

# TECHNICAL REGULATIONS FOR CLASS FORMULA 80-87

(Sanctioned at the Nordic Meeting 2020)

This is a translation of the Norwegian language regulations. In case of discrepancies, the Norwegian language regulations shall apply.

**1. Type and age:** The regulation for this class is based on the FIM GP class and the FIM formula class, through the 1987 season. The class is open for bikes that were used or could have been used in these classes. Replicas of such bikes are also eligible. Bikes produced for the 1988 season and prototypes or replicas of prototypes that were used by manufacturers for preparation for the FIM superbike class introduced for the 1988 season is prohibited, even though these should have been raced before December 31st 1987. Prototypes constructed exclusively for other racing classes than those already mentioned are prohibited. Yamaha TZ 750 with typical period modifications is allowed despite not complying with the above described categories because this is an older bike that was still widely used during this period.

The class is divided in 2 categories based on cylinder volume (F1 and F2).

For modifications and building of prototypes, the period look must be maintained. The owner of the bike is responsible for the bike's eligibility and that all components of the bike, both in appearance and function, are within the time period of the class. It is the owner's duty to be able to prove this by photographs and documents with source reference.

The following paragraphs shall be adhered to:

**2. Vehicle Licence:** Vehicle licence is required for organised racing and parading. (Not applicable to riders/bikes licensed outside Scandinavia)

**3. Frame and Swingarm:** Shall be of design and type as used during the time period of the class. Swingarm may be strengthened, but the period look must be maintained (see § 1, owners responsibility)

**4. Front Fork:** Shall be of design and type as used during the time period of the class. The maximum permitted diameter of fork stanchions is 43mm. Deviations may be approved if documented used for road racing in appropriate class during the period. WP inverted front fork with outside adjustment to damping is prohibited. Öhlins inverted front fork is prohibited

**5. Steering:** Reference is made to FIM technical regulations.

**6. Wheels:** Wheels shall be typical for the period, 16.5" wheels are prohibited. Spoked wheels are to have alloy rims of valanced or non-valanced type. All parts of the wheel that carries load shall be of metallic material.

**7. Brakes:** Cannot be of newer type or design than used inside the period. Brake discs shall be of ferrous material. Brake callipers shall be of type as available inside the period. Maximum 4 pistons allowed for double acting callipers and 2 pistons for single acting callipers. Radial mounted callipers are not allowed. Master pump for the front brake must have pump cylinder parallel with the handlebar.

**8. Tyres:** Slick- and rain- tyres are eligible for this class. Air valve of short type is recommended. Valve caps are to be of metal and equipped with a gasket.

**9. Rear Suspension:** Hydraulic pre load adjustment for spring is prohibited if not fitted originally to the bike. In that case, the original complete damper unit can be used. Any linkage system for actuation of suspension unit may be used.

**10. Tank, seat and fairing:** Design and appearance shall be as used during the period. Fairing is obligatory. For 4-strokes only, the following shall apply: The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and coolant capacity used in the engine (min. 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. The lower fairing must incorporate 2 openings of 25 mm (minimum) diameter in the bottom front lower area. These holes must remain closed in dry conditions and must be only opened in wet race conditions as declared by the Race Director.

**11. Motor:** Crankcase, cylinder and cylinder head shall be of design as was available during the period. No tuning restrictions. Modification to original parts is allowed, also fitment of period accessories. The class is divided in 2 categories based on cylinder volume.

F1:

Cylinder volume 251 - 500 cm<sup>3</sup> for bikes classified in accordance with the GP regulations.  
Cylinder volume 401 - 500 cm<sup>3</sup> for 2-strokes classified in accordance with the Formula regulations  
Cylinder volume 601 - 1100 cm<sup>3</sup> for 4-strokes classified in accordance with the Formula regulations.  
Cylinder volume 601 - ∞ cm<sup>3</sup> for 4-strokes, produced for the 1985 season and earlier, classified in accordance with the Formula regulations.

F2:

Cylinder volume 0 - 250 cm<sup>3</sup> for bikes classified in accordance with the GP regulations.  
Cylinder volume 0 - 400 cm<sup>3</sup> for 2-strokes classified in accordance with the Formula regulations  
Cylinder volume 0 - 600 cm<sup>3</sup> for 4-sylinder 4-stroks classified in accordance with the Formula regulations.  
Cylinder volume 0 - 750 cm<sup>3</sup> for 2-sylinder 4-stroks classified in accordance with the Formula regulations.

Boring of the cylinder to the engine manufacturers' standard over-sizes is allowed even though this may cause the cylinder volume to exceed the upper limit for the class.

**12. Number plate:** For design, reference is made to general technical regulations.

Colours shall be:

Class F1 GP machines (500 cm <sup>3</sup> ):	Yellow back ground (RAL code 1003) with black numbers.
Class F1 street based machines:	White back ground (RAL code 9010) with black numbers.
Class F2 GP machines (125 cm <sup>3</sup> )	Black back ground (RAL code 9005) with white numbers
Class F2 GP machines (250 cm <sup>3</sup> )	Green back ground (RAL code 6002) with white numbers
Class F2 street based machines	Blue back ground (RAL code 5010) with white numbers

**13. Oil coolers, oil hoses, drain plugs and filling plugs:** Oil cooler radiators must have a protective grid installed in front of the cooler.

Oil plugs or bolts, that may cause oil leak if becoming loose, is to be secured with locking wire or locking washers. The locking shall be against a solid part of the bike (not an exhaust pipe or other moveable or vibration prone part). The locking wire shall be stainless annealed wire of 0.7 mm minimum thickness. Copper wire is prohibited. External pressurised hoses shall be armoured and have threaded secured fittings. Jubilee clips are prohibited for such hoses. Oil filters are to be fitted with a jubilee clip that is secured with locking wire to a solid point.

