



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

Introduction

Although not expressly indicated in this Regulation, reference is made to the 2022 ACI Sport Karting RDS Technical Regulation, 2022 CIK FIA Regulation and subsequent amendments and additions which are hereby fully reported.

1. CLASSES:

- MINI ROK
- JUNIOR ROK
- SENIOR ROK
- ROK EXPERT
- ROK EXPERT PLUS
- SUPER ROK
- SHIFTER ROK

1.1 MINI ROK

Engine: Vortex MINI ROK 60cc complying with the current MINI ROK engine identification sheet (technical fiche) approved by ACI SPORT.

Carburettor: **DELL'ORTO PHGB 18**, it must maintain its original structure, it shall mount the same parts and shall be the same as the ones in the engine identification sheet (technical fiche), in order to allow at any time, the comparison of all components with a new carburettor. **Any kind of processing, connection, polishing, addition or removal of material is forbidden.** The threaded clamp described in the engine identification sheet (technical fiche), screwed onto the carburettor, is used to fix the intake silencer; the clamp must not interfere inside the homologated carburettor inlet. **The only components of the carburettor that can be changed are those described in the table in the engine identification sheet (technical fiche).**

Clutch: Concerning the clutch housing with holes, it is mandatory to use the cover according to the engine identification sheet (technical fiche) supplied by VORTEX.

Ignition: Described in the engine identification sheet (technical fiche). The admitted spark plug is the one described in the Mini Rok engine identification sheet (technical fiche).

Chassis: Brand and model must hold **current CIK FIA MINI Gr.3 homologation.**

All homologated components of the chassis must hold current CIK FIA homologation (brake system, bodyworks, rear wheel protection).

Front fairing: Mounting kit complying with the RDS RT Karting ACI SPORT, art. 4.14.2 art. 4.14.4 comma a-b-c-d-e-f-g

Pre-Race checks: Every driver can use:

2 chassis of the same **Brand**

2 engines.

1.1.a. ENGINE DISTRIBUTION

In the Mini Rok category the races of the Rok Cup Italia 2022 will be reserved (limited number) to a maximum of 34 drivers for each race, racing with the ENGINES previously allocated by drawing lots by the Promoter.

The same procedure might be applied to other races of the Rok Cup Trophy, if specified in the Specific Race Regulations defining, from time to time, the maximum number of drivers admitted.



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

With ENGINE or ENGINES we mean: Mini Rok engine + carburetor + exhaust + airbox. The engines and the parts supplied with it (Mini Rok engine + carburetor + exhaust + airbox) will be identified with the same serial number and will be equipped with seals.

All drivers must have their own battery, battery support and wiring.

ENGINES will be distributed/assigned to each driver by drawing lots, and this will happen just before the official free practices in the presence of all drivers. The ENGINES must be used starting from the official free practices.

At the end of each race session during the event, there might be a further draw for the engine kit; in this case, each driver will be requested to leave the ENGINE and participate in a new draw.

Every time the drivers will return the ENGINES, a Vortex technician will verify eventual break, damages and/or missing parts and that seals are integral. In case of damaging and /or missing parts, the relating costs will be charged to the driver who has just returned the ENGINE.

ENGINES must be returned clean at the end of the race.

The cost of renting the ENGINE for each race of 2022 Rok Cup Italia is

Euro 300,00 VAT included for the rental requests received the week before the race

Euro 200,00 VAT included for the rental requests received during the week of the race

Registration to each race must be presented to the Organizer within the provided terms (maximum 34 drivers for each race), while the renting of the ENGINE will be managed by the Promoter, according to the given instructions.

1.2 JUNIOR ROK

Engine: Vortex ROK GP JUNIOR 125cc complying with the current ROK GP JUNIOR engine identification sheet (technical fiche) approved by ACI SPORT.

