

SLYVIA HYBRID

FILANTE
HYBRID

It's hard to believe that this bike hides a system providing electric pedal assist. Yet, it does. Filante Hybrid is an electric road bike that integrates the lightest pedal assist system in the world: the new X20 motor by Mahle, a German multinational that is driving technological innovation toward zero-impact mobility.

Filante Hybrid was designed with a very specific objective: to help you go faster while minimising strain. By combining the new Mahle X20 system with everything we know about aerodynamic efficiency and by using composite materials, we have raised even further the performance of the Cento10 Hybrid, a product that has won major international awards over the seasons. An overall improvement in energy savings of practically 8%. Improved battery management and greater integration for better aerodynamics, lighter weight and better performance.





AVANT-GUARD FRAME

Filante Hybrid definitely resembles the Filante SLR, the bike used by Astana professional cyclists. There are no holes in the frame (except for the one required to recharge the battery), and the integrated monocoque carbon handlebar houses the derailleur cables and electrical system controls. The Hybrid also has the same aerodynamic carbon seat post as Filante.



BUILT-IN BATTERY AND BATTERY LIFE

The battery integrated in the down tube has a capacity of 250 Wh. An additional bottle-shaped battery can be on the seat post bottle holder to add 185 Wh to the system.

As in the previous version, a software system and apps are available both for the user and the retailer to manage, monitor and configure the system.



NEW MINIATURISED MOTOR

The X20 motor has been miniaturised to the max. It's extremely lightweight (the complete system weighs just 3.6 kg for the X35 and 3.3 kg for the X20), with a modern straight pull spoke pattern and 24 spokes, a perfect match for Wilier Triestina's carbon rims. Mahle's new X20 motor hub delivers 40 Nm of torque, but there's more: the body can be removed easily from the "motor" casing for easy maintenance or replacement. Shimano, SRAM XDR and Campagnolo compatible bodies will soon be available.



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NEW POWER SENSOR

To improve the riding experience, we have introduced a new bottom bracket with torque (power) and frequency sensor.

The cyclist (through pedalling, i.e. the power the cyclist delivers) communicates with the motor via the frequency and power sensor. The system reads the "pedalling power" to modulate the assistance delivered to give the cyclist a natural pedalling experience with no jerks, sudden accelerations or loss of assistance. For example, the motor will continue to deliver power smoothly even on steep inclines of over 10%. All of this is necessary as we move toward a cycling experience similar to that of a traditional bicycle. The power sensor (with the new firmware) also optimises battery consumption, since the power provided by the motor is much more sensitive and proportionate to the power delivered by the cyclist.



STANDARD PULSAR ONE

Filante Hybrid comes standard with Pulsar One, a compact and easy-to-use on-board computer with a 2.1" display that updates electrical system data and trip statistics in real time and lets the rider modify the level of pedal assistance if necessary. Pulsar One connects via the ANT+ protocol to the X20 system and to other sensors (cadence sensor, external power sensor and heart rate monitor) and the data can be displayed directly on the screen for a more complete experience.



CLEARANCE & GEOMETRIES

Tire clearance is suitable for a modern road bike and is compatible with rims for tires up to 32 mm wide.

Filante Hybrid comes in geometries similar to those of our endurance models. Don't expect an aggressive geometry, although the bike's relaxed look, with a high stack and limited reach, can be deceiving. Six sizes available, from XS to XXL.





REAR THRU-AXLE

There's one very important detail that makes Filante Hybrid totally novel for the category: the wheel that houses the new Mahle X20 motor can be assembled and disassembled quickly, just like on a traditional thru-axle racing bike.

In addition to the ease and speed of wheel assembly and disassembly, the system automatically connects to the battery, so there are no more cables to be connected or disconnected by hand. It's all done when you insert the wheel. How? It's easy.

The rear dropout has a slider with a built-in electrical connector that ensures the hub positions itself directly in contact with the battery, quickly and with no risk of misalignment.



TOTAL INTEGRATION

The integrated handlebar is carbon monocoque and mimics the aerodynamic design of Filante Bar. However, in the hybrid version, the button and display of the new iWoc, the interface that gives access to the system and changes the pedal assistance mode, are hidden inside the handlebar stem.

