RR 06T FIM EUROPE MINI ROAD RACING EUROPEAN CHAMPIONSHIP 2024

Everything printed in **BOLD or RED** is new or changed for **2024.**
Where is written “he” or “his”, it means also “she” or “her”.

RR06.2 TECHNICAL RULES MINI MOTO

RR06.2.1 SPECIFICATIONS
MINI MOTO is special racing motorcycles equipped with combustion engines.
Motorcycles may not contain titanium, beryllium and carbon parts, if not stated otherwise.

RR06.2.2 DIMENSIONS JUNIOR A, B, C and OPEN 50.
Wheelbase: max 730 mm
Length: ** max 1060 mm
Seat height: max 460 mm
Max height: max 620 mm
All dimensions in art. 06.2.2 are subject to 5% tolerance.
** Exception for the exhaust muffler, this may overlap the rear line for max. 50 mm.

RR06.2.3 ENGINE
−Single cylinder engine with maximum displacement 40 cc (2 stroke) or 90 cc (4 stroke) in Junior A, B and C. In OPEN 50cc (2 stroke) or 110 cc (4 stroke).

- Equipped by centrifugal clutch, only single gear.
- 4-Stroke may have only a 2 valve cylinder head.
- The cylinder capacity can have a tolerance of 0,60cc.

RR06.2.3.1 Engine for Junior A 2-stroke and Junior A 4-stroke
Engine as in RR06.2.4 with power restriction:
−Restriction for 2-stroke: of minimum 3 mm thick and a maximum cylindrical hole with a diameter of 12 mm in the exhaust port and before the exhaust header pipe.
−Restriction for 4-stroke: of minimum 5 mm thick and a maximum cylindrical hole with a diameter of 12 mm in the inlet port but after the mixing area of the carburettor.
−Note: As general for restrictions: All gas must flow through the restrictor(s). A gradually guidance bush or ring before the restrictor is allowed. For all sizes concerning thickness, a tolerance of +/- 0.3 mm and for hole diameters, a tolerance of + 0.03 mm is allowed. The holes will be measured by cross measurement, i.e., left-right and up-down.
−No water-cooled engine for 2-stroke.
−No oil cooler for 4-stroke.

RR06.2.3.2 Engine for Junior B 2-stroke and Junior B 4-stroke
Engine as in RR06.2.4 with power restriction:
−Restriction for 2-stroke: of minimum 3 mm thick and a maximum cylindrical hole with a diameter of 15 mm in the exhaust port and before the exhaust header pipe.
−Restriction for 4-stroke: of minimum 5 mm thick and a maximum cylindrical hole with a diameter of 15 mm in the inlet port but after the mixing area of the carburettor.
−Note: As general for restrictions: All gas must flow through the restrictor(s). A gradually guidance bush or ring before the restrictor is allowed. For all sizes concerning thickness, a tolerance of +/- 0.3 mm and for hole diameters a tolerance of + 0.03 mm is allowed. The holes will be measured by cross measurement, i.e. left-right and up-down.
−No water-cooled engine for 2-stroke.
−No oil cooler for 4-stroke.

RR06.2.3.3 Engine for Junior C 2-stroke and Junior B 4-stroke
Engine as in RR06.2.4 with no power restriction:
−No water-cooled engine for 2-stroke.
−No oil cooler for 4-stroke.

RR06.2.3.4 Engine for Open 50.
Engine as in article RR06.2.3. Air, oil or water cooled is allowed.

RR06.2.4 CARBURETTOR
Any carburettor with max diameter of diffuser:
−15 mm (cylindrical) for Junior A, Junior B and Junior C 2-stroke
−15 mm (cylindrical) for Junior A 4-stroke
−18 mm (cylindrical) for Junior B and C 4-stroke
−free for OPEN 50
The diffuser may be oval, but the area shall not exceed the maximum cylindrical size as prescribed above. Fuel injection is strictly forbidden.

RR06.2.5 MUFFLER
The exhaust system can be of any design. The rear of the silencer may not have sharp edges. A heat-shield must be used to prevent burning.
Strictly forbidden to have valves or other devices in the exhaust system to make the exhaust adjustable during operation of the bike.

RR06.2.6 NOISE LIMITS AND NOISE TESTS
The maximum noise limit is: 98 dB/A at 6.000-7.000 RPM (4 stroke at 4.000 – 5.000 RPM) for a period of minimum 2 seconds with free running of the rear wheel and with the driving chain mounted.

RR06.2.6.1 Noise test
Noise tests must be conducted in an open area with a space of at least 10 meters between the motorcycle being tested and walls or other obstacles. There should be a minimum amount of ambient noise in the area.

RR06.2.6.2 Test equipment
The measuring equipment must be calibrated prior to the test and recalibrated at regular intervals.

RR06.2.6.3 Measurements
With the microphone placed at 50 cm from the exhaust pipe at an angle of 45° measured from the centre-line of the exhaust end and at the height of exhaust pipe, but at least 20 cm above the ground. If this is not possible, the measurement can be taken at 45° upwards.
See FIM Technical Rules Road Racing Art.2.14.

RR06.2.7 WHEELS AND TYRES
Rims must be from serial production of motorcycle producer. Tyres can be with or without profile.
Dimension of wheel with tyre: Min. Diameter: 240 mm
Max. Diameter: 280 mm
Max. Wirth: 110 mm
Only the tyres supplied on track by the official tyre service are permitted. No external tyres, are allowed without the permission of the official tyre service.
Only ~~two (2)~~ three (3) sets of slick tyres ~~of any brand or type~~ may be used during the whole event ~~and must be marked by the Chief Technical Steward~~. The number of rain tyres is free.
Each time there is no mark on one or more tyres during the practice or race, **the rider ~~he~~** will lose the results of his last practice or race.
In case of doubts, the Chief Technical Steward in cooperation with the Jury, will take a decision. Use of tyres warmers **on the grid** is not allowed.
It is specified that when mounting the tyre on the wheel rim it is mandatory to respect the direction of travel indicated by the manufacturer.

RR06.2.8 FUEL AND COOLANT LIQUID
As fuel, only Lead-free gasoline may be used. See ~~art. 2.10 of FIM Technical Rules~~ **RR06.5.21.2.**
For fuel sampling and testing see RR06.5.23.1.1. and RR06.5.23.2.
Liquid for the cooling circuit may only be clear water with no additives.

RR06.2.9 STOP (KILL) SWITCH
For all classes, a red coloured kill switch must be placed on the left side of the steering bar, easily reachable by Rider's hand and clearly visible from the marshal in case of accident and must securely stop the running engine.

RR06.2.10 IGNITION
Ignition must be fixed. Variable ignition is strictly forbidden.

RR06.2.11 CONTROL LEVERS / HANDLEBARS
Max length of levers / handles is 120 mm. Each lever / handle must have a ball-form ending. These endings must be an integral part of lever / handle. Each lever / handle must be mounted on a separate pivot.
The maximum width of the handlebars (total steer from left to right) is 550 mm.
Handlebars must have at least 20 mm of free space between any part of the bike when in maximum positions.

RR06.2.12 FOOTRESTS
Minimum length of the footrests, from top view is 29 mm. Footrests can be of a **tip-up** type, but these must be equipped with a device, which will return them automatically to normal riding position. Each footrest must have an integral ball ending cover. If footrests are not of tip-up type, they must be equipped with a rubber or Teflon cover.

RR06.2.13 BRAKES
Motorcycle must be equipped by two independent operating brakes. One brake is for the front wheel and another brake is for the rear wheel. The mounting bolts of the discs must be minimum 5 mm Ø.
The front wheel brake disc must be covered to prevent physical contact with this brake disc.

RR06.2.14 TRANSMISSION
Transmission rates are not limited. The chain must be covered in a responsible way from the footrest.
A chain guard must be fitted in such a way as to prevent any direct physical contact possible between the chain-run and the sprockets.

RR06.2.15 LINING AND FAIRING
Sharp edges must be rounded by 10 mm radius.

RR06.2.16 NUMBER PLATES
The colour of the numbers and the background of the number must respect the following colours:
- Junior A. background blue with white number
- Junior B, background red with white number
- Junior C, background yellow with red number
- Open 50, background brown with white number

Each motorcycle must have one number plate on the front windshield-fairing. A minimum of 10 mm of width, free space must be around the numbers. Shape of the numbers must meet FIM standards.
Number sizes: height 100 mm width 45 mm thickness of line 15 mm

RR06.2.17 MOTORCYCLE VERIFICATION

Each rider is responsible for presenting his motorcycle(s) to the Technical Inspection for verification before the first official practice. It must be in a good state and clean. The compliance of the motorcycle, even if already verified and marked, is under the responsibility of the rider, which will justify differences and modifications identified during post-race verifications.