Carburettor: DELL'ORTO VSH 30, it must maintain its original structure, it shall mount the same parts and shall be the same as the ones in the engine identification sheet (technical fiche), in order to allow at any time, the comparison of all components with a new carburettor. **Any kind of processing, connection, polishing, addition or removal of material is forbidden. The only components of the carburettor that can be changed are those described in the table in the engine identification sheet (technical fiche).**

Cooling: Use of **only one (1)** radiator: it is mandatory to use the original radiator supplied with the engine, which must comply with the dimensions indicated in the table at art. 11.

Clutch: Concerning the clutch housing with holes, it is mandatory to use the cover according to the engine identification sheet (technical fiche) supplied by VORTEX.

Chassis: Brand and model must hold current CIK FIA homologation or CIK FIA homologation of the previous homologation period, the use of bodyworks and rear wheel protection RDS RT Karting ACI SPORT art. 4.14 and 4.15 is mandatory.

Front fairing: Mounting kit complying with the RDS RT Karting ACI SPORT, art. 4.14.3 – art. 4.14.4 comma a-b-c-d-e-f-g.

Pre-Race checks: Every driver can use:

2 chassis of the same **Brand**

2 engines.



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

1.3 SENIOR ROK - ROK EXPERT - ROK EXPERT PLUS

Engine: Vortex ROK GP 125cc complying with the current ROK GP engine identification sheet (technical fiche) approved by ACI SPORT.

Carburettor: DELL'ORTO VSH 30, it must maintain its original structure, it shall mount the same parts and shall be the same as the ones in the engine identification sheet (technical fiche) in order to allow at any time, the comparison of all components with a new carburettor. **Any kind of processing, connection, polishing, addition or removal of material is forbidden. The only components of the carburettor that can be changed are those described in the table in the engine fiche (technical fiche).**

Cooling: Use of **only one (1)** radiator: it is mandatory to use the original radiator supplied with the engine, which must comply with the dimensions indicated in the table at art. 11.

Clutch: Concerning the clutch housing with holes, it is mandatory to use the cover according to the engine identification sheet (technical fiche) supplied by VORTEX.

Chassis: Brand and model must hold current CIK FIA homologation or CIK FIA homologation of the previous homologation period, the use of bodyworks and rear wheel protection RDS RT Karting ACI SPORT art. 4.14 and 4.15 is mandatory.

Front fairing: Mounting kit complying with the RDS RT Karting ACI SPORT, art. 4.14.3 – art. 4.14.4 comma a-b-c-d-e-f-g.

Pre-Race checks: Every driver can use:

2 chassis of the same **Brand**

2 engines.

1.4 SUPER ROK

Engine: Vortex ROK DVS 125cc complying with the current ROK DVS engine identification sheet (technical fiche) approved by ACI SPORT.

Carburettor: IBEA DVS branded Rok DVS, it must maintain its original structure, it shall mount the same parts and shall be the same as the ones in the engine identification sheet (technical fiche), in order to allow at any time, the comparison of all components with a new carburettor. **Any kind of processing, connection, polishing, addition or removal of material is forbidden.**

Cooling: Use of **only one (1)** radiator, complying with the dimensions indicated in the table of Annex A.

Chassis: Brand and model must hold current CIK FIA homologation or CIK FIA homologation of the previous homologation period, the use of bodyworks and rear wheel protection RDS RT Karting ACI SPORT art. 4.14 and 4.15 is mandatory.

Front fairing: Mounting kit complying with the RDS RT Karting ACI SPORT, art. 4.14.3 – art. 4.14.4 comma a-b-c-d-e-f-g.

Pre-Race checks: Every driver can use:

2 chassis of the same **Brand**

2 engines.

1.5 SHIFTER ROK

Engine: Vortex SHIFTER ROK 125cc complying with the current SHIFTER ROK engine identification sheet (technical fiche) approved by ACI SPORT.

Carburettor: DELL'ORTO VSH 30, it must maintain its original structure, it shall mount the same parts and shall be the same as the ones in the engine identification sheet (technical fiche) in



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

order to allow at any time, the comparison of all components with a new carburettor. **Any kind of processing, connection, polishing, addition or removal of material is forbidden.**

Cooling: Use of **only one (1)** radiator, complying with the dimensions indicated in the table of Annex A.