This unique design, improves safety, since cyclists can select one of four power levels (automatic, eco, sport and boost) without having to remove their hands from the top of the handlebar. Mahle has improved iWoc's ergonomics, ease of use and reading compared to the previous version. Cyclists can now see at a glance how much battery capacity remains and which assistance mode is selected.



FILANTE
HYBRD

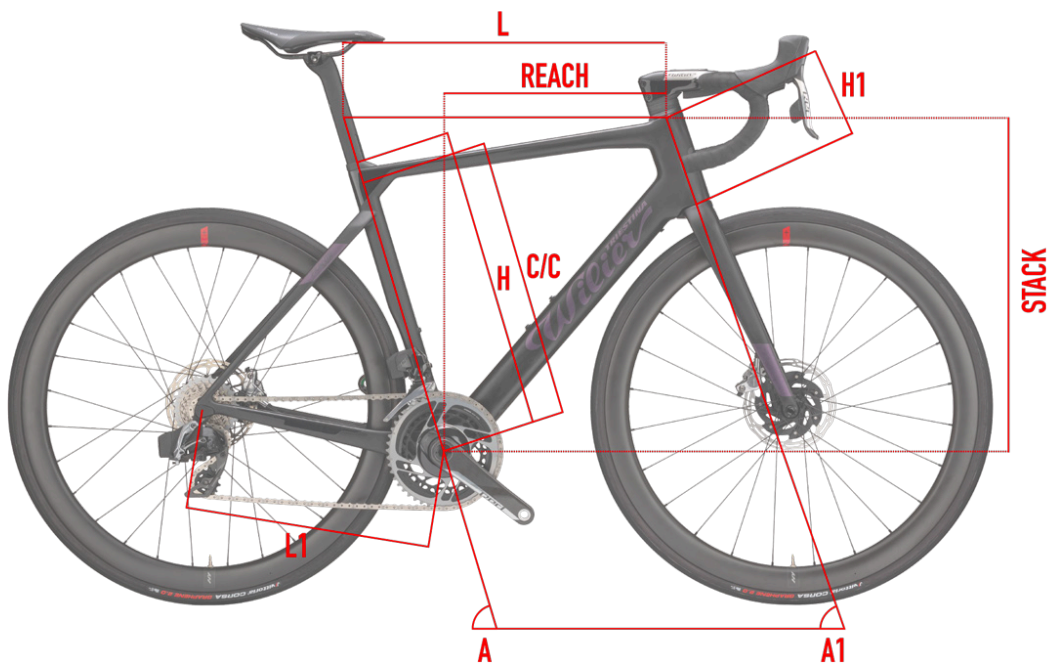
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COLOR CODE	Y17



