

RACEGUIDE

2023 FIA WEC



Round 3
2023 FIA World
Endurance
Championship
(FIA WEC)

TOTAL ENERGIES 6 HEURES OF SPA-FRANCORCHAMPS



SATURDAY, APRIL 29



The 2023 FIA WEC's second race in April, two weeks after Portimao

The Porsche and Ferrari Hypercars have both tested at Spa-Francorchamps

A full-scale dress-rehearsal ahead of Le Mans

Toyota/Michelin unbeaten in the 6 Hours of Spa-Francorchamps since 2017

#PERFORMANCE MADE TO LAST



THE CIRCUIT

CIRCUIT DE SPA-FRANCORCHAMPS

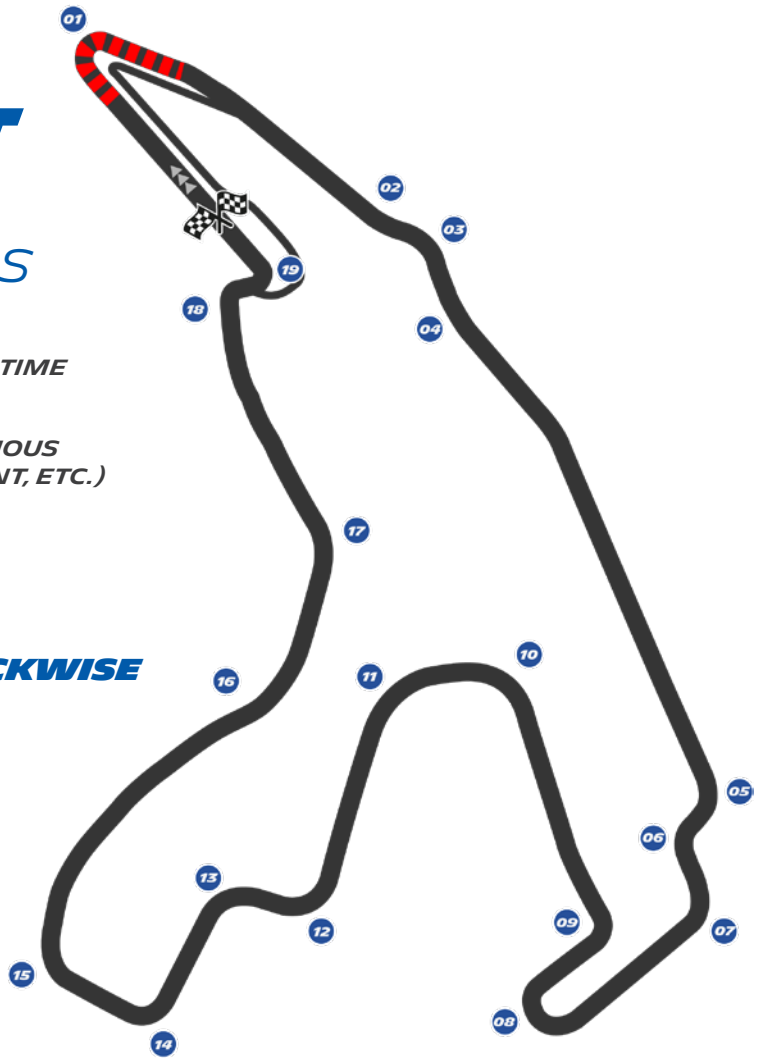
- » HOSTING A ROUND OF THE FIA WEC FOR THE 11TH TIME
- » FAST AND HILLY
- » INCLUDES SOME OF MOTOR RACING'S MOST FAMOUS CORNERS (EAU ROUGE, RAIDILLON, BLANCHIMONT, ETC.)
- » PARTIALLY RESURFACED IN 2022

7.004KM / **19 TURNS** / **CLOCKWISE**



FASTEST RACE LAP (FIA WEC):

STÉPHANE SARRAZIN
(Toyota TS050 Hybrid/Michelin),
1m53.658s (2017)



MICHELIN STATISTIC

The recent 6 Hours of Portimao saw Michelin claim its 80th outright FIA World Endurance Championship victory. Since the series' creation in 2012, Michelin has won every round with five different partners: Toyota (41 wins), Audi (17), Porsche (17), Rebellion (3) and Alpine (2).