~~**RR06.4 TECHNICAL RULES NSF100**~~

OHVALE EUROPEAN CHAMPIONSHIP TECHNICAL REGULATIONS

RR06.5. TECHNICAL REGULATIONS

EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN

RR06.5.1. INTRODUCTION

Motorcycles participating in the Ohvale European Championship must comply with the provisions of this regulation. As set out in the Sporting Regulation, this Championship is open to motorcycles produced by the Official Supplier of the Ohvale European Championship (Ohvale S.r.l), with the following categories:

- GP-0 110 4Speed
- GP-0 160 4Speed
- GP-2 190 Daytona

Ohvale GP-2 Daytona Category is divided into the following categories:

- GP-2 190 Daytona
- GP-2 190 European Cup

The Ohvale European Championship is open to Ohvale GP-0 110 4Speed, Ohvale GP-0 160 4Speed motorcycles and GP-2 190 DAYTONA motorcycles manufactured by Ohvale S.r.l. and supplied for the Championship by the Official Supplier.

Motorcycles and engines allowed to participate in this class must comply with these regulations.

If requested, the manufacturer (or distributor for him) is required to deliver to FIM Europe or FMN the material and / or documentation relating to approved motorcycles. All the documentation will be treated confidentially by FIM Europe or FMN.

It is allowed to use some parts of the specific kit for the model of motorcycle in use and / or make changes as indicated in the homologation forms deposited by the manufacturer.

Except as explicitly authorized by this regulation and in the homologation forms, all components of the motorcycle must be kept original, therefore as originally produced by the manufacturer.

If not specified, the front, side and rear views of the motorcycles will conform to the appearance of the model as originally produced by the manufacturer. The physical appearance of exhaust system is excluded from this standard.

During scrutineering, the FIM Technical Director/Chief Technical Steward can avail themselves of the support of the Technical Service of the Official Supplier of the Ohvale European Championship. The Organizer can avail itself of the Technical Service of the Official Supplier also for scrutineering involving the withdrawal of the engine or one of its components.

RR06.5.2. MOTORCYCLE TECHNICAL SPECIFICATIONS

RR06.5.2.1. Homologated motorcycles

The motorcycles homologated for the **2024** Ohvale European Championship are:

- Category GP-0 110 4Speed:
  - o OHVALE GP-0 110 4Speed (from 2016 on)
  - o OHVALE GP-0 110 EVO 4Speed (from 2022 on)
- Category GP-0 160 4Speed:
  - o OHVALE GP-0 160 4Speed (from 2016 on)
  - o OHVALE GP-0 160 EVO 4Speed (from 2022 on)
- Category GP-2 190 DAYTONA:
  - o OHVALE GP-2 190 DAYTONA (from 2021 on)

RR06.5.2.2. Sealing engines quota

At any time during the event, each rider may have only one motorcycle (frame) verified and punched in his/her name. Punching consists of applying a sticker, or indelible paint to the motorcycle frame, generally near the steering head on the right side of the motorcycle at the discretion of the Scrutineers. The sticker will be applied at the conclusion of the Motorcycle Verification and indicates that the motorcycle has passed technical inspection and is deemed legal for use by the rider for that race.

Punching of a second motorcycle is granted in case of proven technical reasons (e.g., accident, frame breakage, etc.) and must be agreed with the FIM Technical Director/Chief Technical Steward.

During the whole season each regular rider is entitled to use, then have sealed, a maximum of 3 engines. ~~**Wild card riders are allowed to have a maximum of 2 engines sealed per event and no more than 3 during the season**~~. An engine is considered used at the moment the motorcycle with that engine crosses the transponder signal reception point at the pit lane exit.

Where required by FIM **Europe**, the engines must be presented for sealing already provided with the identification seal affixed by the Ohvale Technical Service.

Where requested by FIM, engines submitted for sealing in the Ohvale European Championship must have the screws already drilled to be tied as follows.

The Official Supplier's Technical Service seal and, where required, the FIM Europe seal, shall be applied:

- **OHVALE GP-0 110 4 Speed: to the fixing screws of the timing cover.**
- OHVALE GP-0 160 4 Speed: to the fixing screws of the timing cover.
- OHVALE GP-2 190 DAYTONA: on the left side connecting the cylinder head to a screw to the crankcase

Where required by FIM Europe, engines must be sealed by the FIM Technical Director/Chief Technical Steward or their Staff, as indicated in the following articles.

Each rider has the obligation to seal at least one engine during the technical inspections of the first event to which it participates. Use on the track of an engine without seals or with damaged seals involves the immediate affixing of new seals and is equated with technical irregularity.

Sealing of additional engines can occur during, at the end of the current event or in subsequent events, according to the rider's needs, subject to agreement with the FIM Technical Director/Chief Technical Steward and the Official Supplier's Technical Service.

The engines are sealed in the rider's name, so the exchange of already sealed engines among riders is also prohibited within the same team.

Applying new seals to an engine with missing, removed or damaged seals is likened to sealing of a new engine. Except for the replacement of seals removed during the Technical Inspections, provided the engine to be submitted for substitution seals within the Technical Inspections of the events following the verification.

The use of each engine, therefore of the sealing, beyond the permissible amount is penalized with departure from last position in the grid, in the first race following the sealing request. In case more than one rider show up for sealing of an engine above the maximum allowed number, the starting order is the one with which the riders are showed up for the engine sealing (the last showing up will be in the last position, the last but one showing up before the last one, and so on).

RR06.5.3. Chassis / Frame

RR06.5.3.1. Frame

The frame must be kept original.

Frames from low-capacity versions (GP-0 110 and GP-2 160) are allowed to be updated to the permitted version (See RR06.5.2.1.).

- **GP-0 110 updated to GP-0 160, only**
- **GP-2 160 updated to GP-2 190, only**

On OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed is only permitted to fit the chassis anti-vibration plate produced in kit by the manufacturer for the model of motorcycle in use. The painting of the frame is free, but its polishing is forbidden. The use of shells to protect the swing arm or frame is forbidden.

RR06.5.3.2. Seat post frame

The seat post frame must be kept original. The painting of the seat post frame is free, but its polishing is forbidden.

RR06.5.3.3. Front fairing frame

The front fairing frame must be kept original. Painting of front fairing frame is free, but polishing is forbidden.

RR06.5.3.4. Swing arm

Except as authorized in the following articles, the swing arm, swing arm pivot and chain tensioner must be kept original.

On OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed it is allowed replace the original chain tensioner adjusters with the racing ones produced by the manufacturer for the model of motorcycle in use.

All motorcycle must be equipped with a solid protective chain guard (shark fin) fixed to the swing arm produced by the manufacturer of motorcycle.

RR06.5.3.5. Steering plates

The upper and lower fork bridges and the steering axle must remain as originally produced by the manufacturer on the homologated motorcycle, as well as the steering lock stops device.

The steering stem must remain in its original position.

It is allowed to fix a protector on the upper fork bridge, for the sole purpose of protecting the upper front forks. The design is free, but the final decision of the safety came from the FIM Technical Director / Chief Technical Steward.

RR06.5.3.6. Handlebars and controls

Except as authorized in the following articles, the handlebars, the handlebar clamps, the manual controls (throttle control, grips, brake and clutch levers and electric controls), and the handlebar terminal must be kept original.

Handlebars and manual controls (clutch and brake levers) must stay original. It is allowed to replace the original clutch lever with the optional part produced by the manufacturer for the model of motorcycle in use. They can be repositioned, but a minimum clearance of 30 mm must be maintained between the tank and the handlebars, including any accessories attached to it.

Is forbidden to use handlebars without mounted terminals.

It is forbidden to repair the handlebars by welding.

The control levers on the handlebars (brake and clutch) must always have rounded edges and must have a ball-form ending.

In any position of the steering and the front suspension, the control levers on the handlebars must not touch any component of the motorcycle.

Throttle controls must be self-closing when not held by hand.

It is mandatory to use the brake lever guard device supplied in the specific kit for the model of motorcycle in use, which protects the front brake lever from any involuntary actuations resulting from the contact between two motorcycles.

RR06.5.3.7. Footrest and Controls

Except as authorized in the following articles, the footrests, and foot control must be kept original.

Footrests and foot controls can be re-positioned only using the setting originally provided by the manufacturer.

Gear shift pedal and his leverage can be replaced to use one of reverse type that is part of the kit produced by the manufacturer for the motorcycle model in use.

For OHVALE GP-2 190 DAYTONA it is allowed to replace the original gear shift rod with the optional part to be used with the quick shift system produced by the manufacturer for the model of motorcycle in use.

The rear brake lever peg may also be repositioned.

It is forbidden to repair the footrests by welding.

It is forbidden to enter in the track with footrests having the original terminal in plastic material plug in high damaged condition or without a mounted terminal.

