

**TECHNICAL INTRODUCTION**  
REV.01

**CEBRINCO / HY**

**CENTO1HY**

The Cento1 Hybrid was designed to re-imagine the traditional limits of usability of a high-level racing bike: a product that combines the special distinctive traits of Wilier Triestina products with the cutting-edge intelligence of the lightest servo-assistance system on the market. The result is a true racing bike with pedal assistance which weighs just 11,9 kilograms - a record in the e-road category.

### **GET YOURS**

The first intelligent racing bike created with a specific mission: to give as many people as possible the opportunity to enjoy the emotions that only a high-end racing bicycle can offer.

Cento1 Hybrid was designed for you, whoever you are: Get yours!



## THE LIGHTEST E-ROAD BIKE ON THE MARKET

One of the most important aspects for us was to achieve a record weight: we have succeeded in creating a racing bike with pedal assistance that weighs less than 12 kg. A lightweight monocoque carbon frame, high-quality mechanical components and an Ebikemotion servo-assistance system, with a total weight (motor, battery and controls) of 3.7 KG, the lightest solution on the market.



## GET THAT RACING FEELING WITH A TRUE RACING BIKE

When designing the Cento1 Hybrid, we focused on those individuals who are discovering the world of racing bikes for the first time, as well as the thousands of passionate cyclists who already use racing bikes, but who struggle to keep up with their friends, or who can no longer conquer their favourite climb.

The Cento1 Hybrid is composed of a monocoque carbon frame and fork, built using the same composite materials and with the same technologies that we usually employ on our high-end competition bicycles. The shape and geometry of the Cento1 Hybrid frame derives from the NDR family of racing-endurance bikes, which offer less tiring riding positions without relinquishing their racing spirit.

The Cento1 Hybrid is fitted with traditional-type components, such as hydraulic disc brakes, 11-speed Shimano groupset and high-profile aluminium wheels. The only component that differs from the standard equipment provided is the rear hub, which contains the drive unit that provides pedal assistance. The energy required by the motor is delivered by the battery, which is neatly integrated into the down tube of the frame. The system is controlled (on, off and monitoring) via a button which is integrated into the top tube, enabling the rider to choose from the various assistance modes offered by the Cento1 Hybrid.

