



Fulcrum **ROAD 2011**

ROAD 2011

ENG

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FULCRUM



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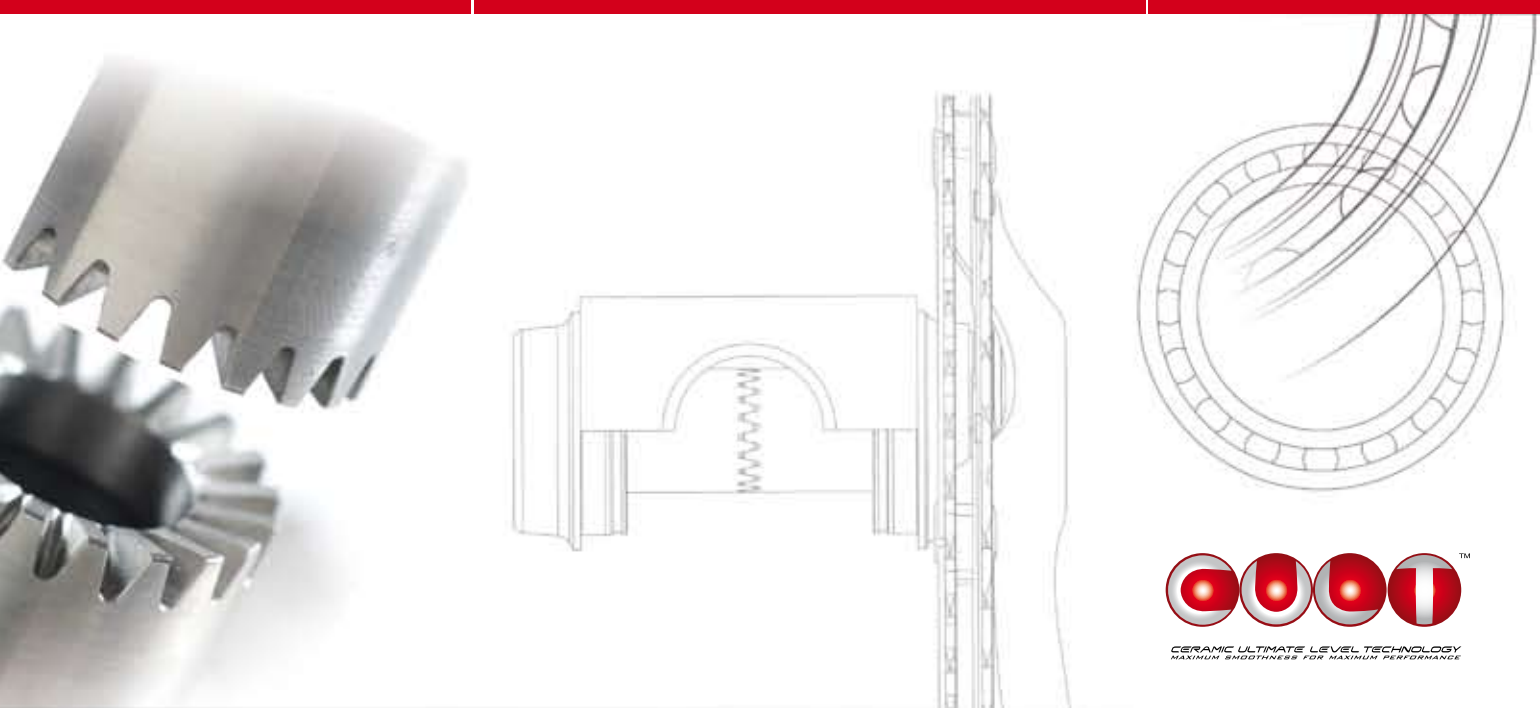
Fulcrum®, 2:1 Two-to-One™, Dynamic Balance™, Racing Torq™, Ultra Torque™, CULT™, Hollow Crank Technology™, 2-Way Fit™, Ultra-Fit™, MoMag™, Racing Light™, Racing Speed™, Racing Chrono™, Red Carbon™, Red Metal™, Red Fire™, Red Zone™, Red Heat™, AFS™, HH™ are Fulcrum Wheels Srl Trademarks.

* Cronitect® is a registered Trademark of Schaeffler Group

cover photo courtesy of TIM BARNETT

RRS standard

RRS compact



Hirth Joint™

The Fulcrum® Racing Torq™ crankset structure consists of two semi-axles fixed to the respective arms and coupled together by means of a frontal joint of the Hirth type.
The Ultra Torque™ axle assembly is inside the bottom bracket shell in order to reduce lateral bulk. Its life over time is increased by the new anodization treatment which also comes with a darker and more aggressive colour. Compatibility with the most common drivetrains is ensured.

Calotte OS-Fit™

The Ultra Torq™ OS-Fit™ cups by Fulcrum® have been designed to respond to the growing trend of frames with oversize bottom bracket shell. We developed these cups so that we wouldn't have to modify the distinctive performance features and lightness of the Racing Torq™ crankset. The OS-Fit™ cups simply replace the standard Racing Torq™ cups and have the same bearing seat function. OS-Fit™ cups are available in versions compatible with bottom bracket shells with 86.5 mm diameter and with BB30 bottom brackets, and are 20 grams lighter than the standard cups. A special tool is required for fitting the OS-Fit™ cups.