Chassis: Brand and model must hold current CIK FIA homologation or CIK FIA homologation of the previous homologation period, the use of bodyworks and rear wheel protection RDS RT Karting ACI SPORT art 4.14 and 4.15 is mandatory.

Front fairing: Mounting kit complying with the RDS RT Karting ACI SPORT, art. 4.14.3 – art. 4.14.4 comma a-b-c-d-e-f-g.

Pre-Race checks: Every driver can use:

2 chassis of the same **Brand**

2 engines.

2. TIRES

2.1 For the **Mini Rok** category, admitted tires are the following:

SLICK tires: LeVanto KRT 10x4.00-5/11x5.00-5

RAIN tires: LeVanto MRT WET 10x4.00-5''/11x5.00-5''

2.2 For **Junior Rok, Senior Rok, Expert Rok, Expert Rok Plus, Super Rok and Shifter Rok** categories, admitted tires are the following:

SLICK tires: LeVanto KRT 10x4.50-5/11x7.10-5

RAIN tires: Bridgestone YNP 4,5/10,0 - 5 + 6,0/11,0 – 5

The Specific Race Regulation of each ROK CUP TROPHY race might provide different provisions regarding the tyres models to be used.

With reference to the tire tolerances please note that the tolerance on the circumference is $\pm 20\text{mm}$ measured with tire mounted on the wheel and with operating pressure (1 bar).

This measurement will be made by the technical Scrutineer in charge of the race.

2.3 PARC FERME' FOR TIRES

All the Rok Cup Trophy categories are allowed to use only one (1) set of new slick tires (2 front slick tires + 2 rear slick tires) for each single race.

The competitor can decide to use 1 optional slick tyre (1 front slick tyre or 1 rear slick tyre).

The complete set of tires and the optional tyre will be delivered at the parc fermé, upon a VOUCHER purchasable on the track at the **Rok Center**.

The use of minimum one (1) set / maximum two (2) sets of RAIN tyres per race is admitted.

(1 set = 2 front rain tires + 2 rear rain tires), new or used at the entrant's discretion, provision to be included in the Specific Race Regulations, under penalty of nullity.

The number of tires, the brand and the model of tires as well as the management of tires might be different for some ROK CUP TROPHY races and it will be specified in the Specific Race Regulation.



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

The Specific Race Regulation of each race might also allow, if specified, the distribution and management of both slick and rain tyres as described in: RDS ACI SPORT 2022 Karting Technical Regulations, art. 4.16/4.16.1/4.16.2/4.16.3.

3. FUEL AND LUBRICANT FOR FUEL MIXTURE

For all Rok Cup Trophy categories the lubricant to be used for the fuel mixture is **ENI KART 2T**. For the checks, please refer to Art. 4.19 of the RDS ACI SPORT and Karting Technical Regulations.

4. LUBRICANT

Counter shafts mechanism chambers and transmission gear set chamber must be filled in with oil.

5. MINIMUM WEIGHT FOR EACH CATEGORY

The minimum weight of kart + driver (in race conditions) for each category is the following:

MINI ROK	110 Kg
JUNIOR ROK	145 Kg
SENIOR ROK	160 Kg
ROK EXPERT	170 Kg
ROK EXPERT PLUS	170 Kg
SUPER ROK	155 Kg
SHIFTER ROK	180 Kg

6. TECHNICAL CHECKS

During the technical checks, the specifications in this Technical Regulation, the engine identification sheets (technical fiches) duly approved by ACI SPORT, registered together with this regulation, and the RDS ACI SPORT Karting Technical Regulation will be taken into consideration. **The tolerances described in the engine identification sheets (technical fiches) are construction tolerances.** Moreover, the ACI SPORT Technical Scrutineer, upon authorization request to the Sports Marshals, may at any time refer to any comparisons to value the conformity of any parts, with details provided by the promoter.