**14. Vents:** Vents from crankcase, gearbox and fuel tank shall be equipped with suitable catch tank to prevent spillage.

**15. Carburettors:** No restrictions to carburettors. Fuel injection is allowed if originally used on the engine. All parts of the system must be as original, but the inside diameter of the throttle house can be changed.

**16. Ignition system:** No restrictions to the ignition system. The bike shall be equipped with an ignition cut-off switch easily accessible on the handlebar.

**17. Gearbox:** Maximum 6 gears allowed.

**18. Transmission:** No restrictions to transmission. Chain link with clip shall be secured with locking wire or similarly secured.

**19. Exhaust system and silencer:** The bike must always be equipped with silencer to satisfy current noise restrictions. Silencer can be terminated behind the rear wheel if necessary to meet the noise restrictions.

**20. Instruments, handles and levers:** No restrictions to instruments. Handles and levers must comply with the general technical regulations. The throttle grip must return to closed position by itself.

**21. Replicas:** The look of the bike must comply with the original bike.

**Generally:** The bike shall be prepared for racing. Stands and kick-start lever shall be removed.

#### **General lines for classification of bikes**

For the FIM formula classes, the engine shall be from a road bike. Frame, suspension and wheels shall comply with regulations described above. Otherwise there are no restrictions. The cylinder volume for formula 1, 4-strokes, was 1000 cm<sup>3</sup> through the 1983 season. It was then reduced to 750cm<sup>3</sup>. For these regulations the upper limit is set to 1100cm<sup>3</sup> to provide for a broader range of bikes to compete. In addition, bikes produced for the 1985 season and earlier have no upper cylinder volume limit. The cylinder volume for 2-strokes in formula 2 was max 350 cm<sup>3</sup>. We have in our regulations set an upper limit of 400cm<sup>3</sup>, to increase the range of bikes to compete. The cylinder volume for 4-strokes in formula 2 was max 600 cm<sup>3</sup>. We have in our regulations kept this limit for 4-cylinder machines, but have introduced an upper limit of 750cm<sup>3</sup> for 2-cylinder machines.

**Below is a listing with guidelines and examples of bikes and their legitimacy. Bikes not listed will be evaluated separately. Bikes produced unchanged within the cut-off year in 1987 and later will also be legitimate.**

#### **Bimota**

The Bimota YB4 is allowed

YB4 EI is not allowed.

Bimota frames identical to the YB4 frame or other frames produced within the time frame for the class is allowed in combination with engine types eligible in the class.

### **Ducati**

750 Montjuic 1986, 750 Laguna Seca 1987, 750 Santamonica 1987, 750 Paso 1986, 87, 88 are allowed. 750 engines in combination with frames from independent manufacturers are allowed. 906 Paso 1988, 89 is not allowed.

Bikes with 4 valves per cylinder are prohibited.

### **Harley Davidson**

HD Sportster cup has earlier been run as a separate class, but because of declining interest, the class has been discontinued. For these bikes still to be raced, it has been decided that they can compete with the formula 80 – 87 class.

The following special rules shall apply for these bikes:

- Maximum cylinder volume 1200 cm<sup>3</sup>

- The standard frame has to be used

Apart from this, the rules for the class have to be adhered to.

### **Honda**

NSR 250R 1987 (type MC16) is allowed.

NSR 250R 1988 (type MC18...) is not allowed.

NS 400R 1985-1988 is allowed.

RS 250 allowed through model year 1989.

RS 500 bikes with frame made from tubing are allowed. Bikes with "deltabox" type frame are not allowed.

VFR 400 NC24 is allowed, NC30 is not allowed.

CBR 400 NC23 is allowed, NC29 is not allowed.

CBR 600 model years 1987 and 88 (motor and frame no PC19...) is allowed.

CBR 600 model years 1989 and 90 (motor and frame no PC23...) is allowed.

VFR 750 model years 1986, 87 and 88 is allowed.

VFR 750 R (RC 30) is prohibited.

CBR 1000 model years 1987 and 88 are allowed.

### **Kawasaki**

GPX 750 through model year 1988 is allowed.

ZX 10 is allowed.

ZXR 750 is prohibited.

### **Rotax 250**

Cylinders of model year 87 and 88 that can be identified with cast in part no 223 350 (with exhaust valve) or 223 355 (without exhaust valve) are allowed. Model year 89 and later, part no 223 530 and 223 535 is not allowed. Cylinders that are not identified with part no is not allowed. V-twin engines are not allowed.

### **Suzuki**

RG 500 MK VII and later models are allowed.

RG 500 road bikes are allowed

GSXR 750 model years 1985, 86 and 87 are allowed. 1988 model as a complete bike is not allowed.

However, the frame from the 1988 model is regarded as a replica of a frame that the factory used for racing within the time limit for the class and is thus allowed. GSXR 750 RR is not allowed.

GSXR 1100 model years 1986, 87 and 88 are allowed.

**Yamaha**

TZ 250 parallel twins with exhaust ports pointing forward are allowed. Newer models with rearward pointing exhaust ports are not allowed.

TZ 250T 1987 model is allowed (parallel twin with exhaust ports pointing forward)

TZ 250U 1988 model is not allowed (parallel twin with exhaust ports pointing rearward)

TZ 500 with 2 rearward pointing exhaust ports is allowed (TZ 500J).

TZ 750 is allowed.

RD 350 is allowed.

RD 500 is allowed.

FZR400 1WG, 2TK and 3EN is allowed, FZR400 RR 3TJ is not allowed.

FZ 750 and FZR 750 are allowed. FZR 750 R (OW01) is not allowed.

FZR 1000 is allowed. FZR 1000 EXUP is not allowed.