyond the front-most point of the car when in the straight ahead position.

3. WHEELS & TYRES

Tyre width limits in all classes are overall.

All wheels must be representative of real wheels or have suitable inserts fitted.

Silicone tyres and sponge/foam rubber tyres are not permitted.

All tyres must be dry and free from additives whenever the car is placed on the track.

4. MOTORS & CHASSIS

Motor choice is free.

Chassis design and construction is free but must comply with sections 1 to 4 and any individual class restrictions.

Any chassis design which allows the wheelbase or effective track dimension to vary will be measured at both extremes of movement and must remain within the + or - 2mm scale tolerance and not exceed the maximum width restriction for the class.

On cars fitted with steering the wheelbase, track and overall width will be measured with the steering in the straight ahead position.

Minimum ground clearance will apply under the motor and the entire length of the chassis and body, unless stated otherwise. This will be measured with the car sitting on its tyres on a flat and level section of the track to be used for the event or on a flat test block which matches that track. Drive gears, and side skirts on ground effect cars, may be below the minimum ground clearance but must remain clear of the track surface at all times.

One slot guide only is permitted.

Blade designs must be no more than 25mm long and pin designs with more than one pin must have the pins within an overall length of 25mm.

Traction magnets are not permitted.

5. READY-TO-RUN (RTR) CARS

Any Ready-to-Run car which fully complies with the above car standards will be eligible to race unless stated otherwise by an event organizer.

Event organizers may also choose to allow Ready-to-Run cars which do not comply with the above standards to enter, and may even have separate classes or finals for these cars, but must clearly define the rules they will be applying to such cars well in advance of the event.

The final decision on eligibility will rest with the individual event organizer.

GRAND PRIX AND INDY CAR CLASSES

Event organizers should feel free to select specific year ranges or types of car from within each class or to combine periods and classes as they see fit.

NOTES:

1. In all classes except GP1 tyres must be visible from above the car unless the event organizer specifies that 'streamliners' are eligible.
2. In classes GP1 to GP5 any car which has side tanks/fairings between the wheels must have these mounted as part of the body and must not have any part of the chassis, or any ballast, under or in these tanks/fairings.

GP1a - Pre-1934 Over 2 litre Open Top Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 24mm, minimum width 4mm
- Rear wheels and tyres: Minimum diameter 25mm, maximum width 6mm
- Minimum ground clearance: 3mm
- Maximum overall width must not exceed Scale track dimension +6mm.

GP1b - Pre-1934 Under 2 litre Open Top Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 22mm, minimum width 4mm
- Rear wheels and tyres: Minimum diameter 23mm, maximum width 6mm
- Minimum ground clearance: 3mm
- Maximum overall width must not exceed Scale track dimension +6mm.

GP2a - 1934-1951 Grand Prix and Indy Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 21.5mm, minimum width 5mm
- Rear wheels and tyres: Minimum diameter 24mm, maximum width 7mm
- Minimum ground clearance: 2mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 53mm

GP2b - 1934-1951 Voiturettes

(1.5 litre supercharged and 4.5 litre normally aspirated cars)

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 19mm, minimum width 5mm
- Rear wheels and tyres: Minimum diameter 21.5mm, maximum width 7mm
- Minimum ground clearance: 2mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 50mm

GP3 - 1952-1960 Grand Prix and (1952-1963) Indy Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 19mm, minimum width 5mm
- Rear wheels and tyres: Minimum diameter 21.5mm, maximum width 7.5mm
- Minimum ground clearance: 2mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 50mm

GP4 - 1961-1965 Formula 1 Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 19mm, minimum width 5mm
- Rear wheels and tyres: Minimum diameter 20mm, maximum width 9mm
- Minimum ground clearance: 2mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 54mm

Note: Indy cars of this period should be grouped with either Class 3 (up to Dec 1963) or Class 5 (from 1964 on) as they were significantly bigger than Formula 1 cars.

GP5 - 1966-1970 Formula 1 and (1964-1970) Indy Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 17mm, minimum width 6mm
- Rear wheels and tyres: Minimum diameter 19mm, maximum width 12mm
- Minimum ground clearance: 1.5mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 60mm

GP6 - 1971-1977 Formula 1 and Indy Cars

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 16mm, minimum width 6mm
(Tyrrell P34 6 wheeler: Minimum diameter 13mm)
- Rear wheels and tyres: Minimum diameter 19mm, maximum width 14mm
- Minimum ground clearance: 1.5mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 68mm

GP7 - 1978-1982 Formula 1 and Indy Cars - 'Ground Effect' cars.

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 17mm, minimum width 8mm
- Rear wheels and tyres: Minimum diameter 19mm, maximum width 14mm
- Minimum ground clearance: 1.5mm under the chassis and motor. The outer edges of the body sides, (i.e. the side skirts between the front and rear wheels), may be below this but must not touch the track during normal running.
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 68mm

GP8 - 1983-1988 Formula 1 and Indy Cars - 'Turbo' F1 cars.

- Motor orientation: Inline only
- Front wheels and tyres: Minimum diameter 17mm, minimum width 8mm
- Rear wheels and tyres: Minimum diameter 19mm, maximum width 14mm
- Minimum ground clearance: 1.5mm
- Track dimensions must be 1/32 scale within + or - 2mm but must not exceed a maximum overall width of 68mm