CULT™

Ceramic Ultimate Level Technology, CULT™. It's the technical advancement adopted for the most revolutionary crankset in the Fulcrum® range, the Racing Torq™ RRS, an unprecedented system which guarantees performance at the maximum level. As well as using the best ceramic ball bearings on the market, a new treatment for the races and bearings has been developed with Cronitect® steel, using the "Advanced by FAG" technology by Schaeffler Group. Maximum corrosion resistance, no grease is necessary for lubrication, just a small amount of oil.



Racing Torq™ RRS

There are no compromises in the top of the range crankset in the Fulcrum® series. The use of CULT™ technology and of the High Efficiency Hard-Ox anodization treatment for the chainrings make this model suitable for the toughest and most extreme competitive use. Weight is kept low thanks to Hollow Crank Technology™.

RACING TORQ™ RRS

MODEL	OPTIONS	DESCRIPTION	WEIGHT (g)*
crankset RACING TORQ™ RRS CARBON 10s	170, 172.5, 175 mm 39-52, 39-53	Fulcrum® Hollow Crank Technology composite crankarms - light alloy fixing bolts and nuts - CULT™ bearings (Ceramic Ultimate Level Technology) - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	695
crankset RACING TORQ™ RRS CT™ CARBON 10s	170, 172.5, 175 mm 34-50	Fulcrum® Hollow Crank Technology composite crankarms - light alloy fixing bolts and nuts - CULT™ bearings (Ceramic Ultimate Level Technology) - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	695
BB outboard cups RACING TORQ™	ITA, ENG	aluminium	49
integrated cups RACING TORQ™ OS-Fit™	86,5x41, BB30	aluminium - integrated cups for oversize shells	29

RS standard

RS compact

R standard

R compact



The Racing Torq™ RS has been conceived for competitive racing at the maximum level and uses Fulcrum® Hollow Crank Technology which allows cranksets to be made with arms with an internal cavity and therefore achieve weight while maintaining the structural quality intact.



The Racing Torq™ R on the other hand is perfect for intense and persistent use, typical of enthusiasts of high calibre even if not necessarily athletes. Fulcrum® cranksets feature the Campagnolo® Ultra Torque™ system, the only one that can guarantee lightness, rigidity, simple assembly and maintenance.

RACING TORQ™ RS

MODEL	OPTIONS	DESCRIPTION	WEIGHT (g)*
crankset RACING TORQ™ RS CARBON 10s	170, 172.5, 175 mm 39-52, 39-53	Fulcrum® Hollow Crank Technology composite crankarms - light alloy fixing bolts and nuts - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	699
crankset RACING TORQ™ RS CT™ CARBON 10s	170, 172.5, 175 mm 34-50	Fulcrum® Hollow Crank Technology composite crankarms - light alloy fixing bolts and nuts - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	699
BB outboard cups RACING TORQ™	ITA, ENG	aluminium	49
integrated cups RACING TORQ™ OS-Fit™	86,5x41, BB30	aluminium - integrated cups for oversize shells	29

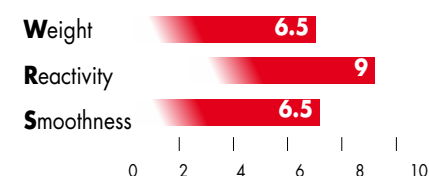
RACING TORQ™ R

MODEL	OPTIONS	DESCRIPTION	WEIGHT (g)*
crankset RACING TORQ™ R CARBON 10s	170, 172.5, 175 mm 39-52, 39-53	composite crankarms - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	751
crankset RACING TORQ™ R CT™ CARBON 10s	170, 172.5, 175 mm	34-50 - composite crankarms - integrated ULTRA-TORQUE™ semi-axles - requires RACING TORQ™ BB cups	751
BB outboard cups RACING TORQ™	ITA, ENG	aluminium	49
integrated cups RACING TORQ™ OS-Fit™	86,5x41, BB30	aluminium - integrated cups for oversize shells	29



What does W.R.S. mean?

What is the ideal wheel?
This is the question that every rider asks before buying a wheel – and Fulcrum wants to help you find an answer!
This is why, in collaboration with professional riders and cycling enthusiasts, we have defined the 3 most important parameters that will enable you to choose the best wheel for your riding style and needs.



Weight: There is little need to describe it. The weight of the wheel is the first question that all riders ask themselves when they buy a wheel. The weight parameter is extremely important, more than any other bike component. Indeed the wheel is a rotating mass and as such it follows the laws of physics that determine its acceleration and inertia. Fulcrum® has always designed its wheels with this aim in mind and, at the same time, combining and adapting it to wheel performance in terms of the stiffness, reactivity and reliability.

