HEART AND REASON

# **R**ecord<sup>™</sup>



This is the first choice of those looking for the maximum performance and reliability of their equipment, whether professional or amateur. It constitutes the world benchmark in terms of lightness, as it is decisively lighter overall than any other groupset on the market.



### GROUPSET**RECORD**<sup>™</sup> <sup>13</sup>





### 14 FEATURES - BENEFITS

COMPONENT	FEATURES		BENEFITS
RECORD <sup>™</sup> 10s	forged aluminium bodies	>	weight savings and long fatigue life
rear derailleur	titanium tightening bolt and cage bolt	>	weight savings, corrosion-proof
	carbon outer plate	>	light, long fatigue life, corrosion-proof
	skeletonized upper body	>	greater rigidity with same weight
	metal-carbon cage	>	light, long fatigue life, corrosion-proof
	rollers on bushings	>	long life, low friction
	rollers in special rubber	>	damping of vibrations
RECORD <sup>™</sup>	Z-shape <sup>™</sup> inner plate	>	greater rigidity, greater thrust on the fork
front derailleur	M-brace <sup>™</sup> body	>	more rigid system, better shifting
	standardised Standard/Compact fork	>	versatility
Section State	Even-O <sup>™</sup> clamp	>	more even pressure on the frame
	aluminium-composite fork	>	weight savings
	antifriction treatment	>	long life
RECORD <sup>™</sup> QS <sup>™</sup> Ergopower <sup>™</sup> controls	carbon brake lever	>	weight savings, reliability, rigidity, mechanical strength, corrosion-proof, long fatigue life
	body in technopolymer with long carbon fibre	>	mechanical strength and corrosion-proof, maximum weight savings, rigidity, minimum ageing
	lightened internal mechanism on bearings	>	operating weight savings, minimum friction, minimum wear, low weight
	silicone hood	>	anallergic, elastic, memory of form, stability with UV and high temperatures
	brake opening control in the brake lever	>	greater ergonomics, fast operation
RECORD <sup>™</sup>	oversize body	>	greater rigidity, weight savings
front hub	adjustable bearings	>	more ball bearings for same size, longer life, adjustable/eliminable play, each component individually replaceable, low friction, lighter, ceramic-ready
	oversize light-alloy axle	>	weight savings and rigidity
	release with light-alloy housings and lever	>	weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
RECORD™	oversize body	>	greater rigidity, weight savings
rear hub	adjustable bearings	>	more ball bearings for same size, longer life, adjustable/eliminable play, each component individually replaceable, low friction, lighter, ceramic-ready
	oversize light-alloy axle	>	weight savings and rigidity
	release with light-alloy housings and lever	>	weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
	monolithic freewheel body	>	weight savings

Component	FEATURES		BENEFITS
RECORD <sup>™</sup> UD <sup>™</sup> 10s	steel-titanium version	>	excellent compromise between weight savings and cost
sprockets -	titanium version	>	maximum weight savings
0	aluminium carrier for the largest sprockets	>	precision and rigidity, weight savings
dillor.	sprocket synchronization	>	fast precise shifting, less stress for the chain
_	Ultra-Drive <sup>™</sup> machining of the teeth	>	chain passage optimization
	nickel-chrome surface treatments on steel	>	longer life, lower wear
RECORD <sup>™</sup> Ultra-Narrow <sup>™</sup> chain	width 5.9mm	>	quiet operation, less interference with adjacent sprockets and chainrings, high-performance shifting
0.00 0.00	HD-Link <sup>™</sup>	>	extremely high retention force
	lightened links	>	weight savings
	antifriction treatment	>	smoothness, long life
	hollow pins	>	weight savings
RECORD <sup>™</sup> Ultra-Torque <sup>™</sup>	full-carbon unidirectional-multidirectional cranks	>	rigidity, weight savings and long fatigue life
Carbon crankset	hollow cranks (Ultra-Hollow <sup>™</sup> Structure)	>	lower weight with same rigidity and life
	light-alloy high-guage chainrings with antifriction treatment	>	weight savings, rigidity, resistance to wear
	light-alloy nuts and bolts	>	greater weight savings
	8 pins on the large chainring	>	faster shifting
	Ultra-Torque <sup>™</sup> bottom bracket	>	(see specific window)
Ultra-Torque <sup>™</sup>	Hirth-type joint	>	self-centering, self-aligning, extreme strength
System -	15mm locking bolt with preloading Belleville spring	>	great strength, great security, preload the joint with 1300lb/600kg self-locking
ii	variable section semi-axles	>	great weight savings, strength where necessary
	great interface diameter with the crank	>	makes it possible to make a thinner crank, with less lateral bulk/better Q-factor
	bearings on semi-axles	>	simple fast maintenance, fast and simple changing
_	triple gaskets	>	good insulation with reduced friction
_	preloading spring on the bearings	>	elimination of lateral bearing movement
_	crescent spring for RH bearing	>	prevention of crankset movements compared with frame
_	cups with surface treatment	>	reduced wear and noise
RECORD <sup>™</sup> Pro.Fit Plus <sup>™</sup>	compact	>	weight savings, excellent clearance in bends
pedals -	broad support base	>	comfortable
	sealed cartridge axle	>	zero maintenance
	release adjustment display	>	simple adjustment
_	titanium axle	>	weight savings