EXPERT OPINION

ALLAN McNISH

Three-time Le Mans 24 Hours winner
2013 FIA World Endurance Champion

Round up

Toyota have a 100% record in 2023 with another win in Portimão, but it was not straight forward for the Japanese team with the #7 having a technical issue, so at the flag it was 5 Manufacturers in the top 5 with Ferrari in 2nd, Porsche 3rd, Cadillac 4th, Peugeot 5th.

With a total of 13 Hypercars in Spa, it will be their last "racing test" before the big one, Le Mans.

Spa

Spa is another legendary track with incredible corners like Eau Rouge and Blanchimont, but with the improvement in car and tire technology, these corners are now slightly less of a challenge but meaning the key corners have changed to Les Combes, Pohoun, Fagnes.

In a car you need very good aerodynamic efficiency, with a balance of downforce for the corners in the middle sector 2, but not too much aerodynamic drag for high speed sectors 1 & 3.

For the tire it is a very tough challenge, long high speed straights combined with an incredible vertical and lateral load in the compression of Eau Rouge, to all the medium speed long radius corners in the middle of the track, to the hard acceleration out of the Bus Stop and La Source.

SPA WILL GIVE US MORE OF A VIEW ABOUT WHAT WE WILL EXPECT IN LE MANS

All put a great strain on initially the front left tire which starts to slide but then over a stint, or double stint, the left rear tire is tested to the limit and loses entry stability into the corner and traction coming out.

Now Spa can often be wet, and when it rains.....it rains, so a tire is needed that evacuates a lot of water and does not

aquaplane, including the front tire, but also one that can go from heavy rain to a relatively dry track avoiding unnecessary pit stops.

What it takes to win

A key point of race performance is enough straight line speed to overtake traffic easily on the straights but also enough downforce to overtake traffic in the medium speed corners in the middle sector.

But over the race distance you really need to focus on keeping the car in balance and tire grip as long as possible as that will deliver so much lap time in the second stint of the tire.

Predictions

Toyota have the cards stacked in their favour, but as we saw in Portimão, Ferrari, Porsche and Cadillac's are learning and getting closer and Spa will give us more of a view about what we will expect in Le Mans.



THE 2022 RACE



- » **Winners:** Conway/Kobayashi/Lopez (Toyota GR010 Hybrid/Michelin), 103 laps

- » **Pole-position:** Olivier Pla (Glickenhaus 007 LMH/Michelin), 2m2.771s

- » **Fastest race lap:** Sébastien Buemi (Toyota GR010 Hybrid/Michelin), 2m5.298s

- » **Top speed:** Kamui Kobayashi (Toyota GR010 Hybrid/Michelin), 319.6kph

- » 1st FIA WEC pole-position for Scuderia Glickenhaus

- » Toyota back on top in the race

- » Rain and several interruptions to the race

- » The entire MICHELIN Pilot Sport range used

- » The two Porsche/Michelin LMGTE Pros collided at the start

6 HOURS OF SPA-FRANCORCHAMPS

11TH EDITION

» **ROUND 3 - 2023 FIA WORLD ENDURANCE CHAMPIONSHIP (FIA WEC)**



TIMETABLE

THURSDAY, APRIL 27	
11:30am	Free Practice 1 (90 minutes)
4:20pm	Free Practice 2 (90 minutes)
FRIDAY, APRIL 28	
11:00am	Free Practice 3 (60 minutes)
5:00pm	LMGTE Qualifying (10 minutes)
5:50pm	Hypercar Qualifying (10 minutes)
SATURDAY, APRIL 29	
12:45pm	6 Hours of Spa-Francorchamps

Local time • SOURCE: f1wec.com
Informations susceptibles d'être modifiées



PIERRE ALVES

Endurance Racing Manager, Michelin Motorsport

"It was at Spa-Francorchamps in 2021 that the Hypercar prototypes made their FIA WEC debut, equipped with an all-new range of entirely simulator-developed MICHELIN Pilot Sports. Porsche, Ferrari, Cadillac, Peugeot, Vanwall and Glickenhaus have since joined Toyota in the championship's headlining class and Michelin has further developed its range to ensure its partners benefit from competitive, lasting performance. Spa-Francorchamps is very hard on tires due to the loads they have to withstand there, as well as to the high speeds the cars reach. Now that tire-warming systems may no longer be used in the FIA WEC, tire pressures will be a particularly important factor this weekend, because this is a circuit where pressures fluctuate significantly. Our technical staff will therefore work closely with the teams' drivers and engineers to optimize this aspect of the cars' set-ups. The track was resurfaced ahead of last year's race and the gravel traps were modified, with a big concrete step added between the outside of the kerbs and the run-off areas which can do damage to the tires' sidewalls. The weather is often unsettled here, of course, so we might get a chance to evaluate our new rain tire in the race."