Reactivity: How “ready” and fast does the wheel feel every time you change gear? The level of reactivity refers precisely to this concept. Reactivity depends on the weight of the rim and of the wheel as a whole, on torsional rigidity (i.e. how much the wheel flexes around the hub when the rider pushes on the pedals), on flexional rigidity (i.e. how much the wheel maintains its shape if, because

of pedalling, it moves away from its vertical axis) and on inertia.

Smoothness: This will help you understand and compare various wheels degree of smoothness, thanks to, the use of high-performance CULT™ ball bearings or USB™ ball bearings or to other technological solutions applied on the wheel, such as 2-Way Fit™.

Fulcrum® gives you all the technical information, now it’s up to you to choose the perfect wheel for your needs! Your passion, your way of riding the bike and your feel of the bike will help you to make the best choice.



2-Way-Fit™

Tubeless technology was first used by the auto industry, then by motorcycles and now has reached the cycling industry. After its debut with mountain bikes the moment has come to “put it on the road”, and that’s what we propose to do. We have developed our **2-Way Fit™ technology to ensure the perfect compatibility of our tubeless rims with normal clincher types and tubes.** 2-Way Fit™ wheels are perfectly multipurpose for tackling every situation. Thanks to a special impression in the valve area, the tubes are fitted with the maximum precision while keeping the tube perfectly stable inside the tyre. Housing the valve for tubeless tyres is also risk-free, with the unquestionable advantage that there are never any air infiltrations caused by non-ideal positioning when fitting. The advantages are indisputable: our tests have highlighted an unique increase in smoothness. Because there is no tube, the friction caused by rubbing against the tyre is eliminated, while the perfect

adherence of the tyre to the rim prevents the dispersion of energy. Tubeless tyres do not suffer from sudden deflation when punctured which is a great advantage in safety terms. There is also no risk of snake bites as there is no tube to rupture. What if a tubeless tyre gets punctured? There’s nothing to fear...With Fulcrum® 2-Way Fit™ you can remove the tubeless valve and fit in a standard clincher tire that will let you ride back home.

Ultra-Fit™ Tubeless

Here’s the interface between the tubeless tyre and the rim. The form we have studied for our rims with Ultra-Fit™ Tubeless technology means that the sides of the tyre mate perfectly with the shoulders of the rim when it is fitted. The result is exceptionally smooth: for whizzing speedily without tubes!

By eliminating every possible movement between the rim and tubeless tyres, all energy dispersion is also eliminated. The Ultra-Fit™ Tubeless wheels well exceed any other wheel fitted with traditional tyres in our tests. The first installing of the tyre is also made with great ease: two special tracks on the rim groove keep the tyre perfectly in position.

Dynamic balance™

CULT™

USB™



Oversize spokes

Dynamic Balance™. Aluminium rims.

The concept is simple and elegant: balance the weight of the gasket, with an item of similar weight placed on the exact opposite side. For top models, this is obtained by a special operation on the section of the rim opposite the rim joint. For entry-level models, Dynamic Balance™ is obtained by using two oversized spokes in the section opposite the joint. The result is a wheel with perfectly balanced rotational dynamics.



RIM Dynamic Balance™ Carbon wheels.

For carbon wheels the principle is the same, but applied using a different technology. When making carbon rims, the pieces of carbon fabric are aligned in such a manner that the resulting rim is always balanced.



CERAMIC ULTIMATE LEVEL TECHNOLOGY
MAXIMUM SMOOTHNESS FOR MAXIMUM PERFORMANCE



CULT™

CULT™: it stands for **Ceramic Ultimate Level Technology**. But, above all, it is the technology we have developed, fine-tuned, and then adopted exclusively for the realization of the bearings with ceramic balls. Behind CULT™ is the exclusiveness of Cronitect® steel, using the "Advanced by FAG" technology by Schaeffler Group., for the bearing races.

This is an incredibly robust and corrosion-resistant stainless steel, with a surface thermo chemical treatment that makes it extremely resistant to corrosion.



ULTRA SMOOTH BEARINGS

USB™

The high quality smoothness of Fulcrum® wheels is a universally recognised fact. The decision to produce our own bearings rather than using standard ones has resulted in performance and service life unequalled on the market. For this technological solution Fulcrum® chose the best ceramic balls available on the market - Silicon Nitride (Si3N4) – so compared to the already extraordinary quality of the steel ball bearings normally used by Fulcrum®, USB™ bearings have truly astonishing features:

- 30% lighter
- 40% more resistant
- 50% smoother

USB™ is in all our Racing Zero models.

Anti-rotation System

MoMag™

2:1 Two-to-One™ Spoke Ratio

Max compatibility



New spoke anti-rotation system

This new system raises the concept of spoking to new heights of performance.

The Fulcrum® engineers have redesigned the spokes and the hub housings to create a solid and unmoveable whole. The result is that the spokes a) will never lose their initial tension, thus keeping the wheel perfectly reactive and centred, and b) will remain in the position that was found in wind tunnel tests to ensure the best aerodynamic penetration possible.