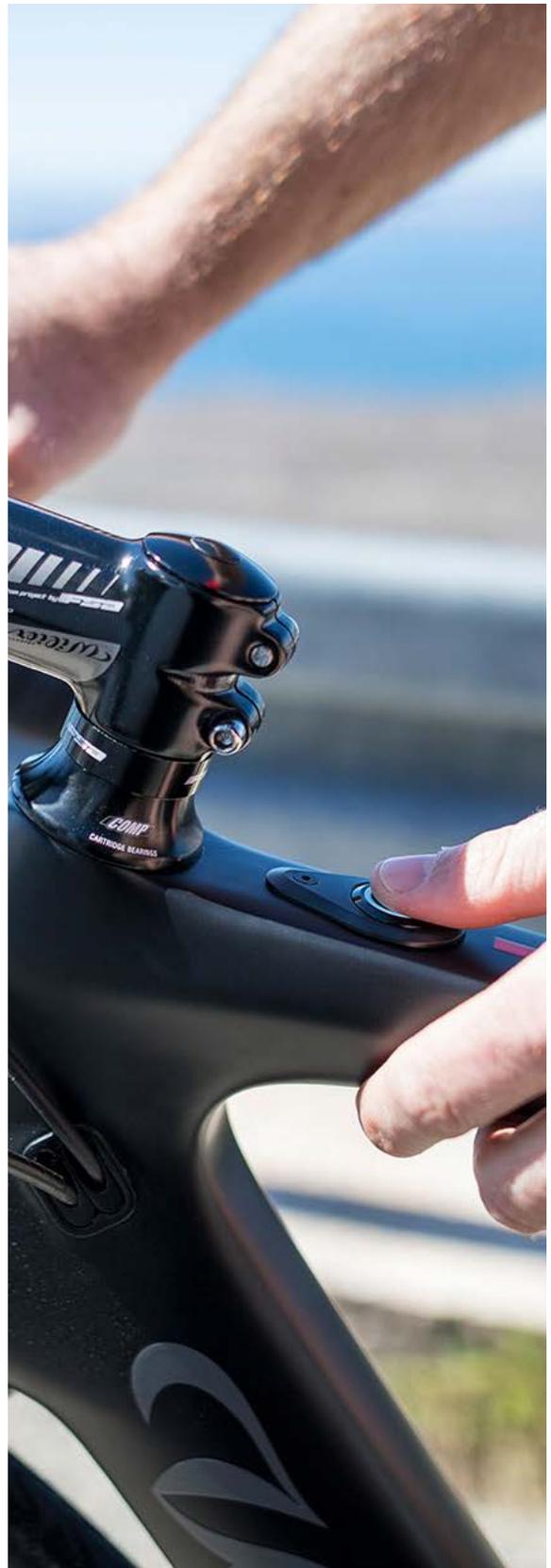
## INTELLIGENCE ON BOARD

The intelligent solutions installed on the Cento1 Hybrid enable the limits of the person riding the bike to be understood and overcome, assisting the cyclist at just the right moment.

There are several options for using and managing the entire system. The simplest of these options is just to use the controller integrated into the top tube, which enables you to turn the system on and off and to select the desired level of assistance, by pressing the backlit button.

Riders looking for greater interaction with the system can download the dedicated EBIKEMOTION app from the AppStore or the PlayStore, which provides access to the system command centre. This app opens the door to a whole range of functions, from the simplest (classic cycle computer functions such as display speed, distance, remaining charge level, incline etc.) to the most complex (navigation management and programming of the various outputs, recording data, setting weather forecast alerts, etc.)

The intelligence of the Cento1 Hybrid doesn't stop there: the system can also help when you want to monitor other parameters - your heart rate, for example. When paired with a heart rate monitor belt, the maximum heart rate can be set. If your heart rate reaches the predetermined threshold during activity, the system will engage the motor, enabling your heart rate to return to within the threshold set without having to stop pedalling.