It is forbidden to repair the footrest supports by welding.

RR06.5.3.8. Start lever

The starting lever of the original engine must remain mounted and running and be equipped with a system that prevents accidental opening (example: elastic).

RR06.5.4. Suspension

RR06.5.4.1. Front suspension

Except as authorized in the following articles, the fork must be kept original in every component.

Position of the fork sleeve respect to the steering plates is free.

The settings of the hydraulic adjusters, the spring coefficient (K), the preload of the main springs and the amount and type of hydraulic oil are free.
A steering damper may be added with the specific kit provided by the official supplier. In any case the steering damper cannot act as a steering lock limiting device.

For OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed:

- It is allowed to replace the original forks with the original "+5" forks on motorcycles produced from 2019 onwards
- It is possible to mount the fork spring pre-load system provided by the manufacturer for the motorcycle model in use.
- The front forks from the different models homologated (see also RR06.5.2.1) cannot be exchanged between them.

For OHVALE GP-2 190 DAYTONA:

- It is also allowed to use the fully adjustable front fork kit, as original produced and sold by the manufacturer.

RR06.5.4.2. Rear suspension

Except as authorized in the following articles, the rear suspension must be kept original in every component.

The adjusting system and attachments of the rear suspension to the frame and swing arm must be kept original.

The wheelbase of the shock absorber, the position of the hydraulic registers, the elastic coefficient (K) and the pre-load of the main spring of the shock absorber are free.

The plastic washers (4 units) cannot be removed or modified.

The mounting position of the rear shock has to be respected, so as sold originally by the Motorcycle Supplier, with the adjustment knob oriented to the top.

RR06.5.5. Brake system

Except as authorized in the following articles, the parts from different model years cannot be exchanged between them.

For OHVALE GP-0 110 EVO 4Speed and GP-0 160 EVO:
It is allowed to mount all available brake systems sold by the Manufacturer, only if both front and rear brake systems match, except when “Brembo” front brake system is mounted. See table 1.

For OHVALE GP-0 110 4Speed and GP-0 160 4Speed:
It is only allowed to mount the standard brake systems originally mounted. See table 1.

	110 EVO / 160 EVO			110 / 160
	OPTION A	OPTION B	OPTION C	OPTION A
FRONT	Formula	J. Juan	Brembo	Formula
REAR	Formula	J. Juan	J. Juan	Formula

Table 1. Permitted brake system combinations.

RR06.5.5.1. Brake discs

The brake discs must remain as originally produced by the manufacturer for the motorcycle.

It is not allowed to add air ducts in order to improve the cooling of the braking system.

For OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed:

It is allowed to replace the original front disc with the front disc (ø190mm fixed or ø190mm floating) sold and homologated as a kit by the Manufacturer.

RR06.5.5.2. Brake callipers

Except as authorized in the following article, the front and rear brake callipers, as well as all their fixing points and all anchor pieces, must be kept original.

It is compulsory to fit original brake pads. It is possible to fit brake pads from the specific kit for the motorcycle model in use.

For OHVALE GP-0 160 EVO 4Speed (from 2023 on) & OHVALE GP-2 190:

It is allowed to add thermal plates between the brake pads and the calliper pistons only if it's part of the kit sold and homologated by the Manufacturer.

For OHVALE GP-2 190:

It is allowed to mount on all models the 2024 brake system.

RR06.5.5.3. Master cylinder

Master cylinder (front and rear) and the related pipes must be kept original.

~~**Only on OHVALE GP-2 190 Daytona MY 2021 motorcycles is permitted to replace the original front brake master cylinder with that originally fitted to OHVALE GP-2 190 Daytona motorcycles from MY 2022.**~~

Installation of a protection of the brake pump positioned on the handlebar, is allowed to prevent oil leaks if they break after falling.

For OHVALE GP-2 190:

It is allowed to mount on all models the 2024 brake system.

RR06.5.6. Wheels

Wheel rims, inner and outer spacers and their spindles must be kept original. All dimensions of the wheel rims should be as indicated below:

- For OHVALE GP-0 110 4Speed

- Front Wheel 2,50" x 10"

- Rear Wheel 3,00” x 10”

- For OHVALE GP-0 160 4Speed
- Front Wheel 2,50” x 10”
- Rear Wheel 3,00” x 10”

- For OHVALE GP-2 190 DAYTONA
- Front Wheel 2,50” x 12”
- Rear Wheel 3,00” x 12”

RR06.5.7. Tank and fuel system

RR06.5.7.1. Tank

Plastic tank and tank cap must remain as originally produced by the motorcycle manufacturer.

Fuel tank must be filled with fire retardant material (i.e., fuel cell foam, "Explosafe").

Fuel tank can have heat reflective material attached to its surface.

RR06.5.7.2. Fuel line

The fuel circuit, understood as the set of ducts and devices between the tank and the carburettor, must remain as originally produced by the motorcycle manufacturer, except as authorized in the following articles.

Replacement of the fuel cock is not allowed.

The addition of fuel filters is not allowed.

Only the kit quick connectors for fuel pipes, sold and homologated by the Manufacturer, are allowed.

The fixing clamps the fuel circuit pipes are free, as long as they guarantee a perfect seal.

RR06.5.8. Intake system

RR06.5.8.1. General

Except as authorized in the following articles, the fuel system must be kept original.

RR06.5.8.2. Carburettor

The use of pumps or power-jet is forbidden.

The carburettor’s breather pipes must be installed and work properly.

Is mandatory the use of the carburettor indicated in the following points:

- Category GP-0 110 4Speed DELL’ORTO PHBL 24

For the duration of the event, it is mandatory to use a carburettor calibration (max jet, min jet, model and needle position, needle jet, valve) within the range indicated by the Official Supplier. The next calibration elements can only be replaced with more fuel-rich calibration elements: Jet Needle positions, Main Jet, Idle Jet and Starting Jet only.
Only original DELL’ORTO components are allowed except main jet and idle jet which are free. The use of different calibrations (even for a single element) from those indicated by the Official Supplier is sanctioned as a technical irregularity.

During an event, the Official Supplier can modify the carburetion range as long as it is immediately communicated to the riders within 60 minutes from the beginning of the next session.

BRAND / MODEL	Dell'Orto PHBL24
Float	6.5 gr.
Needle & Seat Assy	250
Starting Jet	60
Idle Jet	40
Needle Jet	264 K
Main Jet	104
Jet Needle model / Position	D49 / 3rd seat from the top
Piston Valve	55

- Category GP-0 160 4Speed DELL'ORTO PHBH 28 BD

For the duration of the event, it is mandatory to use a carburettor calibration (max jet, min jet, model and needle position, needle jet, valve) within the range indicated by the Official Supplier. The next calibration elements can only be replaced with more fuel-rich calibration elements: Jet Needle positions, Main Jet, Idle Jet and Starting Jet only.
Only original DELLORTO components are allowed except main jet and idle jet which are free. The use of different calibrations (even for a single element) from those indicated by the Official Supplier is sanctioned as a technical irregularity.
During an event, the Official Supplier can modify the carburetion range as long as it is immediately communicated to the riders within 60 minutes from the beginning of the next session.

BRAND / MODEL	Dell'Orto PHBH28-BD
Float	6.5 gr.
Needle & Seat Assy	250
Starting Jet	55
Idle Jet	50
Needle Jet	262 T
Main Jet	120
Jet Needle model / Position	X71 / 4th seat from the top
Piston Valve	50

- Category GP-2 190 DAYTONA DELL'ORTO PHBH 28 BD

For the duration of the event, it is mandatory to use a carburettor calibration (max jet, min jet, model and needle position, needle jet, valve) within the range indicated by the Official Supplier. The next calibration elements can only be replaced with more fuel-rich calibration elements: Jet Needle positions, Main Jet, Idle Jet and Starting Jet only. Only original DELLORTO components are allowed except main jet and idle jet which are free. The use of different calibrations (even for a single element) from those indicated by the Official Supplier is sanctioned as a technical irregularity.
During an event, the Official Supplier can modify the carburetion range as long as it is immediately communicated to the riders within 60 minutes from the beginning of the next session.

BRAND / MODEL	Dell'Orto PHBH28-BD
Float	6.5 gr.
Needle & Seat Assy	250
Starting Jet	55
Idle Jet	50
Needle Jet	262 T
Main Jet	122
Jet Needle model / Position	X71 / 3rd seat from the top
Piston Valve	50

RR06.5.8.3. Intake duct

Except as authorized in the following articles, the intake duct must be kept original.

For OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed it is compulsory to replace the intake duct of GP-0 motorcycle models manufactured from My2016 onwards (GP-0 110 and GP-0 160 model) with the one originally mounted on motorcycles manufactured from My2022 onwards (GP-0 110 EVO and GP-0 160 EVO model).