The Technical Scrutineers also have the possibility, upon authorization request to the Sport Marshals, to replace any part of the engine with an original spare part supplied by the promoter.

6.1 MARKING

Each part of the following engines MINI ROK, ROK GP, ROK GP JUNIOR, ROK DVS, ROK SHIFTER has a mark which allows the recognition and ensures the originality and the conformity of the part itself during the technical checks.

The marks used for marking the parts are those below:



6.2 EXHAUST MANIFOLD AND INLET GASKETS

Exhaust manifolds and inlet gaskets sealing cannot be anyhow decreased, restricted or blocked.



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

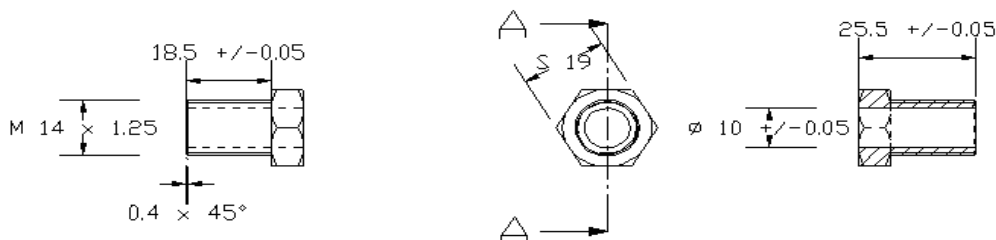
7. PROCEDURE FOR MEASURING THE VOLUME OF THE COMBUSTION CHAMBER

1. Remove the engine from the chassis;
2. Wait until the engine is at room temperature (the organizer must supply appropriate cooling fans);
3. Remove the cylinder head to check the protrusion of the spark plug inside the combustion chamber;
4. Remove the spark plug (check the 18.5 mm dimension);
5. Screw the plug insert in place of the spark plug (the plug insert, tightened on the cylinder head, must not extend beyond the upper part of the combustion chamber. It must be fixed to the head cylinder exactly in the same way as the spark plug measuring 18.5mm);
6. Make the top part of the piston and the periphery of the cylinder waterproof using grease;
7. Place the piston at top dead centre and block the crankshaft;
8. Carefully remove the excess grease;
9. Make sure the engine lies flat;
10. Place the cylinder head back and screw it in at the tightening torque recommended by the Manufacturer;
11. With a laboratory graduated burette (mechanical A-type or electronic), fill the combustion chamber with “**CASTROL ATF DEXRON**” VI (6) “**RED**” type OIL to the uppermost part of the top edge of the plug insert;
12. The measured volume must be as requested and determined by RDS and described in the following table, for each class.

Table of the minimum value of the combustion chamber volume, of the classes mentioned below:

Class	Volume of the combustion chamber	
MINI ROK	4,8cm ³ . + insert 2 cm ³	6,8cm³ Min.
JUNIOR ROK – ROK GP Junior	7,5cm ³ + insert 2 cm ³	9,5cm³ Min.
SENIOR ROK - ROK GP	7,5cm ³ + insert 2 cm ³	9,5cm³ Min.
SUPER ROK – ROK DVS	9 cm ³ + insert 2 cm ³	11cm³ Min.
SHIFTER ROK	11 cm ³ + insert 2 cm ³	13cm³ Min.

Dimensions Plug Insert



$$\text{Volume Inserto} = \pi \times 1 \times 2.55 / 4 = 2 \text{ cm}^3/\text{cc}$$