COLOR	SILVER
FINISH	GLOSSY
COLOR CODE	Y18

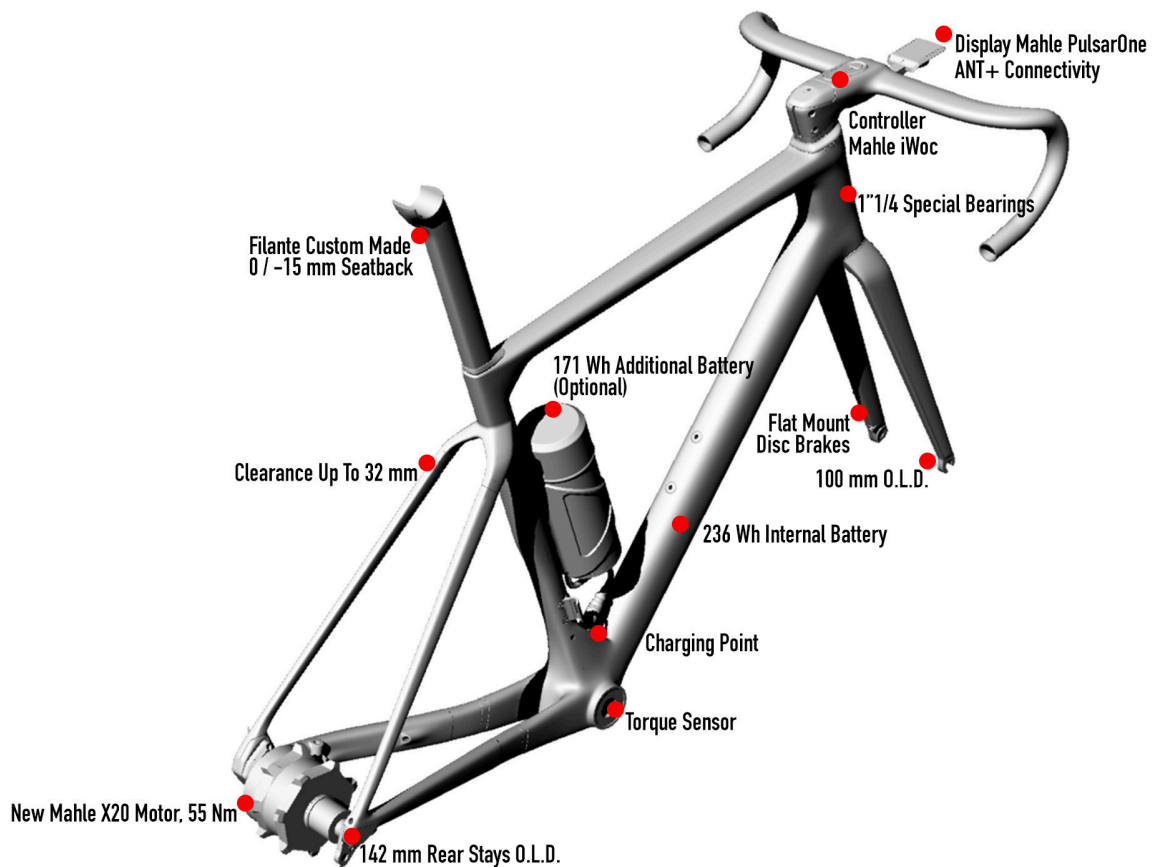


GEOMETRIES AND SIZES



	H	C/C	L	A	H1	L1	A1	REACH	STACK	WB
SIZE	[cm]	[cm]	[cm]	[°]	[cm]	[cm]	[°]	[mm]	[mm]	[mm]
XS	46.0	40.5	51.7	74.5	11.7	40.6	71	369	527	974
S	49.0	43.5	53.2	74	13.6	40.6	71.5	374	546	982
M	51.0	45.5	54.7	73.5	15.7	40.8	72	379	566	991
L	53.0	47.5	55.8	73.5	17.7	40.8	72.5	384	586	998
XL	56.0	50.5	57.4	73	19.6	41.1	72.5	389	604	1012
XXL	59.0	53.5	59.2	72.5	21.7	41.1	72.5	395	625	1024