RR06.5.8.4. Air filter

The air filter is mandatory and must be as indicated in the points below.

Only the standard metal air filter supplied by the manufacturer may be used.

The use of air filter made from the spongy material is forbidden.

Use of systems to increase the pressure close to the air filter using the dynamic air pressure when the motorcycle is in movement is forbidden.

The optional air filter cover is allowed.

RR06.5.9. Engine

RR06.5.9.1. General

Except as expressly permitted in the following articles, the engine must remain completely original.

The only engine allowed are those indicated in the points to follow:

- Category GP-0 110 4Speed:
  - o ZONGSHEN W110-G OHVALE SET-UP
- Category GP-0 160 4Speed:
  - o ZONGSHEN W150-G OHVALE SET-UP
- Category GP-2 190 DAYTONA:
  - o DAYTONA ANIMA FDX 190 4Speed – OHVALE SET-UP
  - o DAYTONA ANIMA FSM 190 4Speed – OHVALE SET-UP

Bore and Stroke must remain original.

It is compulsory to use the right-side engine cover that is part of the specific kit for the model of motorcycle in use supplied by the manufacturer.

See also RR06.5.2.2. Sealing engines quota

RR06.5.9.2. Engine head

Except as authorized in the articles to follow, any type of machining for the removal of material (including polishing) and application of material (including surface treatment) is prohibited.

Intake and Exhaust ducts must remain original.

For OHVALE GP-2 190:

It is allowed to mount the cylinder head breather, using only the original kit supplied by the Manufacturer.

Valves, valve seats, valve guides, oil seals must be the original. Only normal maintenance provided by the service manual is allowed.

The springs, half-cones and valve plates spring retainers must remain original. Valve spring shims are not allowed.

It is not allowed to rectify the head plane to restore the surfaces. Only a light cleaning work is allowed, as long as the values described below on volume of the combustion chamber and squish are respected.

The volume of the combustion chamber and the height of the squish must comply with the values indicated in the following table:

Category	Volume (cc)	Squish* (mm)
OHVALE GP-0 110 4 Speed	10.0 +/- 0.4	> 1.00
OHVALE GP-0 160 4 Speed	13.5 +/- 0.4	> 0.60
OHVALE GP-2 190 DAYTONA	14.8 +/- 0.4	> 1.25

*No tolerance is admitted on the minimum height of the squish.

Spark plug is free. None of the parts of the spark plug, beside electrodes, can protrude out the interior of the combustion chamber.

RR06.5.9.3. Valves timing diagram

Any modification of the camshaft is forbidden.

Timing driven sprocket and his fixing screws must be kept original. Modification or increase of the diameter of the fixing holes are forbidden.

Chain timing and his timing chain tensioner must be kept original.

For OHVALE GP-2 190:

It is allowed to replace the original timing chain with the DID brand chain included in the specific kit for the motorcycle model in use.

RR06.5.9.4. Cylinder

Cylinder must be kept original.

Any surface treatment of the inner wall of the cylinder, is forbidden.

Only the original head and base gaskets, as provided by the manufacturer are allowed.

RR06.5.9.5. Piston

Any modification to the piston, including polishing and lightening, is forbidden.

Any modification to ring set, pins and their holders is forbidden.

RR06.5.9.6. Connecting rod

Any modification to the rod, including lightening and polishing, is forbidden.

RR06.5.9.7. Crankshaft

Engine crankshaft must remain original, any modification included lightening, balancing and polishing is forbidden.

RR06.5.9.8. Crank case

The engine crankcase and engine crankcase covers must remain original, even with regard to colour and surface finishing. It is only allowed making holes less than Ø12 on the flywheel cover to help the cooling of the internal organs.

It is forbidden to repair the crank cases and engine covers by applying material.

RR06.5.9.9 Fly wheel

Any modification of the fly wheel is forbidden.

For OHVALE GP-0 110, GP-0 160, GP-0 110 EVO and GP-0 160 EVO:

It is allowed to replace the original fly wheel with the part originally fitted on the GP-2 190 or GP-0 EVO 160 model 2024.

RR06.5.10. Transmission

RR06.5.10.1. Primary transmission

The gears of the primary drive (on the crankshaft and on the clutch) must be kept original.

RR06.5.10.2. Clutch

Except as authorised in the following articles, the clutch, including the springs, driven discs and clutch control must be kept original.

For OHVALE GP-2 190 DAYTONA the use of OHVALE slipper clutch kit included in the specific kit for the model of motorcycle in use is allowed.

RR06.5.10.3. Gearbox

Any change to the gearbox, understood as the assembly consisting of the gear selection system and drive forks, primary and secondary shafts and their gears transmission is forbidden.

Any kind of treatment on the surface for reducing friction (including polishing and superfinishing), is forbidden.

For OHVALE GP-2 190 DAYTONA it is allowed to use the quick shift system produced by the manufacturer for the model of motorcycle in use, **only when the rider is using the reverse shift lever.**

RR06.5.10.4. Final transmission

For the final transmission (pinion, chain and rear wheel sprocket) the use of components distributed by Ohvale is mandatory.

RR06.5.11. Cooling and lubrication system

RR06.5.11.1. Oil cooler

The oil cooler must remain original.

RR06.5.11.2. Oil Circuit

Any modification to the oil pump is forbidden.

The oil pipes that connect the engine to the oil cooler must be kept original. The engine breather pipes must be put into a tank with a minimum volume of 250cc.

The oil inlet and discharge plugs, the delivery and return pipes to the oil cooler, the cam head oil pipe and the oil filter cover screws must be perfectly sealed and secured with a binding wire to prevent accidental opening.

RR06.5.12. Electrical system

RR06.5.12.1. Wiring and electric controls

The main wiring must be kept original.

It is mandatory to keep the ignition kill switch mounted on the right side of the handlebar.

RR06.5.12.2. Engine ignition and control

Except as authorized in the following articles, the engine ignition and control system (rotor, stator, CDI and coil) must be kept original **(see also RR06.5.9.9).**

The CDI must be the last homologated version distributed by the manufacturer. All the motorcycles must be equipped with the same CDI version.

At any time of the event, the FIM Technical Director/Chief Technical Steward has the right to request the replacement of any components of the engine ignition and control system mounted on the motorcycle. The refusal to proceed with the replacement is equated with a technical irregularity.

RR06.5.12.3. Engine control sensors

The use of electronic shift assistance systems (quick shifter) is:

- On OHVALE GP-0 110 4Speed is forbidden
- On OHVALE GP-0 160 4Speed is forbidden
- On OHVALE GP-2 190 DAYTONA is allowed by using only the specific kit for the model of motorcycle in use.

No additional controllers or sensors other than those originally fitted to the engine may be added in order to implement engine control strategies. Original engine mounted sensors must be retained.

RR06.5.12.4. Additional Equipment

With the exception of what is authorized in the following articles, any electrical or electronic components (sensor, CDI, display) that are additional or not originally mounted on the motorcycle, are forbidden.

Use of electronic equipment with IR (infrared) technology, GPS or radio timing recording for on-board lap timing / data recording purposes is allowed. Telemetry is not allowed (remote signal to or from the motorcycle).

It is allowed to mount one or more systems (dashboards, displays, etc.) to display **only** the parameters indicated in the points below:

- RPM
- Oil temperature
- Lap Time
- Engine Hours

Integrated dashboards with electronic tracing function, geolocation and data acquisition, is allowed. The data acquisition must be just limited to the channels listed below:

- RPM
- Oil temperature
- Lap Time
- Engine Hours
- Position and speed (by GPS signal).

All motorcycles must mount the rear safety light included in the specific kit for the model of motorcycle in use. The riders must ensure that the light is switched on whenever Race Director declare wet race or practice.

The presence of cables or electronic components or of not clear origin are not allowed and is considered as a technical irregularity. The FIM Technical Director / Chief Technical Steward has the final decision.

RR06.5.13. Fairing/Bodywork

RR06.5.13.1. General

Except as authorized in the following articles, the fairing, the saddle, the front and rear mudguard and all the superstructures that make up the motorcycle body, must be kept original.

Colour and graphics are free.

The use of carbon fibre components is forbidden.

RR06.5.13.2. Fairings

Except as authorized in the following articles, the fairing must be kept original.

On OHVALE GP-0 **110** 4Speed and OHVALE GP-0 160 4Speed it is allowed to modify the fairing as indicated in the following points:

a) Replace the original front fairing and / or fairing with those originally fitted on motorcycles produced from 2018 on (GP-0 or GP0 EVO)
b) Replace the original tail/tank cover with the one originally fitted to GP-0 EVO motorcycles.

The windshield must remain original. The windshield can be coloured and not transparent in order to accommodate the table and the front race number.

The size and shape of the oil cooler holes for all GP-0 models built up to 2017 are free. It is also permitted, as well as recommended to mount protective grilles or wire mesh to protect the oil cooler.