ROK CUP TROPHY 2022

TECHNICAL REGULATION

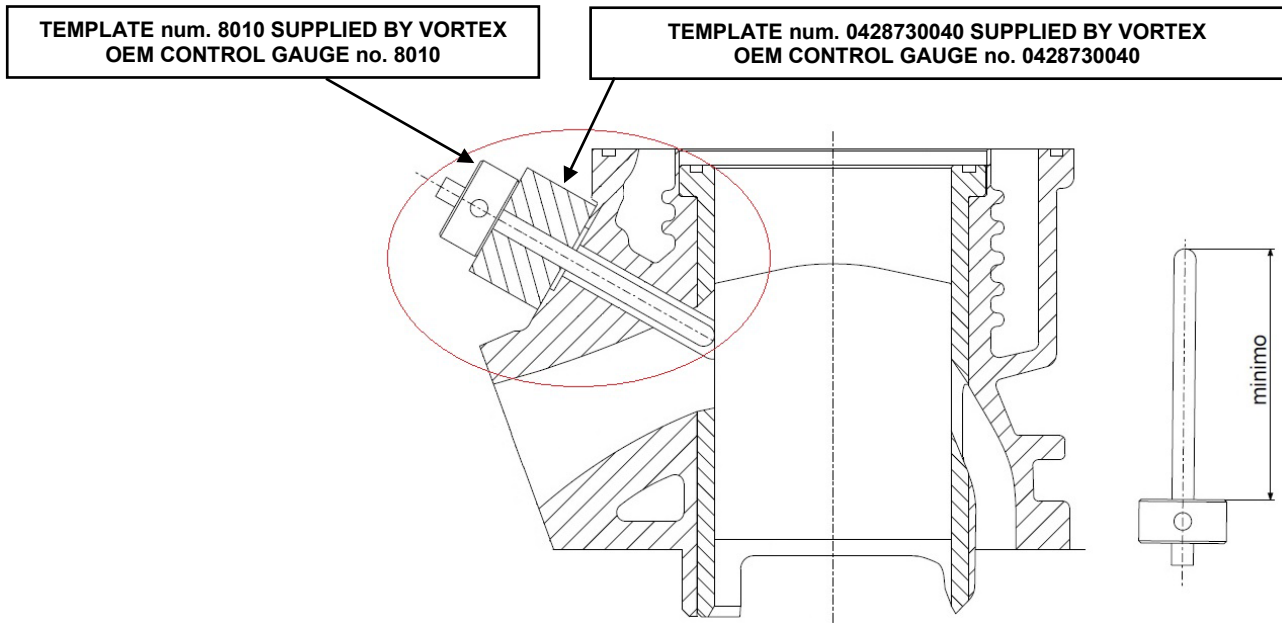
(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

7.1 PROCEDURE FOR MEASURING THE MINIMUM DISTANCE BETWEEN THE SEAT OF THE POWER VALVE AND THE PISTON

1. Remove the engine from the chassis;
2. Wait until the engine is at room temperature (the organizer must supply appropriate cooling fans);
3. Remove the valve system;
4. Substitute the valve assembly with the measuring gauge number 0428730040 supplied by Vortex.
5. Let the gauge 8010 slide in pushing it against the piston with out excess force.
6. Block the measuring rod with the grub screw on the rod support.
7. Take out the gauge 8010 and proceed with the measurement with a caliper.
8. The minimum distance measured must be the one established and described in the following table, for each class.

Table of the minimum value of the combustion chamber volume, of the classes mentioned below

Classe	Min. distance between the seat of the power valve and the piston
ROK JUNIOR - ROK SENIOR ROK EXPERT - ROK EXPERT PLUS	57.22mm
ROK SUPER	57.02mm



8. TOOL FOR MEASURING THE ENGINE DISTRIBUTION

For all Rok categories where the control is required, the exhaust angular reading, exhaust, transfers and gap must be measured with a 0,20 mm thick and 5 mm wide wedge (see drawing below).