### <sup>16</sup> FEATURES - BENEFITS

FEATURES forged arms forged arms skeletonized arms differentiated front-rear orbital pad adjustment titanium and light-alloy screws and nuts ball bearings ball bearings special pad compound differentiated composite tube forged aluminium head	> > > > >	BENEFITS stronger, maximum life cycle greater weight savings with same life powerful front, light and modulable rear optimum interface with the rim, maximum braking performance weight savings long life, low friction excellent balance between performance on dry and wet surface, modulable braking and long pad life
skeletonized arms differentiated front-rear orbital pad adjustment titanium and light-alloy screws and nuts ball bearings special pad compound differentiated composite tube	> > > > >	greater weight savings with same life powerful front, light and modulable rear optimum interface with the rim, maximum braking performance weight savings long life, low friction excellent balance between performance on dry and wet surface,
differentiated front-rear orbital pad adjustment titanium and light-alloy screws and nuts ball bearings special pad compound differentiated composite tube	> > > >	powerful front, light and modulable rear optimum interface with the rim, maximum braking performance weight savings long life, low friction excellent balance between performance on dry and wet surface,
orbital pad adjustment titanium and light-alloy screws and nuts ball bearings special pad compound differentiated composite tube	> > > >	optimum interface with the rim, maximum braking performance weight savings long life, low friction excellent balance between performance on dry and wet surface,
titanium and light-alloy screws and nuts ball bearings special pad compound differentiated composite tube	> > >	weight savings long life, low friction excellent balance between performance on dry and wet surface,
ball bearings special pad compound differentiated composite tube	>	long life, low friction excellent balance between performance on dry and wet surface,
special pad compound differentiated composite tube	>	excellent balance between performance on dry and wet surface,
differentiated composite tube	-	
	>	
forged aluminium head		weight savings and strength
	>	weight savings and security
forged aluminium bottom bracket	>	strength and long fatigue life
composite top bracket	>	weight savings and long fatigue life
special steel screw with rolled thread	>	strength and long fatigue life
light alloy with steel inserts	>	light and strong
cup and cone system	>	easy cleaning and maintenance
carbon tension plate	>	weight savings, corrosion-proof
light alloy tension bolt	>	weight savings, corrosion-proof
cup and cone system	>	easy cleaning and maintenance
Campagnolo <sup>®</sup> patented centering system	>	weight savings, does not damage the fork
lubrication hole	>	fast lubrication
light alloy with steel inserts	>	weight savings and strength
carbon tension plate	>	weight savings, corrosion-proof
carbon top cup	>	weight savings, corrosion-proof
light alloy tension bolt	>	weight savings, corrosion-proof
cup and cone system	>	easy cleaning and maintenance
Campagnolo <sup>®</sup> patented centering system	>	weight savings, does not damage the fork
carbon monocoque structure	>	weight powings
		weight savings
	composite top bracket special steel screw with rolled thread light alloy with steel inserts cup and cone system carbon tension plate light alloy tension bolt cup and cone system Campagnolo® patented centering system lubrication hole light alloy with steel inserts carbon tension plate carbon tension plate carbon top cup light alloy tension bolt cup and cone system	composite top bracket       >         special steel screw with rolled thread       >         light alloy with steel inserts       >         cup and cone system       >         carbon tension plate       >         light alloy tension bolt       >         cup and cone system       >         cup and cone system       >         Campagnolo® patented centering system       >         light alloy with steel inserts       >         light alloy with steel inserts       >         carbon tension plate       >         light alloy with steel inserts       >         light alloy with steel inserts       >         carbon tension plate       >         carbon tension plate       >         carbon top cup       >         light alloy tension bolt       >         cup and cone system       >



RECORD<sup>™</sup> sub-shell plate technopolymer with PTFE > self-lubricating, minimum friction



### <sup>18</sup> TECHNICAL SPECIFICATIONS

### RECORD<sup>™</sup> 2008

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*
RECORD <sup>™</sup> 10s rear derailleur	short cage	upper to lower pulley-axle: 55 mm composite outer plate - composite outer cage - Titanium hanger and pivot bolt	184
	medium cage	upper to lower pulley-axle: 72,5 mm composite outer cage - Titanium hanger and pivot bolt	193
RECORD <sup>™</sup> QS <sup>™</sup> STD + CT <sup>™</sup> 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard and CT <sup>™</sup> crankset - capacity 16 – max. chainring 55 – min. chainring 34 - composite and aluminum fork - M-brace <sup>™</sup> body - Even-O <sup>™</sup> clamp - Z-shape <sup>™</sup> lower cage	75
RECORD <sup>™</sup> QS <sup>™</sup> 10s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible – composite body and levers – ball bearings light alloy hardware - ErgoBrain10 <sup>™</sup> computer ready	324
RECORD <sup>™</sup> front hub	32, 36 holes	light alloy axle and body – adjustable bearings – quick-release with aluminium lock nuts - O.L.D. 100 mm	116
RECORD <sup>™</sup> rear hub	32, 36 holes	9s/10s - light alloy body, axle and one-piece freewheel body – adjustable bearings – quick-release with aluminium lock nuts - lockring thread 27x1 - O.L.D. 130 mm	231
RECORD <sup>™</sup> UD <sup>™</sup> 10s sprockets - steel+titanium	11-21, 11-23, 11-25, 12-23, 12-25, 13-26, 13-29	Ultra·Drive <sup>™</sup> - nickel-chromed finish for steel sprockets - light alloy carrier - supplied without lockring (except for 11-21, 11-23 and 11-25)	188
RECORD <sup>™</sup> UD <sup>™</sup> 10s sprockets - titanium	11-23, 12-25, 13-26	Ultra·Drive <sup>™</sup> - light alloy carrier - supplied without lockring (except for 11-23)	156
RECORD™ Ultra Narrow™chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive <sup>™</sup> - HD-Link <sup>™</sup> for Ultra Nar- row <sup>™</sup> chain - lightened links - hollow pins	2,24/ link **
RECORD™ Ultra-Torque™ Carbon 10s crankset	170, 172.5, 175, 177.5,180 mm 39-52, 39-53	Ultra-Hollow <sup>™</sup> composite crankarms - light alloy fixing bolts and nuts - Ultra.Drive <sup>™</sup> EPS <sup>™</sup> chainrings with antifriction treatment - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	643
RECORD™ Ultra-Torque™ CT™ Carbon 10s crankset	170, 172.5, 175 mm 34-48, 34-50, 36-50	Ultra-Hollow <sup>™</sup> composite crankarms - light alloy fixing bolts and nuts - Ultra·Drive <sup>™</sup> EPS <sup>™</sup> chainrings with antifriction treatment - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	643
RECORD™ Ultra-Torque™ BB overboard cups	ITA, ENG	aluminium	49
RECORD™ Pro·Fit Plus <sup>™</sup> pedals		Titanium axle -light alloy body - with floating (standard) or fixed (optional) cleats - compo- site axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain <sup>™</sup> magnet	266
RECORD™D Skeleton™brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (measured from brake fixing-bolt to brake- shoe-nut) - ball bearings - light alloy and titanium hardware - brake pads orbital adjustment - lightened rear brake	279

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*
RECORD <sup>™</sup> Carbon seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	185
RECORD™ headset		BC 1"x24tpi - height 36.5 mm	104
RECORD™ Threadless™ headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	110
RECORD™ Hiddenset™ headset	1-1/8", 1-1/8" TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC <sup>™</sup> : height 15.9 mm - patent pending system - composite and light alloy fixing screw and cap	73
RECORD <sup>™</sup> water-bottle carrier		monocoque carbon, supplied with water-bottle	18
RECORD <sup>™</sup> cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
 \*\* Example: 2,24 x 108 links = 242 g

### A HIGH-LEVEL CHOICE FOR PURE PASSION

Flat Bar

new

CHORUS IB Con

ULTRA-TORQUE

## **C**horus<sup>™</sup>

This is the choice of high-level athletes. It shares its genetic makeup with Record<sup>™</sup> and this designates it for competition as does its level of reliability, life and construction tolerances, even if they are obtained through the use of a few less carbon composite parts.