The original fairing brackets can be replaced with quick-release attachments.

The lower fairing must have a perfect seal in order to contain lubricant leaks in the event of engine failure.

The lower fairing must incorporate two holes of 14 mm in the bottom of the front and rear lower area. These holes must remain closed in dry conditions and must be opened only in wet race conditions, as declared by the Race Director.

RR06.5.13.3. Mudguards

The distance between the front mudguard and the tyre may be increased.
The front and rear mudguard must be kept original.

On OHVALE GP-0 110 4Speed and OHVALE GP-0 160 4Speed it is permissible to replace the original front fender with the original one fitted on motorcycles produced from 2018.

RR06.5.13.4. Seat

Saddle seat can be changed.

RR06.5.14. Exhaust system

Except as authorized in the article to follow, in all categories the exhaust system must be kept original.

The use of the silencer with the dB killer fitting is highly recommended. In countries where national regulations foresee a noise limit lower than the one allowed in this regulation; it is compulsory to use the silencer with the dB killer fitting. In this case, the use of the original dB killer is compulsory on all motorcycles.

On OHVALE GP-0 110 4 Speed and OHVALE GP-0 160 4Speed it is compulsory to update the silencer manufactured between 2016 and 2019 with the silencer originally fitted to motorcycles manufactured from 2020 onwards that are prepared for the fitting of the DB Killer.

RR06.5.15. Screw, bolts and fixing elements

RR06.5.15.1. General

Bolts and fairing fixing elements are free but must have the same size as the originals and with a strength class equal to or higher than the original. Fairing fixing elements may be replaced by fast fixing ones.

The use of titanium or aluminium bolts and titanium or carbon fibre and / or Kevlar fasteners, if not originally on the motorcycle or part of the specific kit for the model of motorcycle in use is forbidden.

RR06.5.15.2. Engine bolts

The original engine bolts can be replaced with another one of equal size and with a strength class equal to or greater than the original.

Where required it is permissible to drill holes for the passage of the binding threads, but any modification tending to a lightening is forbidden.

Resetting the threads with the use of helicoil is allowed.

RR06.5.16. WEIGHT

The weight of the motorcycle in running order shall not be less than the value shown below:

- Category GP-0 110 4Speed:
  - o OHVALE GP-0 110 4Speed MY16 on 64.0 Kg
  - o OHVALE GP-0 110 EVO 4Speed MY22 on 65.0 Kg
- Category GP-0 160 4Speed:
  - o OHVALE GP-0 160 4Speed MY16 on 66.0 Kg
  - o OHVALE GP-0 160 EVO 4Speed MY22 on 67.5 Kg
- Category GP-2 190 DAYTONA:
  - o OHVALE GP-2 190 DAYTONA 73.0 Kg

RR06.5.17. TYRES, FUEL & LUBRICANTS

RR06.5.17.1. Tyres

(1) The only tyres admitted to the Ohvale European Championship are those indicated here below:

- **OHVALE GP-0 110 4Speed**

  Front tyre: PMT Slick 100 / 85 R10 in M, S, SS compound.

  Rear tyre: PMT Slick 120 / 80 R10 in M, S, SS compound.

- **OHVALE GP-0 160 4Speed**

  Front tyre: PMT Slick 100 / 85 R10 in M, S, SS compound.

  Rear tyre: PMT Slick 120 / 80 R10 in M, S, SS compound.

- OHVALE GP-2 190 DAYTONA

  Front tyre: PMT Slick 100 / 90 R12 in M, S, SS compound

  Rear tyre: PMT Slick 120 / 80 R12 in M, S, SS compound.

(2) In the event that the qualifying practices or the race, are declared "wet" it is allowed the use of rain tires in the measures indicated below:

- OHVALE GP-0 110 4Speed

  Front tyre: PMT Rain 100 / 85 R10

  Rear tyre: PMT Rain 120 / 80 R10

- OHVALE GP-0 160 4Speed

  Front tyre: PMT Rain 100 / 85 R10

  Rear tyre: PMT Rain 120 / 80 R10

- OHVALE GP-2 190 DAYTONA

  Front tyre: PMT Rain 100 / 90 R12

  Rear tyre: PMT Rain 120 / 80 R12

(3) Only the tyres supplied on track by the official tyre service are permitted. No external tyres, even if they comply with point (1) or (2), are allowed without the permission of the official tyre service.

(4) From the beginning of the qualifying practice on, it is permitted to use up to a maximum of:

- 2 set of tyres (2 front and 2 rear) for events with a maximum of 2 race**s**

- 3 set of tyres (3 front and 3 rear) for events with a maximum of 3 race**s**

Contingent tyres are recognizable and counted by applying a punching mark during technical inspections or, if the official distributor is present, by recording the bar codes affixed to the tyres by the manufacturer.

It is forbidden to exchange tyres already punched between riders. Rain tyres are excluded from the counting, so there is no punching for these.

(5) The rider or the rider's representative is responsible for checking the presence and conformity of the tyre codes/stickers when punching the tyres and before each entry into the track. Failure to check tyres at the time of punching will not be accepted as valid justification for the use of tyres without punching or with non-compliant punching. The ultimate responsibility for the collection and handling of tyres lies with the rider.

(6) The tyre conformity check is normally carried out at the track entrance. Failure to stop the motorcycle for the time necessary for the check at the track entrance is considered as non-compliance with the riders' obligations **(see RR06.5.26.6.)**. The technical scrutineers have the faculty to carry out additional controls, in the pits, in the pit lane and in the parc fermé.

(7) If one or both marks are missing, the irregular tyres will be marked by the FIM Technical Director/Chief Technical Steward. Any tyre controlled unpunched will be sanctioned with a fine **(see RR06.5.26.3.).** In the event of repeated infraction or more serious cases, an additional penalty may be imposed (such as starting from pit lane on the first race following the infringement, in which the rider takes part).

(8) In case of exchange of tyres already allocated to riders, even if belonging to the same team, or in any case of use of tyres with different technical specifications from those associated with the rider for the event, the irregular tyres will be marked by the FIM Technical Director/Chief Technical Steward. Any tyre exchange will be sanctioned with a fine **(see RR06.5.26.4)** and additionally equated to a technical irregularity.

(9) At the end of the session (practice or race), the rider must present to the FIM Technical Director/Chief Technical Steward a number of new tyres registered in his name equal to the number of tyres that have been marked as irregular, in order for them to be removed from the list of tyres associated with him. The rider will be allowed to continue the event with the tyre(s) marked by the scrutineer (provided that the make, model, size and compound are those indicated by the Exclusive Supplier). Failure to deliver new tyres will be considered as a technical irregularity, in repeated cases or those considered more serious, at the sole discretion of the FIM

Technical Director, the additional penalty of starting from the last grid place in the first race following the infringement in which the rider takes part may be applied. In the event of an exclusion from the event, this article will not be applied.

(10) In case of tampering with one or both punches, the irregular tyres will be marked by the FIM Technical Director/Chief Technical Steward. This infraction will be sanctioned with a fine **(see RR06.5.26.5.)** and in addition will result in exclusion from the event.

(11) In the event that a tyre already associated with a rider has defects that compromise its safe use, the official tyre service may request the FIM Technical Director to replace the tyre. The final decision on tyre replacement rests with the FIM Technical Director. Any replacement tyre must have the same characteristics (make, model, compound and size) as the tyre it replaces.

(12) The punching is placed on the right shoulder of the tyre, it is the responsibility of the rider or their agent on their behalf, to make sure the presence and the conformity of punching before getting on the track.

(13) It is specified that when mounting the tyre on the wheel rim it is mandatory to respect the direction of travel indicated by the manufacturer.

(14) The use of tyre warmers is also allowed on the starting grid. Every type of electrical feeding is forbidden.

RR06.5.17.2. Fuel

Fuel shall be liquid at ambient pressure and temperature and shall be used as such.
The only fuel allowed is the lead-free one.

~~**The only fuel allowed is the lead-free one.**~~

If the fuel is not purchased from a public station, the fuel used for competition is considered as race fuel and must be in accordance with the FIM Fuels Regulations.
(Please refer to the in RR06.5.21.1 and all RR06.5.21.).

RR06.5.18. NUMBER PLATE AND RACE NUMBERS

RR06.5.18.1. The background colours of the tables and race numbers must be those indicated in the following points:

Category	Background	Number / Figure
GP-0 160 4Speed	Black	Yellow
GP-0 160 4Speed	Black	Red
GP-2 190 Daytona	Black	White
GP-2 190 European Cup	White	Black

RR06.5.18.2. Front and side race numbers must have a minimum height of 80 mm.