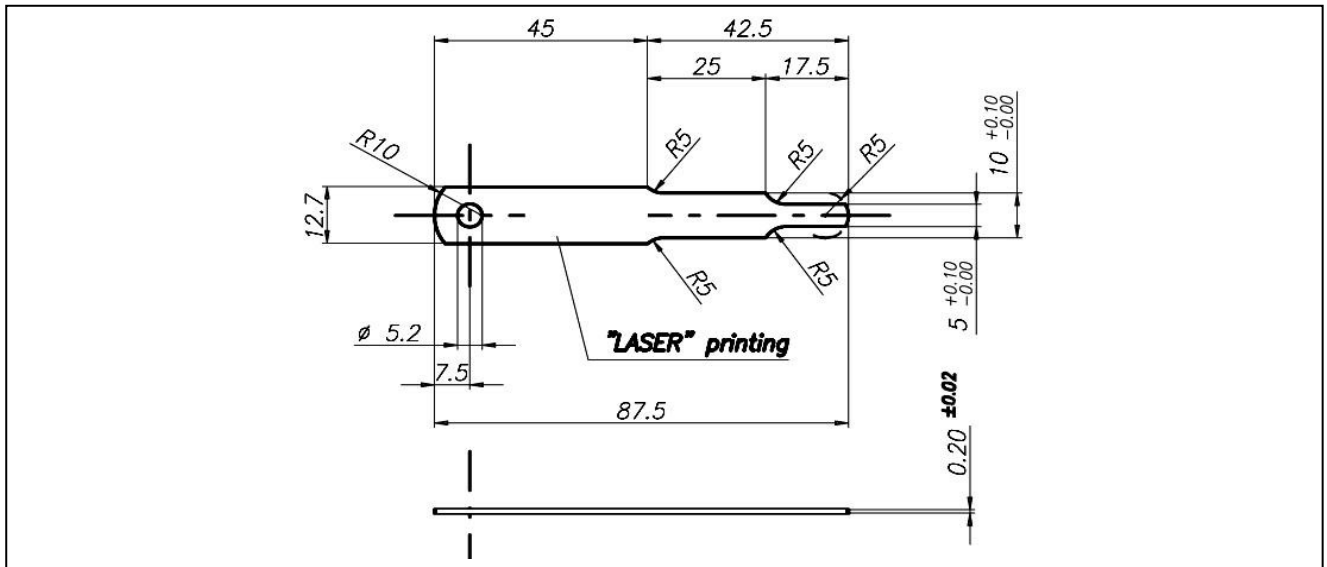


ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

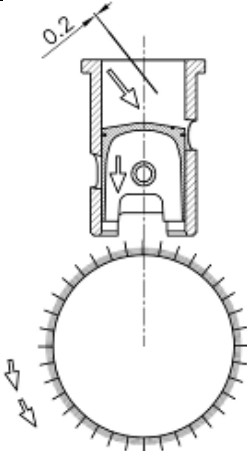
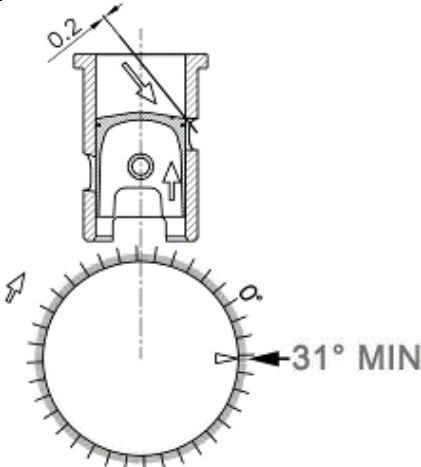
The reading is made by using a digital display with encoder measuring device, or with minimum diameter 200 mm graduated disc.



8.1 CONTROL OF THE ADMISSION GAP OF MINI ROK ENGINE

<p>RUOTARE IN SENSO ORARIO PER ALZARE IL PISTONE E PERMETTERE L'INSERIMENTO DELLO SPESSIMETRO CONTRO LO SPIGOLO INFERIORE DELL'ASPIRAZIONE</p> <p>TURN CLOCKWISE AND LIFT THE PISTON TO ALLOW THE INSERTION OF THE FEELER GAUGE AGAINST THE LOWER EXHAUST EDGE</p>	<p>RUOTARE IN SENSO ANTIORARIO PER ABBASSARE IL PISTONE FINO AD INCONTRARE LO SPESSIMETRO APPOGGIATO ALLO SPIGOLO DELL'ASPIRAZIONE IN QUESTA FASE SETTARE LA POSIZIONE DI 0°</p> <p>TURN COUNTERCLOCKWISE AND LOWER THE PISTON UNTIL IT MEETS THE GAUGE RESTING AT THE EXHAUST EDGE, AT THIS STAGE SET THE SCALE ON THE POSITION OF 0 DEGREES</p>