IFRI

Ø 32

Ø 35

new



### GROUPSETCHORUS<sup>™</sup> 21



Record™



### <sup>22</sup> FEATURES - BENEFITS

COMPONENT	FEATURES		BENEFITS
CHORUS™	forged aluminium bodies	>	weight savings and long fatigue life
rear derailleur —	carbon outer plate	>	light, long fatigue life, corrosion-proof
	skeletonized upper body	>	greater rigidity with same weight
9	rollers on bushings	>	long life, low friction
	rollers in special rubber	>	damping of vibrations
CHORUS™	Z-shape <sup>™</sup> inner plate	>	greater rigidity, greater thrust on the fork
front derailleur —	M-brace <sup>™</sup> body	>	more rigid system, better shifting
1 alle	standardised Standard/Compact fork	>	versatility
a con	Even-0 <sup>™</sup> clamp	>	more even pressure on the frame
	light-alloy fork	>	weight savings
	antifriction treatment	>	long life
CHORUS™ QS™ Ergopower™ controls	carbon brake lever	>	weight savings, reliability, rigidity, mechanical strength, corrosion-proof, long fatigue life
-	body in technopolymer with long carbon fibre	>	mechanical strength and corrosion-proof, maximum weight savings, rigidity, minimum ageing
	internal mechanism on bearings	>	operating weight savings, minimum friction, minimum wear
	silicone hood	>	anallergic, elastic, memory of form, stability with UV and high temperatures
	brake opening control in the brake lever	>	enhanced ergonomics
CHORUS <sup>™</sup> FB Ergopower™ controls	Carbon brake lever	>	weight savings, reliability, rigidity, mechanical strength and corrosion-proof, long fatigue life
	upshift up to three sprockets	>	fast shifting
	downshift up to three sprockets	>	fast shifting
	rolling mechanism	>	low friction-light operation, low maintenance, great reliability
	adjustable brake lever distance	>	maximum ergonomics and security with hands of various sizes
	display of ratio used	>	fast checking without distraction
	indexed left-hand control	>	fast and precise shifting
RECORD™	oversize body	>	greater rigidity, weight savings
front hub —	adjustable bearings	>	more ball bearings for the same dimensions, longer life, adjustable/play eliminable, each component individually replaceable, low friction, lighter, ceramic-ready
	oversize light-alloy axle	>	weight savings, rigidity
	locking with light-alloy housing and lever	>	weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation

COMPONENT	FEATURES		BENEFITS
RECORD™	oversize body	>	greater rigidity, weight savings
rear hub -	adjustable bearings	>	more ball bearings for the same dimensions, longer life, adjustable/play eliminable, each component individually replaceable, low friction, lighter, ceramic-ready
-	oversize light-alloy axle	>	weight savings, rigidity
_	locking with light-alloy housing and lever	>	weight savings
_	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
_	monolithic freewheel body	>	weight savings
CHORUS <sup>™</sup> UD <sup>™</sup> 10s	aluminium carrier for the largest sprockets	>	precision and rigidity, weight savings
sprockets -	sprocket synchronization	>	fast and precise shifting, lower chain stress
0	Ultra-Drive <sup>™</sup> machining of the teeth	>	chain passage optimization
alle	nickel-chrome surface treatments	>	longer life, lower wear
CHORUS™ Ultra-Narrow™chain	width 5.9 mm	>	quiet operation, less interference with adjacent sprockets an chainrings, high-performance shifting
0-010-	HD-Link <sup>™</sup>	>	extremely high retention force
	lightened links	>	weight savings
	antifriction treatment	>	smoothness, long life
CHORUS <sup>™</sup> Ultra-Torque <sup>™</sup> — Carbon crankset —	full-carbon unidirectional-multidirectional cranks	>	rigidity, weight savings, longer fatigue life
	light-alloy high-guage chainrings with antifriction treatment	>	weight savings, rigidity, resistance to wear
	light-alloy nuts and bolts	>	greater weight savings
	8 pins on the large chainring	>	faster shifting
	Ultra-Torque <sup>™</sup> bottom bracket	>	(see specific window)
Ultra-Torque™	Hirth-type joint	>	self-centering, self-aligning, extreme strength
System -	15 mm locking bolt with preloading Belleville spring	>	great strength, great security, preload the joint with 1300lb/ 600kg, self-locking
	variable section semi-axles	>	great weight savings, strength where necessary
_	great interface diameter with the crank	>	makes it possible to make a thinner crank, with less lateral bulk/better Q-factor
	bearings on semi-axles	>	simple fast maintenance, fast and simple changing
_	triple gaskets	>	good insulation with reduced friction
_	preloading spring on the bearings	>	elimination of lateral bearing movement
_	crescent spring for RH bearing	>	prevention of crankset movements compared with frame
-	cups with surface treatment	>	reduced wear and noise

### <sup>24</sup> FEATURES - BENEFITS

Component	FEATURES		BENEFITS
CHORUS <sup>™</sup> Pro⋅Fit Plus <sup>™</sup>	compact	>	weight savings, excellent clearance in bends
	broad support base	>	comfortable
	sealed cartridge axle	>	zero maintenance
	release adjustment display	>	handy adjustment
CHORUS <sup>™</sup> Skeleton <sup>™</sup>	forged arms	>	stronger, maximum life cycle
brakes	skeletonized arms	>	greater weight savings with same life
	orbital pad adjustment	>	optimum interface with the rim, maximum braking performance
a de la de l	ball bearings	>	long life, low friction
39 (l)	special pad compound	>	excellent balance between performance on dry and wet surface, modulable braking and long pad life
	differentiated front-rear	>	powerful front, light and modulable rear
CHORUS <sup>™</sup> Carbon	differentiated composite tube	>	weight savings and strength
seat post	forged aluminium head	>	weight savings and security
	forged aluminium brackets	>	weight savings and long fatigue life
	special steel screw with rolled thread	>	strength and long fatigue life
CHORUS <sup>™</sup> Threadless <sup>™</sup>	cup and cone system	>	easy cleaning and maintenance
headset	Campagnolo <sup>®</sup> patented centering system	>	weight savings, does not damage the fork
۲. E	light alloy with steel inserts	>	weight savings and strength
CHORUS <sup>™</sup> Hiddenset <sup>™</sup>	cup and cone system	>	easy cleaning and maintenance
headset	Campagnolo® patented centering system	>	weight savings, does not damage the fork
<b>a a -</b>			
CHORUS™	composite body	>	weight savings, corrosion-proof
bottle cage	carbon band	>	weight savings, corrosion-proof