TIRE PRESSURES WILL BE A PARTICULARLY IMPORTANT FACTOR THIS WEEKEND



THE MICHELIN RANGE

6 HOURS OF SPA-FRANCORCHAMPS

27 OF THE 38 CARS
RACING ON MICHELIN TIRES



HYPERCAR

LM GTE AM

A new range of MICHELIN Pilot Sport Slicks.

Michelin tires are the preferred choice of all the LMGTE Am teams

SLICKS

Soft cold: for non-abrasive track surfaces, low temperatures (less than 15°C) or at night.

Soft hot: for average-wearing or 'rubbered' track surfaces, temperatures in excess of 15°C (core range tire).

Medium: abrasive track surfaces, demanding track configurations, temperatures in excess of 30°C.

WET-WEATHER TIRES

Tires for light to heavy rain..

SLICKS

Soft hot: core range tire, temperatures between 15 and 35°C.

Medium hot: for abrasive track surfaces and/or temperatures in excess of 30°C.

RAIN TIRES

'Drying' Wets and Full Wets: a broad operating window and the same tread pattern, but a different construction.



SIZES AVAILABLE:

29/71-18 • 31/71-18 • 34/71-18

Width (cm) / exterior diameter (cm) x interior diameter (inches).

SIZES AVAILABLE:

Front: 30/68-18 • Rear: 31/71-18

Width (cm) / exterior diameter (cm) x interior diameter (inches).

SLICKS ALLOCATION









	HYPERCAR	LM GTE AM
Free Practice	12 tires	16 tires
Qualifying + Race	18 tires	26 tires













HYPERCAR










N°2	CADILLAC RACING	Cadillac V-LMDh	BAMBER/LYNN/WESTBROOK	
N°3	CADILLAC RACING	Cadillac V-LMDh	BOURDAIS/VAN DER ZANDE/AITKEN	
N°4	FLOYD VANWALL RACING TEAM	Vanwall Vandervell 680	DILLMANN/GUERRIERI/VILLENEUVE	
N°5	PORSCHE PENSKE MOTORSPORT	Porsche 963	CAMERON/CHRISTENSEN/MAKOWIECKI	
N°6	PORSCHE PENSKE MOTORSPORT	Porsche 963	ESTRE/LOTTERER/VANTHOOR	
N°7	TOYOTA GAZOO RACING	Toyota GR010 Hybrid	CONWAY/KOBAYASHI/LOPEZ	
N°8	TOYOTA GAZOO RACING	Toyota GR010 Hybrid	BUEMI/HARTLEY/HIRAKAWA	
N°38	HERTZ TEAM JOTA	Porsche 963	DA COSTA/STEVENS/ YE	
N°50	FERRARI AF CORSE	Ferrari 499P	FUOCO/MOLINA/NIELSEN	
N°51	FERRARI AF CORSE	Ferrari 499P	PIER GUIDI/CALADO/GIOVINAZZI	
N°93	PEUGEOT TOTALENERGIES	Peugeot 9X8	DI RESTA/JENSEN/VERGNE	
N°94	PEUGEOT TOTALENERGIES	Peugeot 9X8	DUVAL/MENEZES/MULLER	
N°708	GLICKENHAUS RACING	Glickenhaus 007 LMH	DUMAS/BRISCOE/PLA	

LM GTE AM





N°21	AF CORSE	Ferrari 488 GTE Evo	CONSTANTINI/MANN/DE PAUW	
N°25	ORT BY TF	Aston Martin Vantage	AL HARTY/DINAN/EASTWOOD	
N°33	CORVETTE RACING	Corvette C8/R	KEATING/VARRONE/CATSBURG	
N°54	AF CORSE	Ferrari 488 GTE Evo	FLOHR/CASTELLACCI/RIGON	
N°56	PROJECT 1	Porsche 911 RSR	HYETT/JEANNETTE/CAIROLI	
N°57	KESSEL RACING	Ferrari 488 GTE Evo	KIMURA/HUFFAKER/SERRA	
N°60	IRON LYNX	Porsche 911 RSR	SCHIAVONI/CRESSONI/PICARIELLO	
N°77	DEMPSEY-PROTON	Porsche 911 RSR	RIED/PEDERSEN/ANDLAUER	
N°83	RICHARD MILLE AF CORSE	Ferrari 488 GTE Evo	PEREZ-COMPANC/WADOUX/ROVERA	
N°85	IRON DAMES	Porsche 911 RSR	BOVY/GATTING/FREY	
N°86	GR RACING	Porsche 911 RSR	WAINWRIGHT/PERA/BARKER	
N°88	PROTON COMPETITION	Porsche 911 RSR	HARDWICK/ROBICHON/TINCKNELL	
N°98	NORTHWEST AMR	Aston Martin Vantage	DALLA LANA/TBA/THIIM	
N°777	D'STATION RACING	Aston Martin Vantage	HOSHINO/STEVENSON/FUJII	