The spoke antirotation system comes in all:

- Racing Speed
- Racing 3 2-Way Fit™



MoMag™

Though they have no holes in the rim bed, rims have spokes tensioned by traditional nipples. This makes tensioning and changing the spokes extraordinarily easy, and does away with questionable anchoring systems on the rim.

This solution was made possible thanks to the Fulcrum® MoMag™ patent which exploits magnetic power and a good dose of ingenuity to guide the nipples to the correct rim holes.



2:1 Two-to-One™ Spoke Ratio

When you push on the pedals, the rotational force on the sprocket induces a slackening of the freewheel spokes with a consequent loss of rim tension. This results in undesirable flex of the whole wheel and an unavoidable loss of energy. Fulcrum® has solved this classic cycling problem with its 2:1 Two-to-One™ Spoke Ratio patent, by doubling the spokes in the critical zones.

As a result there are two spokes which carry out the function of one, slackening and torsion are limited and the transfer of the athlete's power is much more effective.

Also, thanks to this system, spoke tensions are balanced more evenly between drive and non-drive sides and the fatigue life of the rim, hub and spokes is lengthened.



Campagnolo® freewheel body

Maximum Compatibility

Thanks to the two versions of the freewheel body, all Fulcrum® 2010 wheels are compatible with all Campagnolo® drivetrains, with Shimano Inc. 8, 9 and 10-speed systems and with the Sram Co. 10-speed system.



Shimano Inc. freewheel body

Racing Zero

2-Way Fit™

total weight: 1460g

WRS



Racing Zero 2-WayFit™

Red spokes, black rims: wheels that are absolutely unmistakable in the middle of the peloton. Two powerful colours and exclusive technology stand out from the crowd and make these wheels unique in terms of performance and personality. Racing Zero wheels are at the top of the Fulcrum® range.

In the 2-Way Fit™ (Tubeless & Clincher) version you can choose whether to mount traditional clinchers or tubeless ones.



front wheel

This is an advantageous product which offers a double choice, allowing you to choose the benefits of tubeless or the practicality of clincher tyres.

Thanks to Ultra-Fit™ Tubeless technology, the use of the tubeless tyres drastically improves smoothness and reduces the risk of snake biting on rough roads. The release of air is also gradual in the event of puncturing: there is no risk of sudden deflation.

The **rim** is made using a special extrusion procedure which thins the walls. At the same time, the 26 millimetre thickness is a guarantee of strength. A rim of this type is excellent in terms of resistance and weight. Further lightening has been obtained by milling the material between the spoke anchoring points while the rim is perfectly balanced thanks to Dynamic Balance™ technology.

The **spokes** are made of aluminium with an aerodynamic profile. There are 16 in the front wheel, radially laced; 21 in the rear: 7 on the left and 14 on the right, in accordance with Two-to-One™ technology.

The **hubs** with carbon body and alloy axle are now equipped with **USB™ ceramic bearings** that increase smoothness, prolong service life, and further reduce the weight of the wheels.

Racing Zero 2-Way Fit™ wheels are compatible with Campagnolo®, Shimano Inc., Sram Co. drivetrains and include Fulcrum® releases.

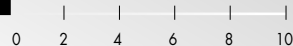


Racing 1

2-Way Fit™

total weight: 1505g

WRS



Racing 1 2-WayFit™

These are top of the range wheels which are also suitable for everyday use. Even if Racing 1 2-Way Fit™ wheels have been conceived for racing, it is also ideal for everyday training.

Ultra-Fit™ Tubeless technology ensures perfect tightness between the tyre and rim and the inflation pressure remains constant over time. Thanks to 2-Way Fit™ it is also possible to fit traditional clincher tyres with tubes.



front wheel



The application of tubeless technology guarantees excellent smoothness.

The aluminium **rim**s have a 24 millimetre profile for the front and 28 for the rear and are lightened by milling between the spoke coupling points.

There are 16 aluminium **spokes** for the front wheel and 21 for the rear. They are fitted in accordance with a well-tried Fulcrum® solution, which has now been upgraded to enhance their performance on rims differentiating front and rear profiles. The arrangement is radial on the front and with doubling spokes on the freehub side on the rear (Two-to-One™).

The **spokes** have an aerodynamic and tapered profile but are strengthened close to the hub and nipples.

The oversize **hubs** contribute to the rigidity of the wheel, both the hub and axle are made of aluminium and take straight-head spokes. They are enhanced with the new Fulcrum® quick releases.

The diameter of the right-hand flange on the rear hub is oversized.

The freehub body that houses the sprockets can be selected from Campagnolo®, Shimano Inc., or Sram Co. versions.



Aluminium spokes and nipples



Racing 3

2-Way Fit™

total weight: 1595g

WRS



The **rim** is lighter thanks to the typical fulcrum milling and the inside has been redesigned to limit its weight without compromising rigidity."

Here, too, Fulcrum® Dynamic Balance™ keeps the Racing 3 2-Way Fit™ wheels perfectly stable even at high speed.

The front wheel maintains its 16 steel radial **spokes** with an antirotation system that keeps the spoke profile in aero position. The same system is used in the rear wheel that also has a 2:1 ratio. The 21 spokes are stainless steel with aero profile.