technopolymer with PTFE > self-lubricating, minimum friction



### <sup>26</sup> TECHNICAL SPECIFICATIONS

### CHORUS™ 2008

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
CHORUS <sup>™</sup> 10s rear derailleur	short cage	upper to lower pulley-axle: 55 mm composite outer plate	202
	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate	205
CHORUS <sup>™</sup> QS <sup>™</sup> STD + CT <sup>™</sup> 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard and CT <sup>™</sup> crankset - capacity 16 – max. chainring 55 - min. chainring 34 - light alloy fork with antifriction treatment - M-brace <sup>™</sup> body - Even-O <sup>™</sup> clamp - Z-shape <sup>™</sup> lower cage	76
CHORUS <sup>™</sup> QS <sup>™</sup> 10s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible – composite body – composite levers - light alloy hardware - ErgoBrain10 <sup>™</sup> computer ready	348
CHORUS <sup>™</sup> 10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible – alu-composite body – aluminium brake lever - light alloy small parts - requires QS™ front derailleur	320
RECORD <sup>™</sup> front hub	32, 36 holes	light alloy axle and body – adjustable bearings – quick-release with aluminium lock nuts - O.L.D. 100 mm	116
RECORD <sup>™</sup> rear hub	32, 36 holes	9s/10s - light alloy body, axle and one-piece freewheel body – adjustable bearings – quick-release with aluminium lock nuts - lockring thread 27x1 - O.L.D. 130 mm	231
CHORUS™ UD™ 10s sprockets - steel	11-23, 11-25, 12-25, 13-26, 13-29	Ultra·Drive <sup>™</sup> - nickel-chromed finish - light alloy carrier - supplied without lockring (except for 11-23 and 11-25)	220
CHORUS™ Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive <sup>™</sup> - HD-Link <sup>™</sup> for Ultra Narrow <sup>™</sup> chain - lightened links	2,36/ link **
CHORUS™ Ultra-Torque™ Carbon 10s crankset	170, 172.5, 175 mm 39-52, 39-53	composite crankarms - Ultra Drive <sup>™</sup> EPS <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi- axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	679
CHORUS™ Ultra-Torque™ CT™ Carbon 10s crankset	170, 172.5, 175 mm 34-48, 34-50, 36-50	composite crankarms - Ultra Drive <sup>™</sup> EPS <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi- axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	679
RECORD <sup>™</sup> Ultra-Torque <sup>™</sup> BB overboard cups	ITA, ENG	aluminium	49
CHORUS™ Pro∙Fit Plus™ pedals		steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain™ magnet	325
CHORUS <sup>™</sup> D Skeleton <sup>™</sup> brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio:40÷50 mm (measured from brake fixing-bolt to brake- shoe-nut) - brake pads orbital adjustment-lightened rear brake	326
CHORUS <sup>™</sup> Carbon seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm	195

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*
CHORUS™ Threadless™ headset		1" - for unthreaded fork tube - height 24.5 mm - patent pending system steel and light alloy fixing screw	117
CHORUS™ Hiddenset™ headset	1-1/8", 1-1/8" TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC <sup>™</sup> : height 15,9 mm - patent pending system - steel and light alloy fixing screw light alloy cap - 1-1/8" TTC <sup>™</sup> without bolt washer and nut set	82
CHORUS <sup>™</sup> water-bottle carrier		carbon and composite, supplied with water-bottle	29
RECORD™ cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
 \*\* Example: 2,36 x 108 links = 255 g

EVERYTHING YOU ALWAYS WANTED AND NEVER DARED TO ASK FOR.

## **C**entaur<sup>™</sup>

The new Ultra-Torque<sup>™</sup> system for the cranksets is also available this year in the Carbon version; Skeleton<sup>™</sup> architecture for the brakes; carbon for the outer plate of the rear derailleur, the bottle cage and the Ergopower<sup>™</sup> controls: a class option at a competitive price.



### GROUPSET CENTAUR<sup>™</sup> 29

Component	FEATURES		BENEFITS
CENTAUR <sup>™</sup> 10s rear derailleur	aluminium bodies	>	mechanical strength, weight savings, rigidity, minimum ageing
20	carbon outer plate	>	light, long fatigue life, corrosion-proof
~ <u>~</u>	rollers on bushings	>	long life, low friction
(SA	rollers in special rubber	>	damping of vibrations
CENTAUR™	standardised Standard/Compact fork	>	versatility
front derailleur —	chrome-plated nickel fork	>	long life and low wear
	surface treatments	>	protection from rust
CENTAUR <sup>™</sup> QS <sup>™</sup> Ergopower <sup>™</sup> controls	carbon brake lever	>	weight savings, reliability, rigidity, mechanical strength, corrosion-proof, long fatigue life
-	body made of technopolymer with long glass fibre	>	mechanical strength and corrosion-proof, weight savings, rigidity minimum ageing
	internal Escape <sup>™</sup> mechanism	>	minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur
9	silicone hood	>	anallergic, elastic, memory of form, stability with UV and high temperatures
	brake opening control in the brake lever	>	enhanced ergonomics
CENTAUR™ front hub	sealed bearings	>	low maintenance
front hub ——	oversize body	>	greater rigidity, weight savings
pa ha	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
4	aluminium release lever housing	>	weight savings
CENTAUR™	sealed bearings	>	low maintenance
rear hub —	monolithic freewheel body	>	weight savings
	oversize body	>	greater rigidity, weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
	higher release lever housing	>	better interface with the frames
	aluminium release lever housing	>	weight savings
CENTAUR™ UD™ 10s	aluminium supports and "macro" spacers	>	precision and rigidity, weight savings
sprockets	sprocket synchronization	>	fast precise shifting, less stress for the chain
0	Ultra-Drive <sup>™</sup> machining of the teeth	>	chain passage optimization
	nickel-chrome surface treatments	>	longer life, lower wear
CENTAUR <sup>™</sup> Ultra-Narrow <sup>™</sup> chain	width 5.9 mm	>	quiet operation, less interference with adjacent sprockets and chainrings, high-performance shifting
0 0	HD-Link <sup>™</sup>	>	extremely high retention force
	lightened links	>	weight savings
	antifriction treatment	>	smoothness, long life

COMPONENT	FEATURES		BENEFITS
CENTAUR™ Ultra-Torque™	forged aluminium cranks	>	excellent mechanical features, longer fatigue life
crankset -	light-alloy high-thickness chainrings	>	rigidity, resistance to wear
0	pedal shouldershoulder tapered insert	>	longer fatigue life
le ce	rolled pedal thread	>	longer fatigue life
	8 pins on the large chainring	>	faster shifting
_	Ultra-Torque <sup>™</sup> bottom bracket	>	(see specific window)
CENTAUR <sup>™</sup> Ultra-Torque <sup>™</sup>	full-carbon unidirectional-multidirectional cranks	>	rigidity, weight savings, longer fatigue life
Carbon crankset -	light-alloy sheared-drawn chainrings with antifriction treatment	>	rigidity, rigidity, resistance to wear
A CONTRACTOR OF	8 pins on the large chainring	>	faster shifting
James and the second	Ultra-Torque <sup>™</sup> bottom bracket	>	(see specific window)
Ultra-Torque <sup>™</sup>	Hirth-type joint	>	self-centering, self-aligning, extreme strength
System -	15 mm locking bolt with preloading Belleville spring	>	great strength, great security, preload the joint with 1300lb/600kg, self-locking
n	variable section semi-axles	>	great weight savings, strength where necessary
_	great interface diameter with the crank	>	makes it possible to make a thinner crank, with less lateral bulk/better Q-factor
_	bearings on semi-axles	>	simple fast maintenance, fast and simple changing
_	triple gaskets	>	good insulation with reduced friction
_	preloading spring on the bearings	>	elimination of lateral bearing movement
_	crescent spring for RH bearing	>	prevention of crankset movements compared with frame
	cups with surface treatment	>	reduced wear and noise
CENTAUR <sup>™</sup> Skeleton <sup>™</sup>	forged arms	>	stronger, maximum life cycle
brakes –	skeletonized arms	>	greater weight savings with same rigidity
t	special pad compound	>	excellent balance between performance on dry and wet surface, modulable braking and long pad life
a farmed	differentiated front-rear	>	powerful front, light and modulable rear
and the	orbital pad adjustment	>	optimum interface with the rim, maximum braking performance
CENTAUR <sup>™</sup> Hiddenset	cup and cone system	>	easy cleaning and maintenance
headset -	Campagnolo® patented centering system	>	weight savings, does not damage the fork
000000	standardised external dimensions	>	forks from 1" to 1-1/8" on the same frame
CENTAUR <sup>™</sup> bottle cage	composite body	>	weight savings, corrosion-proof
	carbon band	>	weight savings, corrosion-proof
RECORD <sup>™</sup> sub-shell plate	technopolymer with PTFE	>	self-lubricating, minimum friction