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

	
<p>LIBERARE LO SPESSIMETRO QUINDI RUOTANDO IN SENSO ANTIORARIO ABBASSARE IL PISTONE PER PERMETTERE L'INSERIMENTO DELLO SPESSIMETRO SOTTO LO SPIGOLO SUPERIORE DELLO SCARICO</p> <p>RELEASE THE FEELER GAUGE AND TURNING COUNTERCLOCKWISE LOWER THE PISTON TO ALLOW THE INSERTION OF THE FEELER UNDER THE UPPER EDGE OF THE EXHAUST</p>	<p>RUOTANDO IN SENSO CONTRARIO ALZARE IL PISTONE FINO AD INCONTRARE LO SPESSIMETRO APPOGGIATO ALLO SPIGOLO DELLO SCARICO E CONTROLLARE CHE L'ANGOLO DI SPOSTAMENTO NON SIA INFERIORE A 31°</p> <p>TURN CLOCKWISE TO LIFT THE PISTON UNTIL IT MEETS THE FEELER GAUGE RESTING AT THE EXHAUST EDGE. AT THIS STAGE CHECK THAT THE EDGE OF DISPLACEMENTS OF THE VERNIER MATCH NOT LESS THAN 31 DEGREES</p> <p>the edge of displacements of the vernier match not less than 31 degrees</p>

8.2 SQUISH HEIGHT MEASUREMENT

Squish height measurement must be done by means of 1.5 mm size round soldering wire.

8.3 TECHNICAL CHECK CONSULTANT AND TECHNICAL CHECKS

On each race and for the technical checks of the engine only, the Promoter may request the presence of his own specialized technician to support the ACI Technical Representative. The control of the chassis and other details is assigned to ACI Technical Scrutineers. The procedures for the technical check of the engine and/or any other parts must be performed only by Technical Scrutineers appointed by ACI for the event, in compliance with the 2022 RDS Karting; for any complaints and/or appeals we refer to RNS ACI SPORT and 2022 RDS Sporting Karting.

Moreover, the Sporting Scrutineers may request the parts to be deeper checked at the Manufacturer's headquarters. This request, duly justified and described, must be done by the Technical Scrutineer to the Sporting Scrutineers.

The Promoter or the Organizer will deliver the part/s duly sealed with the relating official document of the Sporting Scrutineers and Technical Scrutineers to the Manufacturer of the part/s.

The parts will be checked at the Manufacturer's seat, by the presence of the Entrant and the Technical Scrutineer.

Tests/crash tests can be done on such parts.

The parts no longer usable will be replaced by the Promoter OTK Kart Group srl only in case of proven compliance.

The parts no longer usable and replaced by the Promoter OTK Kart Group srl will not be returned to the Entrant.

The Technical Scrutineer will then send the check result to the President of the Sporting Scrutineers.



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

The logistic costs will be paid by the Promoter OTK Kart Group srl if the part/s is/are respecting the Regulations, otherwise the entrant will pay them.

9. CLUTCH

For the **Junior ROK - Senior ROK - Expert ROK - Expert Plus ROK** classes, the following clutch checks are admitted:

- from stationary position in pre-grid and at the end of the race, in order to verify the first engagement of the clutch at 4000rpm (after checking the whole weight); the clutch must be 100% direct-drive at the minimum 5000 rpm in all conditions;
- through the UNILOG ** data acquisition system provided by the Promoter, in order to verify the direct-drive of the clutch in all conditions.

For the **Mini Rok** class, the following clutch checks are admitted:

- from stationary position in pre-grid and at the end of the race, in order to verify the first engagement of the clutch at 3500rpm (after checking the whole weight); the clutch must be 100% direct-drive at the minimum 4500 rpm in all conditions;
- through the UNILOG ** data acquisition system provided by the Promoter, in order to verify the direct-drive of the clutch in all conditions.