The oversize **hubs** have an aluminium body and axle and adjustable high precision bearings for the maximum performance.

Racing 3 2-Way Fit™ wheels are compatible with the Campagnolo®, Shimano Inc. and Sram Co. drive trains and are supplied with the new Fulcrum® quick releases.



Racing 3 2-Way Fit™

The 'youngest' of the 2-Way Fit™ Fulcrum® series has shown its racing character (lying deep inside its own DNA) in just a year after its launch. Weighting less than 1600 grams and with an impressive ability to react, it brings loads of satisfaction.

As the name clearly denotes, the rim has the 2-Way Fit™ profile that makes it possible to use both tubeless and standard clincher tires on the same wheel, thereby obtaining the best from both technologies.



front wheel

Spoke Anti-rotation System





Racing Zero

clincher & tubular

total weight : tubular version 1430g
clincher version 1435g

WRS



guarantees excellent aerodynamic penetration, while the 30 mm of the rear wheel means extremely effective transmission of your pedalling power. Both rims feature the special Fulcrum® lightening between the anchoring points of the spokes and the patented Dynamic Balance™ system that guarantees the maximum stability of your bike even at high speeds.

The **hubs** have a carbon fibre body and aluminium flange; the special bearings combined with a larger number of balls compared to the standard version place the Zero at the top in terms of smoothness and service life. But we wanted more, so we decided to substitute the high quality steel ball bearings with **the ceramic USB** (Ultra Smooth Bearing) specially developed by Fulcrum®. This solution significantly increases the smoothness of the wheels, reduces servicing needs, and further decreases the weight.

The **spokes** are aluminium aero spokes arranged in a radial pattern on the front wheel for better aerodynamic penetration and in the Fulcrum® 2:1 pattern on the rear wheel for immediate transmission of pedal stroke with no dissipation of energy. The nipples are also aluminium, further reducing the peripheral mass of the wheels and thereby increasing their performance.

Racing Zero wheels are compatible with Campagnolo®, Shimano Inc. and Sram Co. drivetrains and are supplied with the new Fulcrum® quick releases.

Racing Zero

Racing Zero is the top wheel of the Fulcrum® aluminium range. Its extraordinary performance features and high impact aesthetics make it stand out from the crowd.

The **rim**s are made of extremely high precision aluminium extrusions that make it possible to eliminate all the excess material, so they are ultra-light but at the same time very strong. The front and rear wheel profiles are differentiated: the 26 mm height for the front



front wheel



Racing Zero Tubular



Racing 1

clincher



Both rims feature the characteristic Fulcrum® toroidal milling between the anchoring points of the spokes. The fact that the rim grooves do not have holes translates into greater torsional stiffness and greater vertical elasticity.

The **spokes** are in aluminium with aero profile and a central section of 2.6 mm, 16 radial for the front wheel and 21 for the rear wheel distributed according to the famous Fulcrum® 2:1 spoking, with double the number of spokes on the cassette side. The nipples are in aluminium, too, which reduces the important peripheral mass of the wheel, thereby increasing its performance in acceleration.

The oversize **hubs** are in aluminium. Smoothness is guaranteed by special bearings designed and produced by Fulcrum® that have many more balls than normal industrial bearings and hence produce unparalleled smoothness.

Racing 1 wheels were born to be fast, so Fulcrum has equipped them with the patented Dynamic Balance™ system that makes them stable and precise even at high speed.

Racing 1 wheels are compatible with Campagnolo®, Shimano Inc. and Sram Co. drivetrains and are supplied with the new Fulcrum® quick releases.



Racing 1

Racing 1 wheels have competition in their DNA. If you're looking for a lightweight wheel that gives the best performance under any condition and has a marvellously aggressive look, you've found it. The aluminium **rim**s have a differentiated profile front and rear. The front wheel height is 26 mm to achieve perfect aerodynamic penetration, while the rear increases to 30 mm to provide all the stiffness necessary to transmit every watt of your power.



front wheel



rear hub



front hub

Racing 3

clincher

New

total weight: 1555g

WRS



Racing 3

Remember this number: 1,555. These are the grams representing the Racing 3 weight, 104g lighter than the previous version! An amazing achievement obtained using the new rim extrusion process, with new reduced section spokes and a new pattern. Racing 3 has always been the balanced training and competition wheel. From now on, thanks to the new features, it will also provide the satisfaction of riding the pink "F" brand".



front wheel



The oversize **hubs**, with an aluminium body and axle, feature adjustable high-precision bearings to achieve the best performance every time.

The 16 steel front wheel **spokes** are straight, aero and with a variable thickness of 2.2/2/1.6/2, featuring an innovative anti-rotation system that keeps the spokes in an aero position at all times. The rear wheel has a 2:1 Two-to-One™ ratio, (7 2.2/2/1.6/2 on the left- 14 2/1.8/2 on the crankset side) that helps keep force balance on both sides of the wheel. Spokes are straight, aero, made of steel, and with an anti-rotation system.