### 32 TECHNICAL SPECIFICATIONS

### Centaur™ 2008

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*	
CENTAUR <sup>™</sup> 10s	short cage	upper to lower pulley-axle: 55 mm composite outer plate	227	
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate	232	
CENTAUR <sup>™</sup> STD + CT <sup>™</sup> 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard and CT <sup>™</sup> crankset - capacity 16 – max. chainring 55 - min. chainring 34 - antifriction insert	91	
CENTAUR <sup>™</sup> QS <sup>™</sup> 10s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible – composite body - ESCAPE <sup>™</sup> mechanism - not compatible with ErgoBrain <sup>™</sup>	334	
CENTAUR™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	169	
CENTAUR™ rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	312	
CENTAUR <sup>™</sup> UD <sup>™</sup> 10s sprockets - steel	11-23, 11-25, 12-25, 13-26, 13-29	Ultra-Drive <sup>™</sup> - nickel-chromed finish - light alloy carrier - "macro" spacers - supplied without lockring (except for 11-23 and 11-25)	233	
CHORUS™ Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive <sup>™</sup> - HD-Link <sup>™</sup> for Ultra Narrow <sup>™</sup> chain - lightened links	2,36/ link **	
CENTAUR <sup>™</sup> Ultra-Torque <sup>™</sup> 10s crankset	170, 172.5, 175 mm	39-53 - Ultra Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA- TORQUE <sup>™</sup> BB overboard cups	828	
CENTAUR <sup>™</sup> Ultra-Torque <sup>™</sup> Carbon 10s crankset	170, 172.5, 175 mm	39-53 - composite crankarms - Ultra Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi- axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	707	
CENTAUR <sup>™</sup> Ultra-Torque <sup>™</sup> CT <sup>™</sup> crankset	170, 172.5, 175 mm	34-50 - Ultra Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA- TORQUE <sup>™</sup> BB overboard cups	828	
CENTAUR <sup>™</sup> Ultra-Torque <sup>™</sup> CT <sup>™</sup> Carbon crankset	170, 172.5, 175 mm	34-50 - composite crankarms - Ultra Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi- axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	693	
RECORD <sup>™</sup> Ultra-Torque <sup>™</sup> BB overboard cups	ITA, ENG	aluminium	49	
CENTAUR <sup>™</sup> D Skeleton <sup>™</sup> brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (measured from brake fixing-bolt to brake- shoe-nut) - brake pads orbital adjustment - lightened rear brake	334	
CENTAUR <sup>™</sup> seat post		Ø 27.2 mm - L. 250 mm - light alloy tube	221	
CENTAUR <sup>™</sup> Hiddenset <sup>™</sup> headset		1-1/8" - internal headset for unthreaded fork tube - height 5.9 mm - patent pending system - composite cap - without bolt washer and nut set	56	
CENTAUR <sup>™</sup> water bottle carrier		carbon and composite, supplied with water-bottle	35	
RECORD <sup>™</sup> cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5	

 \* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products
 \*\* Example: 2,36 x 108 links = 255 g



THE CHAMPION OF THE CAMPAGNOLO<sup>®</sup> MIDDLE RANGE.

# **VELOCE**<sup>T</sup>**SILVER**

ULTRA-TORQUE

Skeleton<sup>™</sup> brake bodies, Ergopower<sup>™</sup> controls with composite or aluminium levers – of both the Racing and Flat-bar types – hubs with oversize bodies, the new Ultra-Drive<sup>™</sup> sprocket set and Ultra-Torque<sup>™</sup> cranksets.



### GROUPSETVELOCE™SILVER 35

# **VELOCE<sup>™</sup>INFINITE<sup>™</sup>**

The Veloce<sup>™</sup> groupset is available with two finishes, the aggressive Veloce<sup>™</sup> Infinite<sup>™</sup> gloss black version as well as the traditional polished Silver one.



### GROUPSETVELOCE™INFINITE™ 37

### **38** FEATURES - BENEFITS

COMPONENT	FEATURES		BENEFITS
/ELOCE™ 10s rear derailleur	aluminium bodies	>	mechanical strength, weight savings, rigidity, minimum ageing
2	rollers on bushings	>	long life, low friction
CI -	rollers in special rubber	>	damping of vibrations
/ELOCE™	standardised Standard/Compact forkt	>	versatility
ront derailleur —	chrome-plated nickel fork	>	long life and low wear
	surface treatments	>	protection from rust
/ELOCE™ QS™ Ergopower™ controls	aluminum brake lever	>	weight savings, reliability, rigidity, mechanical strength, long fatigue life
<b>A</b> -	body made of technopolymer with long glass fibre	>	mechanical strength and corrosion-proof, weight savings, rigidity, minimum ageing
	internal Escape <sup>™</sup> mechanism		minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur
1	silicone hood	>	anallergic, elastic, memory of form, stability with UV and high temperatures
	brake opening control in the brake lever	>	greater ergonomics, greater security
B VELOCE™ Ergopower™ controls	aluminum brake lever	>	weight savings, reliability, rigidity, mechanical strength, long fatigue life
Annual and	upshift up to three sprockets	>	fast shifting
	downshift up to three sprockets	>	fast shifting
_	rolling mechanism	>	low friction-light operation, low maintenance, great reliability
_	adjustable brake lever distance	>	maximum ergonomics and security with hands of various sizes
_	optical gear display	>	fast checking without distractions
	indexed left-hand control	>	fast and precise shifting
/ELOCE <sup>™</sup> —	sealed bearings	>	low maintenance
	oversize body	>	greater rigidity, weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
/ELOCE™ ear hub —	sealed bearings	>	low maintenance
	monolithic freewheel body	>	weight savings
	oversize body	>	greater rigidity, weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
	higher release lever housing	>	better interface with the frames