RR06.5.18.3. In case of dispute concerning the legibility of numbers, the decision of the FIM Technical Director / Chief Technical Steward will be the final

RR06.5.19. SCRUTINEERING

The motorcycles may be scrutineered and technical checks (including the required disassembly) or noise/performance and weight measurements may be executed before, during or after a meeting.

The FIM Technical Director / Chief Technical Steward may perform random controls during the event.

Violations of the present Technical Regulations and noise levels exceeding the allowed limits shall be sanctioned by loss of result and/or the following penalties:

- For prohibited potentially performance-enhancing modifications of the power unit including intake and exhaust systems = fine up to €250 (incl. VAT) and the rider's suspension for up to two subsequent events. If the offence occurs during the penultimate or last meeting of the season, the suspension may be carried to the next season, no matter in which class the rider shall start in that season.
- Other prohibited modifications = fines up to €150 (incl. VAT) per violation.

Should the officials be unable to determine the compliance/non-compliance of a part with the regulations on the spot, the part or the whole motorcycle will be confiscated for checking and the affected entrant will not be able to make any claims whatsoever. The owner of the motorcycle will be responsible for any costs incurred (disassembly, reassembly).

Non-compliant parts found during Scrutineering will be marked.

For major contraventions to the Technical Regulations, the FIM Stewards may penalise the respective participants by disqualification from one or several races or from the whole Ohvale European Championship.

RR06.5.19.1. Sanction for Non-Compliance with Fuel Regulations.

Fuel controls may be carried out in accordance with RR06.5.17.2. of the Technical Regulations. A rider whose fuel does not correspond to the technical requirements will be sanctioned as follows:

1. Exclusion from the whole event in question independent of the moment of the fuel sampling;
2. Fine of 500 €;
3. Payment of all costs connected to the fuel test(s) for his case.

RR06.5.20. SOUND LEVEL

In all categories, the maximum permissible sound level is**:** 100 dB/A at an engine revolution of 5500 rpm (+2 dB/A at the end of the race)

RR06.5.21. GASOLINE, LUBRICANT AND COOLANTS

All **motorcycles** must be fuelled with:
- unleaded gasoline (from public pump station or race type) OR
- a mixture of unleaded gasolines

The unleaded gasoline or the mixture of unleaded gasolines used must comply with the specifications as set out in RR06.5.21.1.

RR06.5.21.1. FIM specifications for unleaded gasolines or mixtures of unleaded gasolines

The following specifications are set for unleaded gasoline or the mixture of unleaded gasolines:

a) The following properties shall be within the following thresholds (for each property, the relative test methods to be used for the measurement are indicated):

Property	Units	Min.*	Max.*	Test Method
RON		95.0	102.0	EN ISO 5164 or ASTM D2699
MON		85.0	90.0	EN ISO 5163 or ASTM D2700
Oxygen (includes 10% ethanol allowance)	% (m/m)		3.7	EN ISO 228541 or EN 13132 or elemental analysis
Nitrogen	% (m/m)		0.2	ASTM D 46292 or ASTM 5762
Benzene	% (V/V)		1.0	EN ISO 22854 or ASTM D6839 or ASTM D5580
Vapour pressure (DVPE)	kPa		100.0	EN 13016-1 or ASTM D5191
Lead	mg/L		5.0	ICP-OES or AAS
Manganese	mg/L		2.0	ICP-OES or AAS
Density at 15°C	kg/m3	720.0	785.0	EN ISO 12185 or ASTM D4052
Oxidation stability	minutes	360		EN ISO 7536 or ASTM D525
Sulphur	mg/kg		10.0	EN ISO 20846 or ASTM D5453
Distillation:				EN ISO 3405 or ASTM D86
E at 70°C	% (V/V)	20.0	52.0	
E at 100°C	% (V/V)	46.0	72.0	
E at 150°C	% (V/V)	75.0		
Final Boiling Point	°C		210	
Residue	% (V/V)		2.0	
Appearance	Clear, bright and visually free from solid matter and undissolved water			Visual inspection
Olefins	% (V/V)		18.0	EN ISO 22854 or ASTM D6839
Aromatics	% (V/V)		35.0	EN ISO 22854 or ASTM D6839
Total diolefins	% (m/m)		1.0	GC-MS or HPLC
Oxygenates:				EN ISO 228541 or EN 13132
Methanol	% (V/V)		3.0	The only oxygenates permitted are paraffinic mono-alcohols and paraffinic mono-ethers (of 5 or more carbon atoms per molecule) with a final boiling point below 210°C.
Ethanol	% (V/V)		10.0	
Isopropanol	% (V/V)		12.0	
Isobutanol	% (V/V)		15.0	
tert-Butanol	% (V/V)		15.0	
Ethers (C5 or higher)	% (V/V)		22.0	
Others	% (V/V)		15.0	

(1) In cases of dispute EN ISO 22854 will be the reference method.
(2) In cases of dispute ASTM D 4629 will be the reference method.
* All reported min. and max. thresholds do not include the tolerance, which needs to be calculated in accordance with ISO 4259 and taken into account to correct the min. and max. thresholds.

The total of individual hydrocarbon components, present at concentrations of less than 5% (m/m), must constitute at least 30% (m/m) of the gasoline. The test method will be GC-FID (gas chromatography-flame ionisation detector) and/or GC/MS (gas chromatography-mass spectrometry).

The total concentration of naphthene, olefins and aromatics classified by carbon number must not exceed the values given in the following table:

% (m/m)	C4	C5	C6	C7	C8	C9+
Naphthene	0	5	10	10	10	10
Olefins	5	20	20	15	10	10
Aromatics	-	-	1.2	35	35	30

Bicyclic and polycyclic olefins are not permitted. The fuel must contain no substances which are capable of exothermic reaction in absence of external oxygen.

RR06.5.21.2. FIM specifications for mixtures of unleaded gasoline(s) and lubricant

The lubricant:
must not change the composition of the gasoline fraction when added to the gasoline; must not contain any nitro-compounds, peroxides or any other engine power boosting additives; must in no way contribute to an improvement in over performance; during the distillation up to 250°C, must not show a reduction in mass by evaporation of more than 10% (m/m) (test method: simulated distillation GC); must contain a max. content of anti-knock agents (lead, manganese, iron) of 10 mg/kg (test method: ICP-OES).
Moreover, the following specifications are set for the mixture of unleaded gasoline(s) and lubricant: The following properties shall be within the following thresholds (for each property, the relative test methods to be used for the measurement are indicated):

Property	Unit	Min.	Max.	Test Method
RON			102.0*	EN ISO 5164 or ASTM D2699
MON			90.0*	EN ISO 5163 or ASTM D2700
Density at 15°C	kg/m3	690**	815**	EN ISO 12185 or ASTM D4052

*** Reported min. and max. thresholds do not include the tolerance, which needs to be calculated in accordance with ISO 4259 and taken into account to correct the min. and max. thresholds.**
**** Min. and max. thresholds do include the tolerance.**

RR06.5.22. Air

Only ambient air may be mixed with the gasoline as an oxidant.

RR06.5.23. Sampling and Testing

The ~~Cup~~ Organiser may require gasoline controls, i.e., controls of the unleaded gasoline, mixture of unleaded gasolines, used by riders/teams at events. These controls involve initial sampling at the event and further testing in the laboratory appointed by the ~~Cup~~ Organiser**.**

RR06.5.23.1. Sampling

The FIM Technical Director (or the FMNR Chief Technical Steward when there is no FIM Technical Director appointed) is the sole official responsible for the sampling management and supervision.

Sampling may be carried out before, during or at the end of official free practice, Qualifying Practices (qualifying), warm-up and races. Motorcycles selected for sampling may be held in the pits, on the pit lane or in the parc fermé for the time necessary to carry out the sampling. Refusal to submit to fuel sampling is equated with the use of non-compliant fuel and as such sanctioned.

A fuel sample is taken from the motorcycle and placed in the 'A' container. Following the filling of sample 'A' a second fuel sample is taken from the motorcycle and placed in container 'B'. Containers 'A' and 'B' must be labelled and sealed. The containers should preferably be filled directly through the motorcycle's fuel delivery pipe by.

If it is not possible to fill directly from the motorcycle's fuel tank delivery pipe, the FIM Technical Director / FMNR Chief Technical Steward in charge of the sampling operations may ask the team to take the necessary amount of fuel from the tank by means of a suitable instrument (pipette/hand pump, etc.). It is the responsibility of the rider (or person delegated by him) to equip himself with suitable sampling instruments that are not contaminated by substances that could alter the fuel taken.

In any case, the suitability of the instrument used for sampling is at the unquestionable judgement of the assigned FIM Technical Director / FMNR Chief Technical Steward and the non-contamination of the instrument is the sole responsibility of the rider. The sampling procedures and the instruments used cannot be subject to protest.

The date of sampling, the place of the event, the type of session (free, qualifying or race), the rider's name, the rider's number and the class are written on the labels of the containers.