The milling **rim**s include the special Fulcrum® Dynamic Balance™ system that keeps all Racing 3s always balanced, even at high speed.

Racing 3 wheels are compatible with Campagnolo®, Shimano Inc. and Sram Co. drivetrains.



front wheel with spoke Anti-rotation System



Racing 5

clincher

total weight: 1760g

WRS



Racing 5

Designed to be used on a daily basis and for training purposes. An great product offered by Fulcrum® that guarantees an excellent performance/price ratio.

The **hubs** are oversized and provided with flanges for blade hammer-head spokes. Smoothness is ensured by sealed high-quality bearings and they have a new single-piece body which incorporates the freewheel body and pawl carrier in



front wheel

a single component with a considerable reduction of weight.

The **spokes** have blade hammer-heads of the Aero type and differentiated thickness, 20 in the front wheel and 24 in the rear wheel.

There is radial spoking for the front wheel and the patented Fulcrum® 2:1 Two-to-One™ Spoke Ratio for the rear wheel. Also unchanged is the presence of Dynamic Balance™ which, thanks to two oversized spokes, balances the concentration of the rim joint material during wheel rotation.

The **rim** is a medium-sectioned one with a height of 24 mm with reinforcing eyelets for the spokes and turned braking surfaces. The new Racing 5 wheels have a deeper upper bridge of the rim to facilitate clincher tire fitting.

Racing 5 wheels are compatible with Campagnolo®, Shimano Inc. und Sram Co. drivetrains.



Racing 7

clincher

New

total weight: 1849g

WRS



wear indicator



test results show, once again, the greatness of this design.

The new **hubs** are made for straight spokes: aluminum-made and with a large flange on the crankset side of the rear wheel, which results in a significant increase in reaction.

The front wheel has 20 steel **spokes** with a 2mm round section. The spokes of the rear wheel have a 2:1 ratio Two-to-One™: 8 2mm round spokes, radially laced for the left side. On the driveside there are twice as many straight spokes, with the same 2mm section. And in order to control wear in Racing models, Fulcrum® has included its new Wear indicator system.

Racing 7 wheels are compatible with Campagnolo®, Shimano Inc. and Sram Co. drivetrains.



Racing 7

It only shares the name with previous models: Racing 7 has been completely re-designed following three precise goals worth pointing out: reduce weight, increase responsiveness, and keep the same price.

Fulcrum® research and development department designers had a tough time reaching the set goals, similar to a rider trying to conquer that “mythical” summit. This rim’s weight (less than 1850g), and all



front wheel





Racing Light™ XLR

clincher & tubular

total weight: tubular version 1226g
clincher version 1345g

WRS



clincher version

Exemplary results: they improve the lightness, the rotation fluidity of the hubs and their life over time.

The low profile **rim** is available for tubular or clincher tyres. It is fitted with 22 radial spokes on the front wheel and 24 on the rear with doubling of the spokes on the freehub side (Two-to-One™ technology) to obtain a snappy response during sprints and uphill.

The carbon **rim**s are made using a particular technique by which the carbon fabric is aligned so that the resulting rim is always balanced.

Racing Light™ XLR wheels require the use of brake pads (supplied) specially designed for carbon fiber.

Racing Light™ XLR is compatible with Campagnolo®, Shimano Inc., or Sram Co. drivetrain systems and are supplied with the new Fulcrum® quick release.



tubular version

Racing Light™ XLR

Ideal for climbers, although not just for them: Racing Light™ XLR wheels. In this version they are enhanced by carbon fiber hub bodies that act on Cronitect® steel bearings with CULT™ ceramic ball bearing technology, improving smoothness nine fold in comparison to standard steel versions.



rear hub



front hub



Racing Speed™ XLR

tubular

total weight: 1324g

WRS



front wheel

Racing Speed™ XLR

Racing Speed™ wheels are much loved by professional cyclists. Their widespread diffusion is due to the wheel's many features: the high rim profile combined with lightness make this model particularly suitable for the most varied racing situations.



In the Racing Speed™ XLR version the **hub** body is made of carbon. The balls of the bearings implement CULT™ technology with its super-high strength and smoothness thanks to Cronitect®* stainless steel with thermo-chemically treated surface layer.

The **rim** has a 50 millimetre profile and is supported by 18 radially-laced spokes in the front wheel and 21 in the rear with doubling on the freehub side using Two-to-One™ technology.

The carbon rims are made using a particular technique by which the carbon fabric is aligned so that the resulting rim is always balanced.

The use of pads for special brakes is necessary (supplied).

Racing Speed™ XLR is compatible with Campagnolo®, Shimano Inc., or Sram Co. drivetrain systems and are supplied with the new Fulcrum® quick release.



CERAMIC ULTIMATE LEVEL TECHNOLOGY
MAXIMUM SMOOTHNESS FOR MAXIMUM PERFORMANCE



Racing Speed™

tubular

WRS



front wheel

Racing Speed™

Racing Speed™ reflects every feature of the design lines of the Racing Speed™ XLR model, becoming the entry level model of the high profile carbon range.