COMPONENT	FEATURES		BENEFITS
VELOCE™ UD™ 10s	sprocket synchronization	>	fast precise shifting, less stress for the chain
sprockets -	Ultra-Drive machining <sup>™</sup> of the teeth	>	chain passage optimization
0	nickel-chrome surface treatments	>	longer life, lower wear
VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain	width 5.9 mm	>	quiet operation, less interference with adjacent sprockets and chainrings, high-performance shifting
	HD-Link <sup>™</sup>	>	extremely high retention force
VELOCE™ Ultra-Torque™	forged aluminium cranks	>	excellent mechanical specifications, longer fatigue life
crankset –	sheared-drawn chainring	>	more rigid for same weight
	pedal shouldershoulder area tapered washer	>	longer fatigue life
0-0	rolled pedal thread	>	longer fatigue life
A second se	8 pins on the large chainring	>	faster shifting
_	Ultra-Torque™ bottom bracket	>	see specific window
Ultra-Torque™	Hirth-type joint	>	self-centering, self-aligning, extreme strength
System –	15 mm locking bolt with preloading Belleville spring	>	great strength, great security, preload the joint with 1300lb/ 600kg, self-locking
and house and h	variable section semi-axles	>	great weight savings, strength where necessary
	great interface diameter with the crank	>	makes it possible to make a thinner crank, with less lateral bulk/better Q-factor
_	bearings on semi-axles	>	simple fast maintenance, fast and simple changing
_	triple gaskets	>	good insulation with reduced friction
_	preloading spring on the bearings	>	elimination of lateral bearing movement
	crescent spring for RH bearing	>	prevention of crankset movements compared with frame
	cups with surface treatment	>	reduced wear and noise
VELOCE <sup>™</sup> Skeleton <sup>™</sup>	forged arms	>	stronger, maximum life cycle
brakes –	skeletonized arms	>	greater weight savings with same rigidity
a martine	special pad compound	>	excellent balance between performance on dry and wet surfact modulable braking and long pad life
tim the	differentiated front-rear	>	powerful front, light and modulable rear
VELOCE <sup>™</sup> linear pull cantilever brakes —	forged arms	>	stronger, maximum life cycle
	special pad compound	>	excellent balance between performance on dry and wet surfac modulable braking and long pad life
fr al	fast-fit pads	>	speedy replacement and secure retention
RECORD <sup>™</sup> sub-shell plate	technopolymer with PTFE	>	self-lubricating, minimum friction

sub-shell plate

### **40** TECHNICAL SPECIFICATIONS

### Veloce™ 2008

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
VELOCE <sup>™</sup> 10s	short cage	upper to lower pulley-axle: 55 mm	250
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	259
VELOCE <sup>™</sup> QS <sup>™</sup> STD + CT <sup>™</sup> front derailleur	braze-on / clip-on: 32, 35 mm	for double standard and CT <sup>™</sup> crankset - capacity 16 – max. chainring 55 - min. chainring 34 - antifriction insert	98
VELOCE <sup>™</sup> QS <sup>™</sup> 10s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible - composite body – ESCAPE <sup>™</sup> mecha- nism - not compatible with ErgoBrain <sup>™</sup>	351
VELOCE <sup>™</sup> 10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible - alu-composite body – aluminium brake lever - requires QS™ front derailleur	340
VELOCE <sup>™</sup> 10s Ergopower <sup>™</sup> FB shifters		for linear pull cantilever brakes - double/triple crankset compatible - alu-composite body — aluminium brake lever - requires QS <sup>™</sup> front derailleur	340
CENTAUR™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	169
CENTAUR™ rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - 0.L.D. 130 mm	
VELOCE <sup>™</sup> UD <sup>™</sup> 10s sprockets - steel	11-25, 12-23, 12-25, 13-26, 13-29, 14-23	Ultra-Drive <sup>™</sup> - single sprockets - nickel-chromed finish - supplied without lockring (except for 11-25)	250
VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive <sup>™</sup> - requires HD-Link <sup>™</sup> for Ultra Narrow <sup>™</sup> chain	2,39/ link **
VELOCE <sup>™</sup> Ultra-Torque <sup>™</sup> 10s crankset	170, 172.5, 175 mm	39-53 - Exa Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA- TORQUE <sup>™</sup> BB overboard cups	836
VELOCE <sup>™</sup> Ultra-Torque <sup>™</sup> CT <sup>™</sup> 10s crankset	170, 172.5, 175 mm	34-50 - Exa Drive <sup>™</sup> chainrings - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA- TORQUE <sup>™</sup> BB overboard cups	821
RECORD™ Ultra-Torque™ BB overboard cups	ITA, ENG	aluminium	49
VELOCE <sup>™</sup> D Skeleton <sup>™</sup> brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (measured from brake fixing-bolt to brake- shoe-nut) - integrated shoe-holder - lightened rear brake	349
VELOCE <sup>™</sup> linear pull cantilever brakes		for distances between brake bosses from 70 to 83 mm and for rim widths from 19.5 to 26.5 mm	378
RECORD <sup>™</sup> cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
 \*\* Example: 2,39 x 108 links = 258 g



## MIRAGE<sup>™</sup>

THE PLEASURE OF CYCLING.

A groupset dedicated to the use of the bike in the most leisurely sense but still without performance compromises at a technical level: included are the CT<sup>™</sup> cranksets, often preferred for gearing down the pedal action, and Flat Bar controls, for a higher position.



### GROUPSETMIRAGE<sup>™</sup> 43

### 44 FEATURES - BENEFITS

Component	FEATURES		BENEFITS
MIRAGE <sup>™</sup> 10s	aluminium bodies	>	mechanical strength, weight savings, rigidity, minimum ageing
rear derailleur	rollers on bushings	>	long life, low friction
	rollers in special rubber	>	damping of vibrations
MIRAGE <sup>™</sup> ront derailleur	standardised Standard/Compact fork	>	versatility
	chrome-plated nickel fork	>	long life and low wear
	surface treatments	>	protection from rust
MIRAGE <sup>™</sup> QS <sup>™</sup> Ergopower <sup>™</sup> controls	aluminum brake lever	>	weight savings, reliability, rigidity, mechanical strength, long fatigue life
and the second s	body made of technopolymer with long glass fibre	>	mechanical strength and corrosion-proof, weight savings, rigidity, minimum ageing
INANG	internal Escape™ mechanism	>	minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur
	silicone hood	>	anallergic, elastic, memory of form, stability with UV and high temperatures
	fast brake opening control in the brake lever	>	greater ergonomics, greater security
FB MIRAGE™ Ergopower™ controls	body made of technopolymer with oriented, long glass fibre	>	reliability, rigidity, mechanical strength, corrosion-proof, long fatigue life
	upshift up to three sprockets	>	fast shifting
UL-	downshift up to three sprockets	>	fast shifting
	rolling mechanism	>	low friction-light operation, low maintenance, great reliability
	adjustable brake lever distance	>	maximum ergonomics and security with hands of various size
	optical gear display	>	fast checking without distractions
	indexed left-hand control	>	fast and precise shifting
MIRAGE™	sealed bearings	>	low maintenance
ront hub	aluminium axle	>	weight savings
*****	oversize body	>	greater rigidity, weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
MIRAGE <sup>™</sup>	sealed bearings	>	low maintenance
rear hub	monolithic freewheel body	>	weight savings
	oversize body	>	greater rigidity, weight savings
	Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
	higher release lever housing	>	better interface with the frames