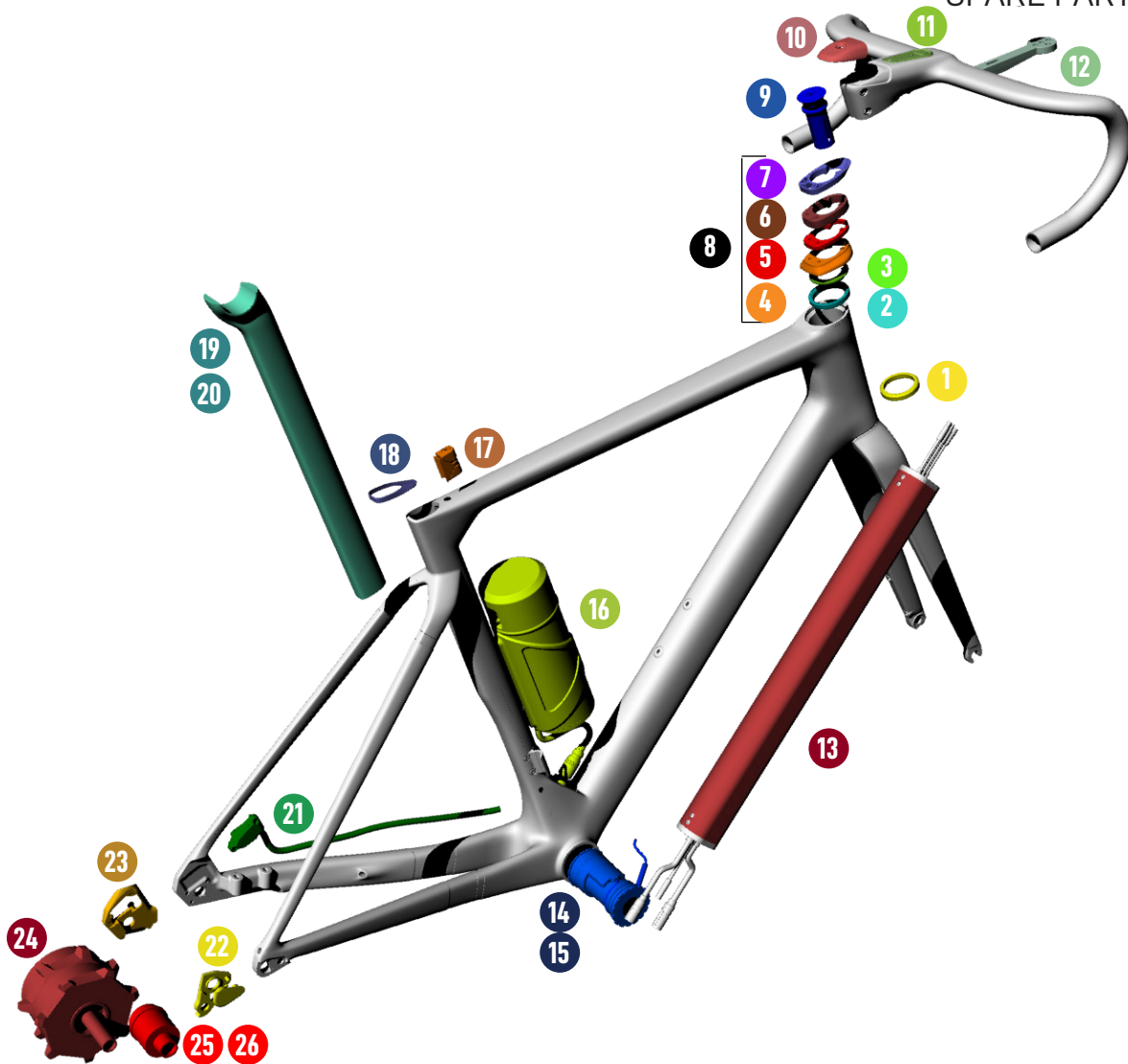
KEYPOINTS



FRAME AND TECHNICAL SPECS DETAILS

HEADTUBE	1"1/4 - 1"1/4
UPPER BEARING	WTP-BEARING-SSLIM 39 X 46.9
LOWER BEARING	FSA MR137
FRONT FORK O.L.D.	100 mm
REAR STAYS O.L.D.	142 mm
BB SHELL	MAHLE TORQUE SENSOR
SEAT POST	WILIER SEATPOST 0/-15
FRONT DERAILLEUR TYPE	REMOVABLE FRONT DERAILLEUR SUPPORT
SEATPOST COLLAR	WTP-SPEXP

SPARE PARTS

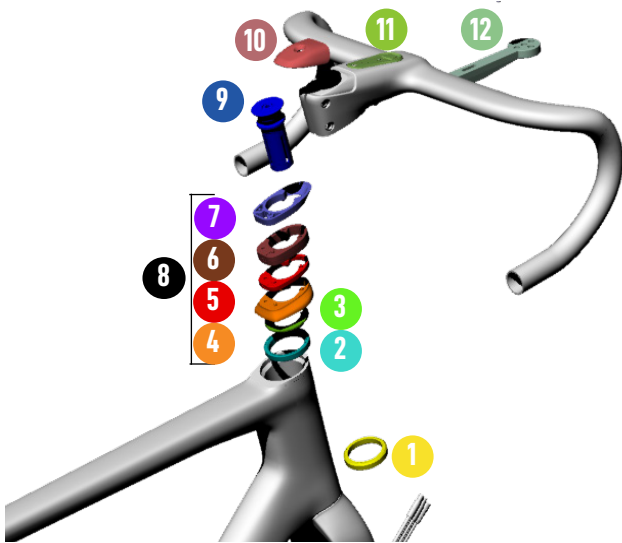


SPARE PARTS		
1	MR137	FSA BEARING 1-1/4"
2	WTP-BEARING-SSLIM	WILIER BEARING SUPERSLIM 39 X 46.9 X 7
3	WTP-COMPRING-SS	WILIER FRAME RING SUPERSLIM
4	W0TC	TOP COVER
5	WTP-ZSPACERS5	SPACER 5MM
6	WTP-ZSPACER10	SPACER 10MM
7	W0TS	TOP SPACER
8	W0KITS	SPACERS KIT
9	EXROUFG	ROUND FORK EXPANDER
10	WFBTC	TOP CAP
11	34010400000100	IWOC ONE HEAD X20
12	W0CICLOC	CYCLOCOMPUTER HOLDER
13	23010400000000	BATTERY PACK X20 250WH