HYPERCAR
FIA WORLD ENDURANCE HYPERCAR CHAMPIONSHIP

MANUFACTURERS		 17/03	 16/04	 29/04	 10-11/06	 9/07	 10/10	 4/11	TOTAL
1 st	TOYOTA	 38	26						64
2 nd	FERRARI	 24	18						42
3 rd	CADILLAC	 18	15						30

DRIVERS		 17/03	 16/04	 29/04	 10-11/06	 9/07	 10/10	 4/11	TOTAL
1 st	BRENDON HARTLEY	 27	26						53
1 st	KAZUKI NAKAJIMA	 27	26						53
1 st	SÉBASTIEN BUEMI	 27	26						53
2 nd	ANTONIO FUOCO	 24	18						42
2 nd	MIGUEL MOLINA	 24	18						42
2 nd	NICKLAS NIELSEN	 24	18						42
3 rd	JOSE MARIA LOPEZ	 38	2						40
3 rd	KAMUI KOBAYASHI	 38	2						40
3 rd	MIKE CONWAY	 38	2						40

LM GTE AM
FIA ENDURANCE TROPHY - LM GTE AM

TEAMS		 17/03	 16/04	 29/04	 10-11/06	 9/07	 10/10	 4/11	TOTAL
1 st	CORVETTE RACING	 38	26						64
2 nd	DEMPSEY - PROTON RACING	 27	6						33
3 rd	AF CORSE	 18	10						28

DRIVERS		 17/03	 16/04	 29/04	 10-11/06	 9/07	 10/10	 4/11	TOTAL
1 st	BEN KEATING	 38	26						64
1 st	NICKY CATSBURG	 38	26						64
1 st	NICOLAS VARRONE	 38	26						64
2 nd	CHRISTIAN RIED	 27	6						33
2 nd	JULIEN ANDLAUER	 27	6						33
2 nd	MIKKEL PEDERSEN	 27	6						33
3 rd	SIMON MANN	 15	12						28
3 rd	ULYSSE DE PAUW	 15	12						28

MICHELIN AND SPA-FRANCORCHAMPS



» Through Raidillon Eau Rouge, the left-hand tires of the Hypercar prototypes are each subjected to a load of 1,500kg, making it the toughest corner of the season for tires

» Michelin won the 1,000km of Spa every year from 2002 to 2011

» 10 years ago, Michelin monopolized the 6 Hours of Spa-Francorchamps podium with Audi

» During a lap of Spa-Francorchamps, MICHELIN Pilot Sport endurance racing tires rotate 3,142 times

» The FIA WEC's new Hypercar prototypes made their first public

appearance at the 2021 6 Hours of Spa-Francorchamps equipped with a new range of MICHELIN Pilot Sports developed entirely on the simulator

» Michelin has won at Spa-Francorchamps in the Formula 1 World Championship, the Sports car World Championship, the FIA WEC, the European Le Mans Series, the BPR, the FIA GT Championship and the Blancpain Series, etc.

» In 2018, the Evo version of the Porsche 919 Hybrid/Michelin established a new record for Spa-Francorchamps (1m41.770s) in the hands of Neel Jani

ENDURANCE RACING: AN ACCELERATOR OF INNOVATION FOR MICHELIN

Michelin has long seen motorsport in general, and endurance racing and Le Mans in particular, as a valuable means to speed up the development of its technological innovations. For example, Michelin was the first to run slick tires at Le Mans, in 1967...