COMPONENT	FEATURES		BENEFITS
MIRAGE <sup>™</sup> UD <sup>™</sup> 10s	sprocket synchronization	>	fast precise shifting, less stress for the chain
sprockets -	Ultra-Drive <sup>™</sup> machining of the teeth	>	chain passage optimization
0	galvanized	>	rust-proof
VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain	width 5.9 mm	>	quiet operation, less interference with adjacent sprockets and chainrings, high-performance shifting
	HD-Link <sup>™</sup>	>	extremely high retention force
MIRAGE <sup>™</sup> Ultra-Torque <sup>™</sup>	forged aluminium cranks	>	excellent mechanical specifications, longer fatigue life
crankset -	sheared-drawn chainrings	>	more rigid for same weight
RA	pedal shoulder area tapered washer	>	longer fatigue life
	rolled pedal thread	>	longer fatigue life
	8 pins on the large chainring	>	faster shifting
-	Ultra-Torque <sup>™</sup> bottom bracket	>	see specific window
Ultra-Torque <sup>™</sup>	Hirth-type joint	>	self-centering, self-aligning, extreme strength
System -	15 mm locking bolt with preloading Belleville spring	>	great strength, great security, preload the joint with 1300lb/ 600kg, self-locking
it	variable section semi-axles	>	great weight savings, strength where necessary
_	great interface diameter with the crank	>	makes it possible to make a thinner crank, with less lateral bulk/better Q-factor
_	bearings on semi-axles	>	simple fast maintenance, fast and simple changing
_	triple gaskets	>	good insulation with reduced friction
_	preloading spring on the bearings	>	elimination of lateral bearing movement
_	crescent spring for RH bearing	>	prevention of crankset movements compared with frame
	cups with surface treatment	>	reduced wear and noise
MIRAGE <sup>™</sup> –	forged arms	>	stronger, maximum life cycle
	special pad compound	>	excellent balance between performance on dry and wet surface modulable braking and long pad life
1			
VELOCE <sup>™</sup> linear pull	forged arms	>	stronger, maximum life cycle
cantilever brakes –	special pad compound	>	excellent balance between performance on dry and wet surface modulable braking and long pad life
The self	fast-fit pads	>	speedy replacement and secure retention
RECORD <sup>™</sup> plate	technopolymer with PTFE	>	self-lubricating, minimum friction

ed arms	>	stronger, maximum life cycle
npound	>	excellent balance between performance on dry and wet surface, modulable braking and long pad life
-fit pads	>	speedy replacement and secure retention

th PTFE > self-lubricating, minimum friction
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### 46 TECHNICAL SPECIFICATIONS

### MIRAGE<sup>™</sup> 2008

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*			
MIRAGE <sup>™</sup> 10s rear derailleur	short cage	upper to lower pulley-axle: 55 mm	269			
	medium cage	upper to lower pulley-axle: 72,5 mm	274			
MIRAGE <sup>™</sup> QS <sup>™</sup> STD + CT <sup>™</sup> front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard and CT <sup>™</sup> crankset - capacity 16 – max. chainring 55 - min. chainring 34 - antifriction insert	106			
MIRAGE <sup>™</sup> QS™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible – composite body - aluminium levers - ESCAPE <sup>™</sup> mechanism - not compatible with ErgoBrain <sup>™</sup>	352			
MIRAGE <sup>™</sup> 10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible – alu-composite body - composite brake lever - requires $QS^{\mbox{\tiny W}}$ front derailleur				
MIRAGE <sup>™</sup> 10s Ergopower™ FB shifters		for linear pull cantilever brakes - double/triple crankset compatible – alu-composite body - composite brake lever - requires QS <sup>™</sup> front derailleur				
MIRAGE <sup>™</sup> front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm				
MIRAGE <sup>™</sup> rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm				
MIRAGE <sup>™</sup> UD <sup>™</sup> 10s sprockets steel	11-25, 12-23, 12-25, 13-26, 13-29	Ultra.Drive <sup>™</sup> - single sprockets - galvanized - supplied without lockring (except for 11-25)	259			
VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive™ - requires HD-Link™ for Ultra Narrow™ chain	2,39/ link **			
MIRAGE <sup>™</sup> Ultra-Torque <sup>™</sup> 10s crankset	170, 172.5, 175 mm	39-53 - Black finish - Exa. Drive <sup>™</sup> - steel inner chainring - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA-TORQUE <sup>™</sup> overboard cups	876			
MIRAGE <sup>™</sup> Ultra-Torque <sup>™</sup> CT <sup>™</sup> 10s crankset	170, 172.5, 175 mm	34-50 - Black finish - Exa Drive <sup>™</sup> - steel inner chainring - integrated ULTRA-TORQUE <sup>™</sup> semi-axles - requires ULTRA-TORQUE <sup>™</sup> BB overboard cups	861			
RECORD <sup>™</sup> Ultra-Torque <sup>™</sup> BB overboard cup	ita, eng	aluminium	49			
MIRAGE <sup>™</sup> brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adj. ratio: 40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut)				
MIRAGE <sup>™</sup> linear pull cantilever brakes		for distances between brake bosses from 70 to 83 mm and for rim widths from 19.5 to 26.5 mm				
RECORD <sup>™</sup> cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5			

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
 \*\* Example: 2,39 x 108 links = 258 g



2+01

XENDN™

WELCOME TO THE CAMPAGNOLO<sup>®</sup> HOUSEHOLD.