**CENTO**1HY

<b>COLOR</b>	BLACK / RED
<b>FINISH</b>	MATT
<b>COLOR CODE</b>	Y1



<b>COLOR</b>	BLUE / BLACK
<b>FINISH</b>	GLOSSY
<b>COLOR CODE</b>	Y2

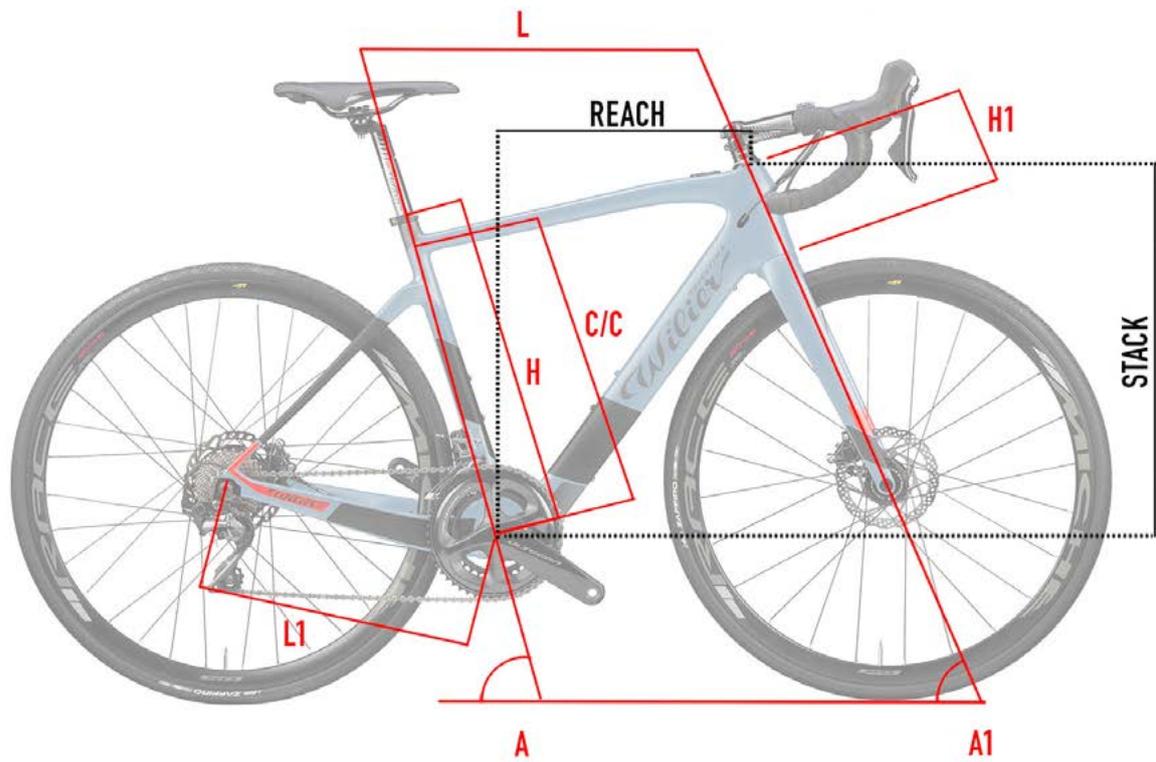


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WILIERPEDIA 2019

ROAD COLLECTION

## SIZES AND GEOMETRIES



SIZE	C/C	L	H	A	H1	L1	A1	REACH	STACK
	[cm]	[cm]	[cm]	[°]	[cm]	[cm]	[°]	[mm]	[mm]
XS	37,5	50,5	43,0	75	10,4	40,6	70,5	365	515
S	40,5	52,5	46,0	74,5	12,1	40,6	71,0	376	532
M	44,5	54,4	50,0	74	14,5	40,8	71,5	383	555
L	47,5	56,1	53,0	73,5	16,6	41	72,0	390	576
XL	51,5	57,8	57,0	73,0	18,5	41,1	72,5	395	595