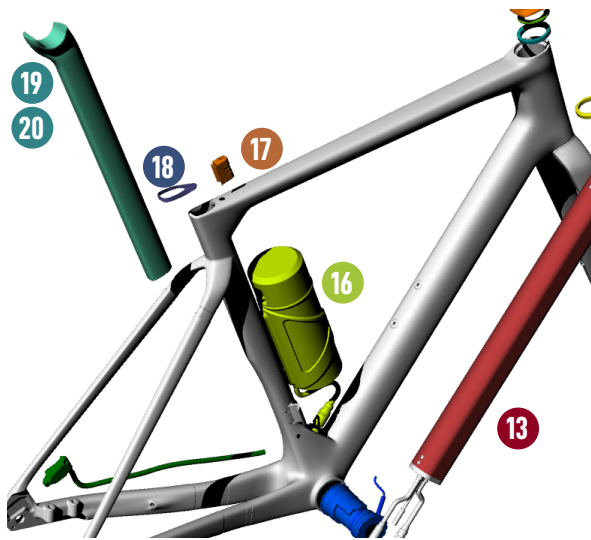
SPARE PARTS		
14	41010400001000	SRAM X20 TQS BB386 EVO
15	41010400003000	SHIMANO X20 TQS BB386 EVO
16	24010400000000	RANGE EXTENDER X20 E-185
17	WTP-SPEXP	SEATPOST EXPANDER
18	WTP-SPSHIELD-F	SEATPOST RUBBER SEAL
19	STFILA-15	SEATPOST -15 OFFSET
20	STFILA0	SEAPOST 0 OFFSET
21	60010410000000	DROPOUT CABLE X20
22	WTP-RD20HY	DROPOUT FILANTE HYBRID
23	WHY20SLIDE	SLIDING DROPOUT FILANTE HYBRID
24	60010400000000	DRIVE UNIT X20
25	60010418006000	SRAM XDR FREEWHEEL SET
26	60010418001000	SHIMANO HG FREEWHEEL SET



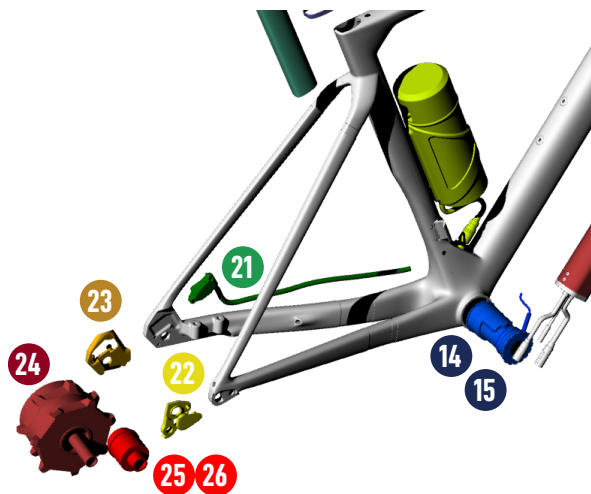
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SPARE PARTS		
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2	WTP-BEARING-SSLIM	WILIER BEARING SUPERSLIM 39 X46.9 X 7
3	WTP-COMPRING-SS	WILIER FRAME RING SUPERSLIM
4	W0TC	TOP COVER
5	WTP-ZSPACER5	SPACER 5MM
6	WTP-ZSPACER10	SPACER 10MM
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SPARE PARTS		
13	23010400000000	BATTERY PACK X20 250WH
16	24010400000000	RANGE EXTENDER X20 E-185
17	WTP-SPEXP	SEATPOST EXPANDER
18	WTP-SPSHIELD-F	SEATPOST RUBBER SEAL
19	STFILA-15	SEATPOST -15 OFFSET
20	STFILA0	SEATPOST 0 OFFSET



SPARE PARTS		
14	41010400001000	SRAM X20 TQS BB386 EVO
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FAQ

What is the maximum speed attainable in assisted mode?