****Any braking or damage to the UNILOG device supplied for the event is under the competitor's responsibility.**

10. RACING SPORTSWEAR

It is mandatory for drivers of all Rok Cup Trophy categories to use racing sportswear (**racing suit and helmet**) complying with homologation and safety measures provided by ACI SPORT and CIK-FIA.



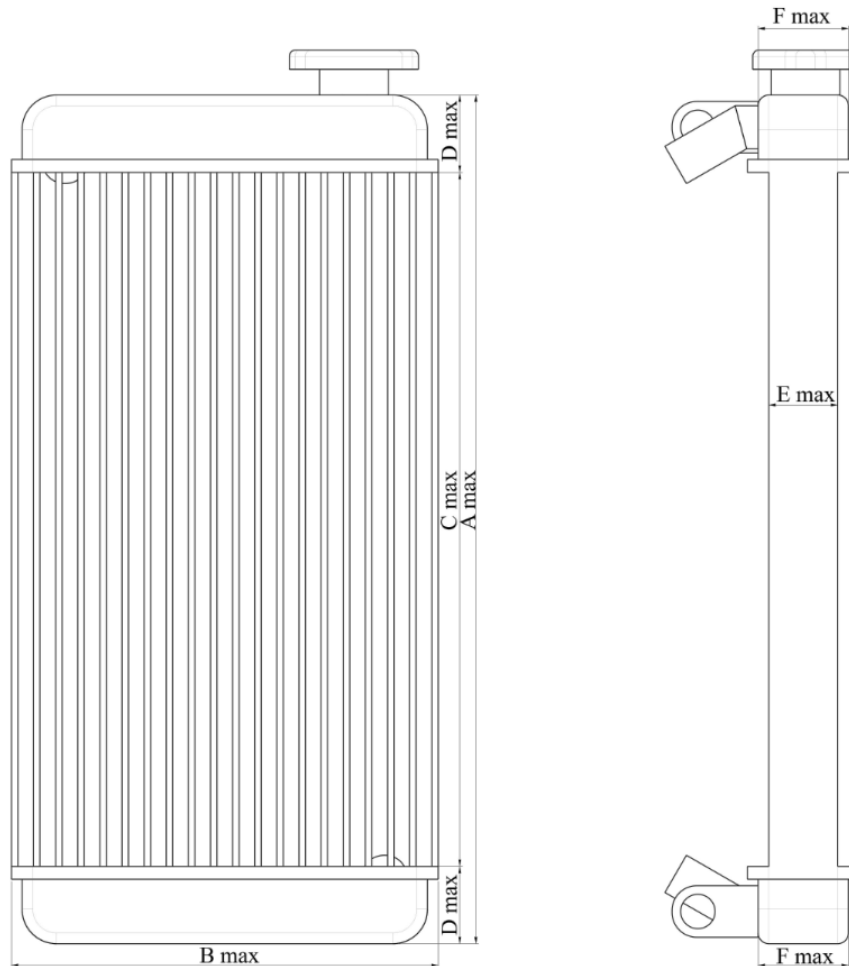
ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

ART. 11 COOLING

Dimensions and characteristics of the radiators admitted in the different ROK classes



	A	B	C	D	E	F
ROK JUNIOR – ROK GP	480 ±10	196 ±3	394 ±7.5	43 ±2.5	31 ±2	44 ±2
ROK DVS – ROK SHIFTER	465 max	265 max	395 max	40 max	45 max	60 max



ROK CUP TROPHY 2022

TECHNICAL REGULATION

(This is just a translation, in case of interpretative conflicts, the Italian text approved by ACI SPORT will prevail)

11.1 RADIATOR ROK Junior – ROK Senior – ROK Expert – ROK Expert Plus

The pictures reported are those of the only radiator admitted for the Rok Junior – Rok Senior – Rok Expert – Rok Expert Plus categories.