Following its introduction of radial technology at the Le Mans 24 Hours in 1951, Michelin was the first

manufacturer to take slick tires to the famous French race. The year was 1967 and the car was the Alpine A210. Doing away with a tread pattern means there is more rubber in contact with the ground at any given moment, resulting in superior performance in dry conditions, although the technology calls for significant work on the compounds and materials employed to make this type of tire. The Michelin slick-equipped Alpine A210 of Mauro Bianchi/Jean Vinatier came 13th overall, in addition to claiming the P1.6 class win. Michelin went on to introduce radial slicks in rallying and motorcycle grand prix racing, and won with the technology both in F1 and at Le Mans in 1978.



SPA-FRANCORCHAMPS TRIVIA

> Spa has been a famed spa resort since Roman times.

> Europe's first casino (La Redoute) opened in Spa in 1762.

> The original 14.981km circuit inaugurated in 1921 formed a triangle that linked the towns of Francorchamps, Malmedy and Stavelot.

MICHELIN GREEN GUIDE

Explore Belgium's charming towns and cities, museums and countryside, and learn about its culinary specialities and local beers with the Michelin Green Guide.



2023

WEC CALENDAR



MARCH 17
1,000 Miles of Sebring



APRIL 16
6 Hours of Portimão



APRIL 29
6 Hours
of Spa-Francorchamps



JUNE 10-11
Le Mans 24 Hours



JULY 9
6 Hours of Monza



SEPTEMBER 10
6 Hours of Fuji



SEPTEMBER 4
8 Hours of Bahrain



FIA WEC TIRE REGULATIONS

Michelin has been appointed as the exclusive tire supplier for the FIA WEC's Hypercar prototypes.

Teams competing in LMGTE Am may work with the tire manufacturer of their choice. Michelin has been nominated by all the competitors in this class.

TIRE ALLOCATIONS

	Free Practice	Qualifying + Race	
		6-hour races	8-hour races
HYPERCAR	12	18	26
LM GTE AM	16	26	34

SLICKS

Hypercars:

Three types of slick for the season for all of the cars, with two types of slick to be nominated 48 hours before the Prologue test. Two types of slick to be nominated 48 hours at the latest before the start of scrutineering (three types for Le Mans).

- Tire manufacturers must draw up identical usage indications (tire pressures, camber) for all competitors. Non-compliance with these indications will result in the competitor being reported to the Sporting Stewards.
- In the case of 29/34 tires, tires will be allocated to each competitor at meetings by a random process carried out by the Technical Delegates. These tires to count for the Qualifying + Race allocation. Procedure established by the WEC Committee.
- In the case of 31/31 tires, a procedure to collect and redistribute tires established by the WEC Committee.
- The WEC Committee may make changes to the random tire allocation and/or tire collection/redistribution procedures at any point in the season.

LM GTE Am:

Only those tire specifications nominated for the 2022 championship may be used in 2023.

All the specifications for the season must be declared to the Technical Delegate before the start of the season.

Three types of slick for the season for all of the cars. Two types of slick for each race (three types for Le Mans).

RAIN TIRES

Rain tires may only be used if Race Control declares the track to be wet (Free Practice, Qualifying, Race). No per-event quotas.

LM GTE Am: One type of rain tire and one type of intermediate tire per model entered 48 hours prior to the Prologue. The re-cutting of tread patterns is not authorized.

Number of authorized specifications

	Slick tires			Wet-weather tires
	Le Mans 24 Hours	Other races	Total for the season	
HYPERCAR	3	2	3	1
LM GTE AM	3	2	3	2

Altering the property of a tire by either chemical or mechanical means is not permitted, except for the removal of debris picked up on the track.

The tires' (fil ou) profile may not be modified or re-cut.

Processes involving a direct or indirect test aimed at modifying the temperature of a tire (in relation to ambient temperature) are not permitted.

In the course of the season, a competitor may change tire supplier no more than once.

Infringement of the tire allowance: Stop & Go of 2 minutes per tire.

Breach of tire-warming rules: three-minute Stop&Go during the race.

A maximum of four mechanics and two tire guns for wheel changes during pit stops. Tire changes are not authorized while the car is being refueled.

1 tire technician authorized to check tire temperatures and pressures.

Tire changes are only authorized a) on the grid up to the five-minute board, b) in front of the car's garage during a pit stop or inside the garage if more extensive work on the car is required, or c) on the track if the race is suspended.

Tires are identified by RFID chips and bar codes. All tire serial numbers must be provided to the Technical Delegates 48 hours in advance.

HEIGHTEN YOUR SENSES



Enjoy all our latest
tire ranges.



MICHELIN
Pilot Sport 5



MICHELIN
Road 6



MICHELIN
Power Cup



MICHELIN