## FRAME KEYPOINTS

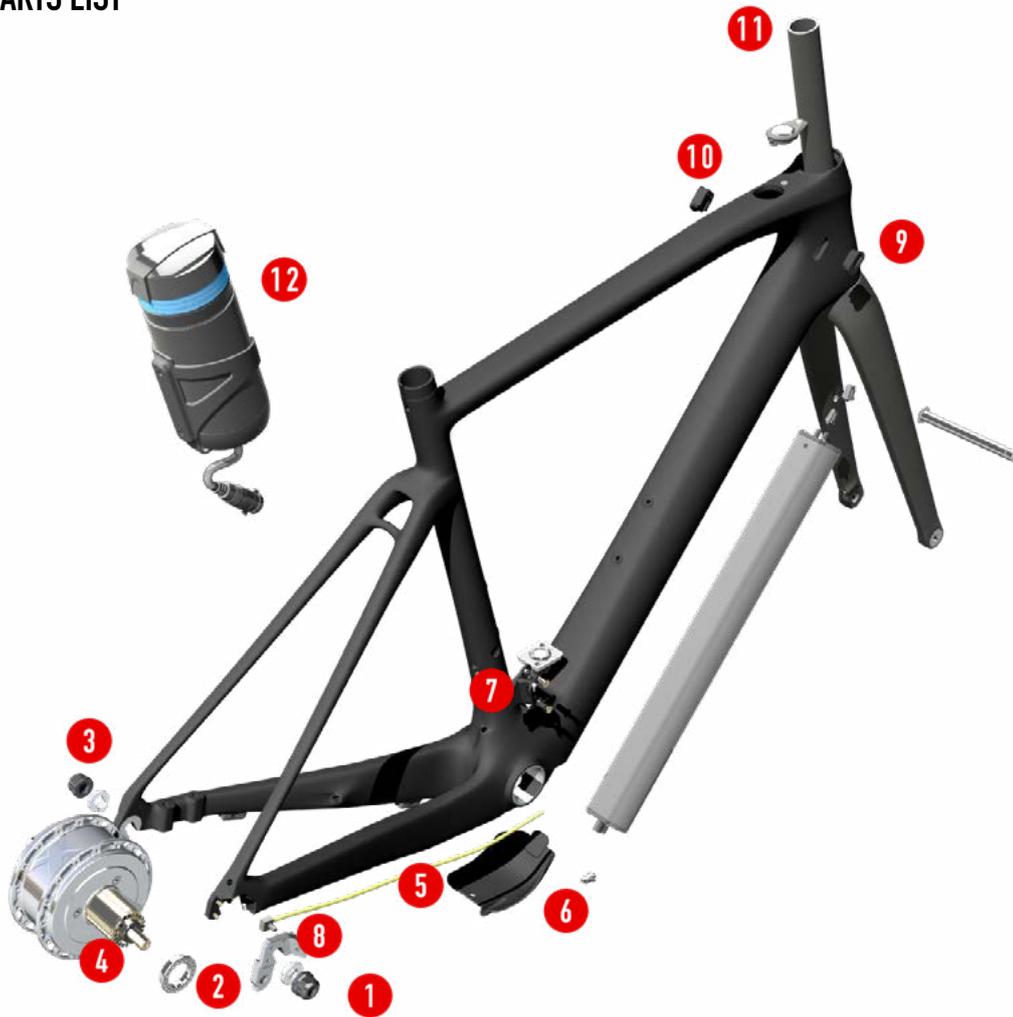


## INDICATIVE TIGHTENING TORQUES

LIST	Nm	LIST	Nm
ALU/CARBON STEM ON ROAD AND MTB	5	COLLAR COMMAND LEVERS ON CARBON MTB HANDLEBAR	4
SHIMANO/CAMPAGNOLO/FSA CRANKSET 386 (central bolt)	40	BOLTS FOR WATER BOTTLE CAGE	2.5
CRANKSET GEAR BOLTS LIGHT ALLOY	10	REGGISSELLA 101 SR DOTATO DI DOPPIO MORSETTO DI REGOLAZIONE	8
BOTTOM BRACKET (threaded coupling)	30	EXPANDER CAP	4
REAR DERAILLEUR BOLT	8	PEDALS	40
FRONT DERAILLEUR BOLT ROAD (integrated)	7	SEATPOST	4
FRONT DERAILLEUR BOLT ROAD (cable tie)	3	THRU AXLE HUBS	3/4
FRONT DERAILLEUR BOLT MTB (integrated)	7	FORK EXPANDER	8
FRONT DERAILLEUR BOLT MTB (a fascetta)	3	BRAKES (caliper, disc)	5
COLLAR COMMAND LEVERS ON ALU ROAD HANDLEBAR	10	INTERCHANGEABLE FIXING SCREWS	3
COLLAR COMMAND LEVERS ON CARBON ROAD HANDLEBAR	8	PASSING SCREWS CABLE GUIDE PLATE	3
COLLAR COMMAND LEVERS ON ALU MTB HANDLEBAR	5	REPLACEABLE FIXING SCREWS CABLE STOPPERS	5



## SPARE PARTS LIST



MECHANICAL VERSION		
	B2B CODE	DESCRIPTION
1	X35LOCKNUT	MOTOR LOCK
2	X35MAGNUT	FREEWHEEL MAGNET
3	X35LOWAKIT	KIT MOTOR LOCKS
4	X35M1SHIELD	MOTOR SHIELD
5	X35PASSENSOR-B	SPEED SENSOR
6	WTP-HY-BBSHELL	BB COVER
7	WTP-101HY-FD	DERAILLEUR SUPPORT
8	WTP-101HY-D2	DROPOUT
9	WTP-CO-A	OPEN CABLE CAP
10	WTP-CO-A	OPEN CABLE CAP
	WTP-CO-A	OPEN CABLE CAP
11	X350NEHCUR	HOLDER IWOC
12	X35EXBATSP1	EXTERNAL BATTERY

ELECTRONIC VERSION		
	B2B CODE	DESCRIPTION
1	X35LOCKNUT	MOTOR LOCK
2	X35MAGNUT	FREEWHEEL MAGNET
3	X35LOWAKIT	KIT MOTOR LOCKS
4	X35M1SHIELD	MOTOR SHIELD
5	X35PASSENSOR-B	SPEED SENSOR
6	WTP-HY-BBSHELL	BB COVER
7	WTP-101HY-FD	DERAILLEUR SUPPORT
8	WTP-101HY-D2	DROPOUT
9	WTP-CO-EL	ELECTRONIC CABLE CAP
10	WTP-CO-EL	ELECTRONIC CABLE CAP
	WTP-CO-GTREL	ELECTRONIC CABLE CAP OPEN
11	X350NEHCUR	HOLDER IWOC
12	X35EXBATSP1	EXTERNAL BATTERY

## FAQ

**Does the electronic system require any maintenance?**

The electronic system does not require any particular maintenance. Wilier recommend a periodic inspection by an official Wilier dealer after 25 full battery charge cycles or every 12 months to ensure peak performance.