In all classes the Gasoline Sample Declaration Form must be signed, and the labels of both containers must be signed The FIM Technical Director / FMNR Chief Technical Steward or Technical Steward in charge of sampling and countersigned by the rider. The rider may delegate a person from his team. If the rider is a minor, the countersignature must be provided by a person exercising parental authority or by the team leader responsible for the fuel sampling. Refusal to countersign both container labels is equated with the use of non-compliant fuel and sanctioned as such.

RR06.5.23.1.1. In the Minimoto categories, fuel sampling (both selected motorcycles and following a protest) consists of taking only the "A" sample, following the procedures indicated in the previous article. In the event of an appeal on the result of the analysis of sample "A", it will therefore not be possible to request counter-analysis.

RR06.5.23.2. Testing

One or more properties to be checked are determined by the FMNR for each selected rider/team.

Sample A will be sent by the Organiser to one of the accredited laboratories. Analyses will concern only those properties which can be analysed according to the quantity of fuel taken, at the sole discretion of the Organiser. The result of the analysis on sample "A" will be communicated to the rider subject to sampling within 90 days from the date of sampling.

The sample "B" will be retained by the Organiser for possible counter-analysis, or alternatively will be taken by the FIM Technical Director / FMNR Chief Technical Steward. The counter-analysis may be requested by the Organiser or by the sampled rider within 5 days from the date of communication of the result of the first analysis.

The sample of the counter-analysis will be handed over to the representative of the analysis laboratory in the presence of a delegate of the Organiser or of the FIM Technical Director / FMNR Chief Technical Steward and of the rider (or his delegate) who signed the container label (or the Gasoline Sample

Declation Form) for the sampling carried out, who will be notified by e-mail of the day, time and place of the operations, as well as of the fact that their presence will not be necessary for the completion of the relevant activities. In any case, the recognition of the sample and its integrity will be verified by the Organiser's delegate or the FIM Technical Director / FMNR Chief Technical Steward, who will record it in a report.

In the event of a request for counter-analysis by the rider, the costs of laboratory examinations, transfers to and from the laboratory and any incidental costs will be borne by the rider.

In case of conflicting results between the result of the first analysis (sample A) and the result of the counter-analysis (sample B), the result more favourable to the driver/team shall prevail. The counter-analysis will only concern the analysable properties depending on the quantity of fuel taken, at the organiser's sole discretion. Any inability to determine the conformity of the fuel due to too few or no properties analysed shall invalidate the counter-analysis, at the sole discretion of the Organiser. In this case, the result of the analysis carried out on sample "A" will be used to determine the conformity of the fuel. In case of absent "B" sample due to lack of residual fuel quantity, it will therefore not be possible to request/perform counter-analysis.

The accredited laboratory for all analyses and counter-analyses is chosen by the organiser.

Costs for shipping and analysis of A-samples are paid by the Organiser.

As soon as possible after completion of the test, the laboratory appointed by The Organiser reports the test results directly to The Organiser.

For negative cases (i.e., conformity of the tested property(ies) with the specification), the rider(s)/Team(s) concerned will be informed individually by the Organiser in due time, informing the rider's FMN/Team, the FIM Technical Director / FMNR Chief Technical Steward, the competent authority (e.g., Race Direction, Jury), the Director and the Coordinator(s) of the relevant Sporting Commission.

Only for positive cases following A or B sample tests (i.e. non-compliance of one or more properties*), the Organiser will inform by e-mail* the rider/Team concerned (including test results) and, 24 hours later, transmit the relevant information to the rider/Team's FMN, the FIM Technical Director / FMNR Chief Technical Steward, the competent authority (e.g. Race Direction, Jury), the Director and the Coordinator(s) of the Sport Commission concerned.
*Note: The non-compliance of a property (except appearance) is sufficient to declare the non-compliance of the petrol or mixture.

If the rider/Team wishes to request a counter-examination, on sample B he must notify the Organiser by e-mail*, within 72 hours after receipt by the Organiser of the notification of the delivery status of the test results to the rider/Team.

The rider/Team has the right to appeal against the decision of the competent authority of the event in question (e.g., Race Direction, Jury) in accordance with the FIM Europe Disciplinary and Arbitration Code applicable to the discipline in question.
*Receipt of a notification of delivery will be considered as proof of delivery.

RR06.5.23.3. FUEL STORAGE

In the event that fuel is supplied by the organiser, there will be an officially designated and monitored fuel storage area. Outside these areas, fuel may only be stored in metal containers.

The officially designated storage and refuelling area must comply with the construction criteria. Fire-fighting equipment, protective devices and personnel must comply with the requirements of the local authorities and laws.

The organiser must make fire extinguishers of a size and type approved by local laws available to each competitor in the pit area.

RR06.5.23.4. FUEL REPLACEMENT

At any time during the event the FIM Technical Director / FMNR Chief Technical Steward has the right to request the replacement of all fuel contained in the motorcycle's tank with fuel supplied on the moment by the Official Championship Supplier (if any) or by the Event Organiser.

FIM EUROPE

Gasoline Sample Declaration Form

Discipline	
IMN (xxx/xx)	
Class	
Riders'/Teams' name	
Riders'/Teams' number	
Riders'/Teams' email or phone number	
Team	
Gasolines' origin (public stationor race supplier	
Gasolines' samples taken on date (dd/mm/yy)	

Gasoline samples take at (right before or after)

FREE PRACTICES	QUALIFYING PRACTICES 1	QUALIFYING PRACTICES 2
WARM - UP	RACE 1	RACE 2

	RACE NUMBER	MOTORCYCLE MAKE	"A"SAMPLE SEAL N°	"B"SAMPLE SEAL N°	**RIDER OR HIS DELEGATE** (FIRS NAME AND SURNAME IN BLOCK LETTERS)	**RIDER OR HIS DELEGATE*** (SIGNATURE)
1						
2						
3						
4						
5						
6						

*Failure to sign this form by the pilot, or his delegate, subject to fuel sampling, shall be penalised as provided for in the class or discipline regulations

The above listed details refer to gasoline samples taken from the fuel tank of the motorcycles specified.

FIM Technical Directors'/FMNR Chief Technical Stewards' name	
FIM Technical Directors'/FMNR Chief Technical Stewards' signature	
Date and time (dd/mm/yy, hh/mm)	

RR06.5.24. PROTECTIVE CLOTHING AND HELMETS

The rider is at all times responsible for ensuring that his own protective clothing and helmets are in good condition (undamaged) and comply with the FIM Technical Regulations. In case one part of his protective clothing and helmets is damaged after a crash, the rider must systematically present this equipment to the FIM Technical Director or to the FMN Technical crew for check.
Riders will have to be equipped with the appropriate complete set of undamaged safety racing equipment:

- o All equipment must comply with the following requirements
- ○ Each rider must be wearing the following elements:

  - One piece leather suit (2-pieces suits are not allowed)
  - Racing boots **(racing shoes for mini moto categories)**
  - Racing gloves
  - Back & chest protectors
  - Helmet (must be of the full-face type)

RR06.5.24.1. Riders must wear a complete leather suit with additional leather padding or other protection on the principal contact points, knees, elbows, musters, hips that conform to EN1621-1:2012.
The use of sliders (specific parts of the riders' safety equipment, either permanently fixed or removable, intended to make regular contact with the track surface to assist the rider while cornering), is permitted on the knees, elbows or any other parts of the race suit, where it is deemed necessary. They must not be manufactured from or contain any material that when in contact with the track surface may cause visual or other disturbance to other riders.

RR06.5.24.2. Linings or undergarments must not be made of a synthetic material which might melt and cause damage to the riders' skin.

RR06.5.24.3. Riders must also wear leather gloves and boots, which with the suit provides complete coverage from the neck down.

RR06.5.24.4. Leather substitute materials may be used, providing they have been checked by the Chief Technical Steward.

RR06.5.24.5. Use of a chest and back protector is compulsory (with or without airbag protection in the suit) and must be clearly marked with the following norms:

a) The back protector must comply with EN1621-2, CB ("central back") or FB ("full back") Level 1 or 2.
b) The chest protector must comply with EN1621-3.

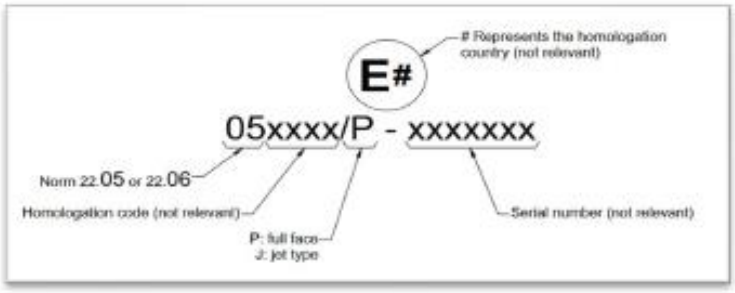
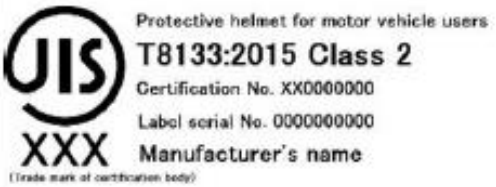
Use of a functional airbag system is strongly recommended.