The **rim** is entirely made of carbon fibre, with a height 50 mm.

The carbon rims are made using a particular technique by which the carbon fabric is aligned so that the resulting rim is always balanced.

The **spokes** are burnished, 18 radial for the front wheel and 21 with Fulcrum® 2:1 spoke ratio for the rear wheel.

The oversize **hubs** are in aluminium and feature the innovative spoke anti-rotation system created by Fulcrum®, which consistently guarantees the maximum aerodynamic penetration of the aero spokes.

The use of pads for special brakes is necessary (supplied).

Racing Speed™ is compatible with Campagnolo®, Shimano Inc., or Sram Co. drivetrain systems and are supplied with the new Fulcrum® quick release.

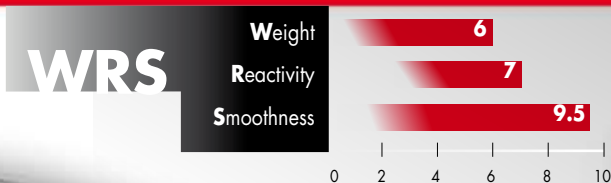
front hub:
spoke
Anti-rotation
System



Racing Chrono™

tubular

total weight: 1010g



The **Racing Chrono™** wheel accepts no compromises: it is dedicated to the most demanding riders, the time trial specialists. The aerodynamic surface is a tensile structure made of polyaramide, a composite which ensures structural strength and aerodynamic penetration. The choice of ball bearings with CULT™ technology using Cronitect® steel gives the wheel smoothness and makes pedal strokes extremely efficient. Furthermore, the ceramic ball bearings are much more resistant to wear. The braking tracks are made of aluminium. The Racing Chrono™ are supplied with the new Fulcrum® quick release.



CX wheels

Mud and dust will no longer be a problem:

Fulcrum® Cyclocross wheels have been designed for this purpose.

Racing 5 CX and Racing 7 CX have been designed for this hard discipline, demanding lots of effort and experience from Fulcrum® designers: Fulcrum® wheels have passed all of the extremely hard lab and field tests they were put to with flying colors.

With special coatings that seal the bearings' base, CX wheels will keep their features unaltered under any weather conditions. Spokes, hubs and mount geometries: they all guarantee wheel stability and durability, even under extreme conditions.

Mud, sand, water, tiredness and sweat: Fulcrum® will always be at your side.



Racing 5 CX

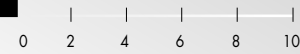
clincher

New

total weight: 1760g

WRS

Weight	7
Reactivity	7.5
Smoothness	6.5



front wheel



Straight Aero **spokes** with a differentiated thickness of 20 at the front and 24 at the rear. Radial front wheel and Fulcrum® 2:1 Two-to-One™ Spoke Ratio rear wheel.

Dynamic Balance™ is also included, and thanks to two enhanced spokes, it keeps the rim's gasket material in balance during wheel rotation.

Medium profile 24mm **rim**, with spoke reinforcements and shaped braking surface for a more powerful and adjustable braking.

The all new Racing 5 CX wheels have a deeper rim upper bridge for easier clincher fitting.

Racing 5 CXs are compatible with Campagnolo®, Shimano Inc. and Sram Co. transmissions.



Racing 5 CX

Racing 5 road is the starting point. But the version bearing the "CX" acronym - saved for sports that don't like clean roads - hides the real true "invisible" novelty inside the **hub**: a double coating that seals the bearings' base guarantees smooth performance and long life, even under extreme conditions of use.

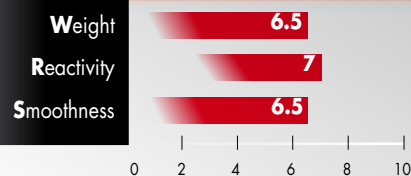
Racing 7 CX

clincher

New

total weight: 1849g

WRS



front wheel



The new double-coating **hubs** were designed for straight spokes: aluminum made and with a large flange on the driveside of the rear wheel, markedly increasing reaction.

The front wheel has 20 steel **spokes** with 2mm round section. The spokes of the rear wheel have a 2:1 ratio. Two-to-One™: 8 2mm round spokes, radially laced for the left side; while on the driveside there are twice as many straight spokes, with the same 2mm section.

In order to control wear in Racing 7 CXs, Fulcrum® has included the new Wear indicator system.

Racing 7 CXs are compatible with Campagnolo®, Shimano Inc. and Sram Co. transmissions.



Racing 7 CX

At first sight they might look like road wheels...but they are not! The main and actual difference, apart from "CX" following "Racing 7", lies inside the new **hub** with a **double gasket** to protect bearings from dust and mud, guaranteeing the smoothness and long life of components.