The maximum speed attainable by Filante Hybrid with the motor in traction is 25 km/h for the European market and 20 mp/h where non-EU government regulations allow it.

How much does the entire pedal assist system weigh?

The X20 pedal assist system weighs 3.3 kg with the battery and electric motor. It is the lightest system currently available on the market.

How many pedal assist levels does the Filante Hybrid have?

There are four different pedal assist levels selectable using the Head Unit located on the handlebar: ECO Mode 1; SPORT Mode 2; BOOST Mode 3; AUTOMATIC Mode 4. The end user can adjust the pedal assist levels using the My SmartBike application.

How much autonomy does the Filante Hybrid have?

Guaranteed autonomy varies depending upon a number of factors: driving style, the set assist level, the user's weight, the slope of the route and pedalling ability. Testing shows the possibility of covering an uphill distance of between 1000 m and 2000 m depending on the difficulty of the route, with the battery working for more than an hour and a half.

Can the Filante Hybrid be used without the battery?

We advise against removing the battery. However, Filante Hybrid can also be used with the assist system in "OFF" mode.

Is it possible to increase the Filante Hybrid's autonomy?

Yes, by installing an optional second battery placed inside a "dummy bottle" on the seat tube of the Filante Hybrid. The total capacity is 435 W/h.

Do I have to wait until the battery is fully discharged before charging it?

No, the Filante Hybrid's lithium battery can be charged at any time.

How many times can I recharge the Filante Hybrid?

The guaranteed number of recharges is 500 times. After that, recharges will decrease to approximately 60% of the initial capacity. Over 500 recharges, battery capacity will gradually decrease.

Can I check the battery charge level?

Yes, you can check the approximate charge level via the Head Unit indicator light on the handlebar. If you want to know the precise value of the battery charge, connect to the MAHLE app or to the Pulsar ONE cycle-computer.

After how much time do I have to recharge the battery?

If the bike is not going to be used for a long period, we recommend you charge the battery at least up to 60% before storing it. If after six months the charge level is less than 20%, we recommend charging it again up to at least 60%.

Can I use a Filante Hybrid in the rain?

Of course. The system is waterproof.



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FAQ

How can I clean the Filante Hybrid?

You can clean the Filante Hybrid like any other racing bike. DO NOT use a pressure washer, as water could get into the motor or communication port located above the bottom bracket box. We recommend wiping it with a soft cloth and mild soap, then drying it completely before use.

Should the electrical assistance system be checked regularly?

The electrical system requires no special maintenance. To maintain maximum pedalling efficiency over time, Wilier Triestina strongly recommends regular maintenance and inspections every 12 months at an official Wilier Triestina dealer.

How are failures or anomalies indicated?

The backlit controller on the handlebar will flash pink. At the same time, the MAHLE app will display a failure/anomaly warning. In the event of a recurring error, contact an authorised Wilier Triestina dealer for a more detailed diagnosis of the problem.

What should I do in the event of a failure or anomaly?

Should your bike have a failure or anomaly, you can first consult the MAHLE APP diagnostic/troubleshooting tool. If the problem persists, you will need to contact an official Wilier Triestina dealer to check the problem using advanced diagnostic tools. Any personal actions different from those specified in the troubleshooting guide will void the product warranty.

Who do I contact for questions about the pedal assist system?

Contact the Wilier Triestina dealer where you purchased your bicycle or use the contact form at <https://wilier.com/en/contacts>

Where can I find the user manual?

A printed "Getting Started" guide is provided with the Filante Hybrid at the time of sale.

Can I replace the Filante Hybrid's groupset?

Yes, you can replace the Filante Hybrid groupset assembly. The new X20 motor lets you replace the body, to enable compatibility with most groupsets available on the market.

Which setups are available for Filante Hybrid?

Filante Hybrid is available with both Shimano and Sram accessories. The rear wheel is available in both the carbon and aluminium versions.

Which sensors enable the new X20 pedal assist system to improve performance efficiency?

In addition to the classic Speed Sensor, which adapts the delivered motor power based on speed, there is also a Torque Sensor in the area of the bottom bracket that adapts the delivered motor power based on the force applied on the pedals.