RR06.5.24.6. Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.

RR06.5.24.7. Helmets must conform to one of the following recognised international standards:

EUROPE	ECE 22-05 (only “P” type) ECE 22-06 (only “P” type)
FIM	FRHPhe-01 **FRHPhe-02**
JAPAN	JIS T 8133.2015 Only “Type 2 Full face”)
USA	SNELL M 2015 SNELL M 2020 R SNELL M 2020 D **SNELL M 2025**

Examples of labels are reported below:

EUROPE	
FIM	
JAPAN	
USA	

RR06.5.24.8. Visors must be made of a shatterproof material.

RR06.5.24.9. Disposable "tear-offs" are permitted.

RR06.5.24.10. Any question concerning the suitability or condition of the riders clothing and/or helmet shall be decided by the FIM Technical Director/ Chief Technical Steward, who may, if he so wishes, consult with the manufacturers of the product before making a final decision.

RR06.5.25. Procedures for Technical Control

The rider is at all times responsible for his/her motorcycle.

The Chief Technical Steward must be in attendance for an event at least 1 hour before the technical verifications are due to beginning. He must inform the Clerk of the Course, the Race Director and the Technical Director of his arrival.

He must ensure that all Technical Stewards, appointed for the event, carry out their duties in a proper manner.

He shall appoint the Technical Stewards to individual posts for the race, practices and final control.

The rider, or his mechanic, must be present with the motorcycle for Technical Control within the time limits stated in the Time Schedule. The maximum number of persons present at the technical verification will be the rider, plus two others. In addition, the Team Manager will also be allowed.

The FIM Technical Director/Chief Technical Steward must inform the Race Director of the results of the Technical Control. The Technical Director/Chief Technical Steward will then draw up a list of accepted motorcycles and submit this list to the Clerk of the Course.

The FIM Technical Director/Chief Technical Steward have the right to inspect any part of the motorcycle at any time of the event.

Any rider failing to report as required below may be disqualified from the event. Race Direction may forbid any team who does not comply with the rules, or any rider who may be a danger to other participants or to spectators, to take part in the practice sessions or in the races.

The Technical Control must be carried out in accordance with the procedure and times fixed in the General Information of the event.

~~The FIM Technical Director/Chief Technical Steward will refuse any motorcycle that does not have a correctly positioned positive transponder attachment. The transponder must be fixed to the motorcycle.~~

The rider or the mechanic shall present a clean motorcycle and in conformity to the rules**.** He shall also present the helmet, gloves, boots and leather.

An overall inspection of the motorcycle must be carried out in conformity with the rules. Accepted motorcycles will be marked with paint or a sticker.

FIM Technical Director/Chief Technical Steward has the final authority in case of a dispute on the conformity of the parts in question and for acceptance thereof.

Before each practice the Chief Technical Steward can confirm that the motorcycle has passed the Technical Control by checking the Technical Control sticker before the motorcycles go on the track.

Only accepted motorcycles may be used in practices and races.

Approximately 30 minutes after the technical control have been completed, the Technical Director/Chief Technical Steward must submit to the Race Direction a list of accepted motorcycles and riders.

If a motorcycle is involved in an accident, the Technical Director/Chief Technical Steward may check the motorcycle, together with the helmet and clothing of the rider involved, to ensure that no defect of a serious nature has occurred. If a motorcycle was stopped with a Black Flag with Orange Disc, the FIM Technical Director/Chief Technical Steward must check the motorcycle. In both cases, it is the responsibility of the team to present the motorcycle (together with helmet and clothing of the fallen rider) for his re-examination in case they wish to continue. If the helmet is clearly defective, the Chief Technical Steward must retain this helmet. The Promotor can send this helmet, together with the accident and medical report (and pictures and video, if available) to the Federation of the rider. If there are head injuries stated in the medical report, the helmet then must be sent to a neutral institute for examination.

The team can scrutineer only one motorcycle per rider.

If during the official practice sessions, a motorcycle suffers any damages that are difficult to repair in the circuit, the FIM Technical Director could allow a second motorcycle to be presented for a technical inspection. The process of authorizing a new machine to be used is not possible during a practice session. Once the starting procedure is initiated, it is not possible to verify a second motorcycle, neither in case of detention by red flag. In case of events with two races, once the first race is finished, the FIM Technical Director may allow the request for verification of a second motorcycle.

Once the official practice sessions have started, only the motorcycle that has gone under the technical inspection will be allowed to be inside the box.

The FIM Technical Director may require a team to provide such parts or sample as he may deem necessary.

In the case that a machine fails post-qualifying or post-race technical checks due to damage or technical issues on-track, the following protocol will apply, always at the sole discretion of the Technical Director.

a) <u>Machines under the minimum weight limit due to:</u>

   a. Loss of fluid:
      i. If the FIM Technical Director has verified that there is physical evidence of fluid loss due to an incident or mechanical issue on track, he may approve the fluid to be replenished to the levels as declared by the Manufacturer at the start of the season.
      ii. If it is necessary to replace a damaged part to accommodate the fluid (e.g., radiator), this will be permitted only under the supervision of the FIM Technical Director who will confirm that the new part is identical to the damaged part.

   b. Loss of material or parts:
      i. If the FIM Technical Director has verified that the machine has lost a part or material due to an incident or mechanical issue on track, he may approve the replacement of the part(s) with the following conditions:
      ii. The FIM Technical Director must verify that any new parts are identical to the original.
      iii. If the FIM Technical Director determines that there is insufficient physical evidence to prove that a part or material is missing, then the original part must be found before it can be replaced.
      iv. Missing ballast weights will only be permitted to be replaced if they are found and returned to Technical Control by the circuit officials.

b) <u>Machines exceeding the maximum noise levels:</u>

   i. If the FIM Technical Director is satisfied that there is sufficient physical evidence of damage or loss due to an incident or mechanical issue on track, he may approve

the replacement of the missing or damaged parts, and the machine to be re-tested.

Noise tests

1. Noise tests must be conducted in an open area with a space of at least 10 metres between the motorcycle being tested and walls or other obstacles.
   There should be a minimum amount of ambient noise in the area.
2. The measuring equipment must be calibrated prior to the test and recalibrated at regular intervals.
3. The measuring equipment should be placed 50 cm from the end of the exhaust pipe and at 45-degree angle to the pipe either to the side or above.

The maximum noise level at all times is prescribed in the Technical Rules of each class.

RR06.5.26. FINES AND PENALITY

RR06.5.26.1. The sanction provided for the technical irregularity of a non-compliant component, for the absence of the seals and/or tampering with the engine seals, is exclusion and will be applied at the official practice session or race in which the irregularity was found. In case of irregularities during the official free practice sessions, the Jury will might apply a fine up to € 150,00 for each infringement.
It is the duty of the riders (or their mechanics for them) to ensure that the engine seals are intact and in good condition before each entry to the track.

RR06.5.26.2. If a rider uses more engines than the amount allowed by the Regulations (03 engines) he will be penalised by starting from the last grid position in the first race following the sealing request in which the driver takes part.

RR06.5.26.3. The fine for non-conformity of tyres (RR06.5.17.1.(7)) is € 180.00.

RR06.5.26.4. The fine provided for the exchange of tyres already allocated to riders (RR06.5.17.1.(8)) is equal to € 180,00, and additionally equated to a technical irregularity.

RR06.5.26.5. The fine for tampering with one or both punches (RR06.5.17.1.10)) is € 150,00 and in addition will result in exclusion from the event.

RR06.5.26.6. The fine for non-compliance with the riders' obligations (RR06.5.17.1.(6)) is € 150,00.

RR06.5.26.7. A fine for prohibited potentially performance-enhancing modifications of the power unit including intake and exhaust system and other prohibited modifications see RR06.5.19.

RR06.5.26.8. For fine concerning Non-Compliance with Fuel Regulations see RR06.5.19.1. RR06.5.26.
For deposits in case of motorcycle control following a protest, see Art. RR01.19 Road Racing Regulation FIM Europe (RR01).

RR06.5.26.10. For Deposit in case of fuel controls following a protest € 2.000,00 + protest fee.

RR06.5.26.11. For deposit in case of engine oil controls following a protest € 2.000,00 + protest fee.

The Jury shall decide on all matters not covered by these rules. The Jury's decision is irrevocable and final.