	Zero 2-Way Fit™		1 2-Way Fit™		3 2-Way Fit™		Zero				1		3		5		7	
	RACING ZERO 2-Way Fit™ front	RACING ZERO 2-Way Fit™ rear	RACING 1 2-Way Fit™ front	RACING 1 2-Way Fit™ rear	RACING 3 2-Way Fit™ front	RACING 3 2-Way Fit™ rear	RACING ZERO clincher front	RACING ZERO clincher rear	RACING ZERO tubular front	RACING ZERO tubular rear	RACING 1 clincher front	RACING 1 clincher rear	RACING 3 clincher front	RACING 3 clincher rear	RACING 5 clincher front	RACING 5 clincher rear	RACING 7 clincher front	RACING 7 clincher rear
weight*	625	835	645	860	680	915	610	825	615	815	635	850	670	885	775	985	828	1021
nominal and ETRTO width	20,5/15	20,5/15	20,5/15	20,5/15	20,5/15	20,5/15	20,5/15	20,5/15	20/-	20/-	20/15	20/15	20/15	20/15	20/15	20/15	20/15	20/15
CULT™/USB™ bearings	U	U	no	no	no	no	U	U	U	U	no	no	no	no	no	no	no	no
dynamically balanced (R=rim; S=spokes)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	no	no
spoke anti-rotation system	no	no	no	no	yes	yes	no	no	no	no	no	no	no	no	no	no	no	no
machining	3	3	3	3	1	1	3	3	3	3	3	3	1	1	no	no	no	no
spoke material	aluminium	aluminium	aluminium	aluminium	stainless steel	stainless steel	aluminium	aluminium	aluminium	aluminium	aluminium	aluminium	aluminium	aluminium	stainless steel	stainless steel	stainless steel	stainless steel
number of spokes	16 radial	7 left 14 right	16 radial	7 left 14 right	16 radial	7 left 14 right	16 radial	7 left 14 right	16 radial	7 left 14 right	16 radial	7 left 14 right	16 radial	7 left 14 right	20 radial	8 left 16 right	20 radial	8 left 16 right
type of spokes	ultra aero with variable section	ultra aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero with variable section	aero	aero	aero with variable section	aero with variable section	standard 2mm	standard 2mm
HUB material (body/axle)	Carb/Alu/ Alu	Carb/Alu/ Alu	Alu/ Alu	Alu/ Alu	Alu/ Alu	Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu	Alu/ Alu	Alu/ Alu	Alu/ Alu	Alu/ Alu	Alu/ Steel	Alu/ Steel	Alu/ Steel	Alu/ Steel
compatibility	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10	100mm	130mm CAMPA 9/10/11 HG 8/9/10

* average weight (tolerance +/- 5%): does not include the quick-release and it refers to the lightest configuration.



	Light™ XLR					Speed™					Chrono™		CX Cyclo-cross		5CX		7CX		
	RACING LIGHT™ XLR clincher front	RACING LIGHT™ XLR clincher rear	RACING LIGHT™ XLR tubular front	RACING LIGHT™ XLR tubular rear		RACING SPEED™ XLR tubular front	RACING SPEED™ XLR tubular rear	RACING SPEED™ tubular front	RACING SPEED™ tubular rear		RACING CHRONO™ tubular rear				RACING 5 CX clincher front	RACING 5 CX clincher rear		RACING 7 CX clincher front	RACING 7 CX clincher rear
weight*	595	750	546	680		577	747	590	770		1010				775	985		828	1021
nominal and ETRTO width	20,5/13	20,5/13	20/-	20/-		20/-	20/-	20/-	20/-		19/-				20/15	20/15		20/15	20/15
CULT™/USB™ bearings	C	C	C	C		C	C	no	no		C				no	no		no	no
dynamically balanced (R=rim; S=spokes)	R	R	R	R		R	R	R	R		no				S	S		no	no
spoke anti-rotation system	no	no	no	no		no	no	yes	yes		no				no	no		no	no
machining	no	no	no	no		no	no	no	no		no				no	no		no	no
spoke material	stainless steel	stainless steel	stainless steel	stainless steel		stainless steel	stainless steel	stainless steel	stainless steel		-				stainless steel	stainless steel		stainless steel	stainless steel
number of spokes	22 radial	8 left 16 right	22 radial	8 left 16 right		18 radial	7 left 14 right	18 radial	7 left 14 right		-				20 radial	8 left 16 right		20 radial	8 left 16 right
type of spokes	aero with variable section	aero with variable section	aero with variable section	aero with variable section		aero with variable section	aero with variable section	aero with variable section	aero with variable section		disc				aero with variable section	aero with variable section		standard 2mm	standard 2mm
HUB material (body/axle)	Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu		Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu	Carb/Alu/ Alu		Alu/ Alu				Alu/ Steel	Alu/ Steel		Alu/ Steel	Alu/ Steel
compatibility	100mm	130mm CAMP 9/10/11 HG 8/9/10	100mm	130mm CAMP 9/10/11 HG 8/9/10		100mm	130mm CAMP 9/10/11 HG 8/9/10	100mm	130mm CAMP 9/10/11 HG 8/9/10		132mm CAMP 9V				100mm	130mm CAMP 9/10/11 HG 8/9/10		100mm	130mm CAMP 9/10/11 HG 8/9/10

* average weight (tolerance +/- 5%): does not include the quick-release and it refers to the lightest configuration.