**How are faults indicated?**

The backlit button on the toptube will blink with a pink colour to alert the rider. In addition, a red triangle will appear in the Ebikemotion app.

**Is there a diagnostic tool?**

Yes. There are diagnostic functions built into the Ebikemotion app. A comprehensive range of diagnostic tools are available at your official Wilier Triestina dealer.

**What should I do if I have a problem?**

In the first instance, consult the diagnostic functions in the Ebikemotion app. If you are unable to fully resolve the problem, you must take your bike to an authorized Wilier Triestina dealer for inspection. Interventions other than those outlined above by unauthorized persons will invalidate the product warranty.

**Where can I find more information regarding the pedaling-assistance system?**

You can visit your local Wilier Triestina dealer or go to the Wilier.com website and navigate to [www.wilier.com/en/contacts](http://www.wilier.com/en/contacts)

**Where can I find a user manual?**

An introduction guide is given when you buy a new Cento1 Hybrid. You can find further documentation on the section Support of the Product page: <https://www.wilier.com/en/products/int/road/cento1-hybrid>

**What is the maximum speed that can be reached with the pedalling system active?**

The maximum speed that you can reach with the lectric motor working is 25 km/h.

**How much does the entire pedal assistance system weigh?**

The pedal assistance system weighs 3.7 kg, including battery and electric motor. The lightest electric system available in the market.

**How many levels of assistance are there in Cento1 Hybrid?**

There are 3 different levels of assistance, that can be modulated up to your requirements in the Ebikemotion app (go to the section “Settings“ of the app > Engine maps).

**Can I change the cassette?**

Yes, you can replace the cassette with a new one having the same dimensions. Pay attention to place the original closing sprocket that you received otherwise the system will not work.



## FAQ

**How much assistance can the Cento1Hybrid motor provide?**

The total assistance provided by the electric motor is affected by a number of factors, such as riding style, rider weight, rider fitness, gradient and terrain. After testing we have found that generally the motor will assist the rider to gain between 1000m and 2000m of elevation, depending on gradient, with the motor working continuously for over 1.5 hours.

**Is it possible to use the Cento1 Hybrid without the battery fitted?**

We do not recommend that the Cento 1 Hybrid is used without the battery fitted, even if the battery is fully discharged.

**Is it possible to increase the range of the Cento1 Hybrid?**

Yes, an external battery will be available in early 2019. It is designed to fit into the bottle cage on the seat tube and has a capacity of 460Wh.

**Do I need to fully discharge the battery before charging?**

No. The Li-ion battery has no memory effect and can be charged at any time.

**How many times could I charge the battery?**

The number of charges up to 100% is guaranteed for 500 times, then the efficiency will decrease to a final capacity of about 60%.

**Is it possible to check the battery charge level?**

Yes. The battery charge level can be easily checked by using the backlit button on the top tube. Detailed information concerning the battery can be accessed via the Ebikemotion app. Information and instructions for these functions can be viewed online at [www.wilier.com/en/products/int/road/cento1-hybrid](http://www.wilier.com/en/products/int/road/cento1-hybrid)

**Do I need to charge the battery if the bike is not used for a period of time?**

If the bike is not being used we recommend keeping the battery charged to at least 60%. If after 6 months the level has dropped below 20% we recommend charging back to a level above 60%.

**Can I use Cento1 Hybrid with the rain?**

Sure, the system is waterproof.

**How should I clean my Cento 1 Hybrid?**

The Cento 1 Hybrid can be cleaned in the same way as any road bike. We recommend cleaning with water and a soft cloth or sponge. Please note that some cleaning agents can damage the finish on the frame and components. We do not recommend the use of pressurized water or air when cleaning the Cento 1 Hybrid. Such practices can damage the finish and bearings etc. Always thoroughly dry and lubricate your bicycle before storage.