Only Campagnolo<sup>®</sup> can offer you a 10-speed groupset that boasts functional features which fear no comparison at this price level. With its makeup, which partly makes use of Mirage<sup>™</sup> components, the Xenon<sup>™</sup> constitutes the most interesting groupset for special bikes in the first market bracket.



rear deailleur         minimum apeing <sup>1</sup> VENON" front derailleur         rollers in special rubber > damping of vibrations           XENON" foot derailleur         chrome-plated nickel fork > long life and low wear           Surface treatments         protection from rust           XENON" foot derailleur         chrome-plated nickel fork > long life and low wear           Surface treatments         protection from rust           XENON" DS" Ergopower"         brake lever in technopolymer with oriented, long glass fibre > reliability, rigidity, mechanical strength, corrosion-proot, long fatigue life           body made of technopolymer with oriented, long glass fibre > mechanical strength and corosion-proot, weight savings, precision, indexing on the front derailleur           internal Escape <sup>IM</sup> mechanism > minimum apeing           internal Escape <sup>IM</sup> mechanism > minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur           silicone hood > internal escape IM mechanism > minimum wear, minimum maintenance, weight savings           fast brake opening control in the brake lever > greater ergonomics, greater security           MIRAGE"         low maintenance           root nub         aluminum apeing           oversize body > greater rigidity, weight savings           Symmetric Action" lever on the release > even and effective operation           MIRAGE"         low maintenance           weight savings         S	Component	FEATURES		BENEFITS
rollers in special nubber         > damping of vibrations           XENON* front derailleur         chrome-plated nickel fork         > long life and low wear           xenon* GS* Ergopower*         brake lever in technopolymer with oriented, long glass fibre         > reliability, rigidity, mechanical strength, corrosion-proof, long taigue life           xenon* GS* Ergopower*         brake lever in technopolymer with long glass fibre         > reliability, rigidity, mechanical strength, corrosion-proof, weight savings, rigidity minimum ageing           winthinum ageing         internal Escape™ mechanism         > minimum water manum maintenance, weight savings, rigidity minimum ageing           internal Escape™ mechanism         > minimum water meantenance, weight savings, rigidity minimum ageing           internal Escape™ mechanism         > minimum water meantenance, weight savings, precision, indexing on the front derailleur           silicore hood         > anallergic, discing, memory of form, stability with UV and high temperatures           front hub         aluminium akd         > weight savings           oversize body         greater regionomics, greater security           MIRAGE*         sealed bearings         > low maintenance           front hub         aluminium akd         > weight savings           Symmetric Action* lever on the release         > even and effective operation           MIRAGE*         seven and effective operation		body made of technopolymer with glass fibre	>	mechanical strength and corrosion-proof, weight savings, rigidity, minimum ageing
XENON* front derailleur         chrome-plated nickel fork > long life and low wear           SUPNO* DS* Ergopower*         brake lever in technopolymer with oriented, long glass fibre > reliability, rigidity, mechanical strength, corrosion-proof, long falgue life           WENON* DS* Ergopower*         brake lever in technopolymer with oriented, long glass fibre > reliability, rigidity, mechanical strength, corrosion-proof, weight savings, rigidity minimum maging           WENON* DS* Ergopower*         brake lever in technopolymer with long glass fibre > mechanical strength and corrosion-proof, weight savings, rigidity minimum maging           Winternal Escape** mechanism         > minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur           Silicone hood >         > anallergic, elastic, memory of torm, stability with UV and high temperatures           MIRAGE*         saled bearings > low maintenance           front hub         aluminitum axie > weight savings           Symmetric Action* lever on the release > even and effective operation           MIRAGE*         saled bearings > low maintenance           mean fub         oversize body > gratter rigidity, weight savings           Symmetric Action* lever on the release > even and effective operation           MIRAGE*         sprocket synchronization > fast precise shifting, less stress for the chain           sprocket synchronization > galvanized > rust-proof         gratter rigidity, weight savings           VELOCE* Ultra-Narrow* </td <td>0</td> <td>rollers on bushings</td> <td>&gt;</td> <td>long life, low friction</td>	0	rollers on bushings	>	long life, low friction
Surface treatments         protection from rust           XENON" QS" Ergopower"         brake lever in technopolymer with oriented, long glass fibre         > reliability, rigidity, mechanical strength, corrosion-proof, long tatigue life           WENON" QS" Ergopower"         body made of technopolymer with long glass fibre         > reliability, rigidity, mechanical strength, corrosion-proof, weight savings, rigidity minimum ageing           internal Escape <sup>TM</sup> mechanism         > minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur           Silicone hood         > anallergic, elastic, memory of form, stability with UV and high temperatures           test brake opening control in the brake lever         > greater regonomics, greater security           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         Symmetric Action" lever on the release         > even and effectiv		rollers in special rubber	>	damping of vibrations
XENON* QS* Ergopower* controls         brake lever in technopolymer with oriented, long glass fibre > reliability, rigidity, mechanical strength, corrosion-prool, long tatigue life           body made of technopolymer with long glass fibre > mechanical strength and corrosion-prool, weight savings, precision, indexing on the front derailleur         minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur           with the precision indexing on the front derailleur         anallergic, elastic, memory of form, stability with UV and high temperatures           MIRAGE**         sealed bearings > low maintenance           front hub         aluminium axle         weight savings           Symmetric Action*         sealed bearings > low maintenance           MIRAGE*         sealed bearings > low maintenance           monolithic freewheel body > greater rigidity, weight savings           Symmetric Action*         low maintenance           oversize body > greater rigidity, weight savings           Symmetric Action*         very on the release > even and effective operation           higher release lever housing > better interface with the frames           MIRAGE*         sprocket synchronization > tast precise shifting, less stress for the chain           Willra-Drive <sup>M</sup> machining of the teeth > chain passage optimization         rust-proof           VELOCE** Ultra-Narrow**         width 5.9 mm > quiet operation, less interference with adjacent chainrings and sprockets, high-prediormance	XENON <sup>™</sup> front derailleur	chrome-plated nickel fork	>	long life and low wear
controls       fatigue life         body made of technopolymer with long glass fibre       mechanical strength and corrosion-proof, weight savings, precision, indexing on the front derailleur         internal Escape™ mechanism       minimum wear, minimum maintenance, weight savings, precision, indexing on the front derailleur         Silicone hood       anallergic, elastic, memory of form, stability with UV and high temperatures         fast brake opening control in the brake lever       greater regrommics, greater security         MIRAGE"       low maintenance         tront hub       auluminium axle       weight savings         oversize body       greater rigidity, weight savings       secure and effective operation         MIRAGE"       sealed bearings       low maintenance         feat hub       oversize body       greater rigidity, weight savings         Symmetric Action" lever on the release       even and effective operation         MIRAGE" to "10s       sprocket synchronization       fast precise shifting, less stress for the chain         sprockets       Ultra-Drive™ machining of the teeth       chain passage optimization         VELOCE" Ultra-Narrow"       width 5.9 mm       quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		surface treatments	>	protection from rust
Internal Escape <sup>TM</sup> mechanism >       minimum wagr. minimum maintenance, weight savings, precision, indexing on the front derailleur         Silicone hood >       anallergic, elastic, memory of form, stability with UV and high temperatures         MIRAGE"       fast brake opening control in the brake lever >       greater ergonomics, greater security         MIRAGE"       sealed bearings >       low maintenance         front hub       aluminium axle >       weight savings         Oversize body >       greater rigidity, weight savings         Symmetric Action" lever on the release >       even and effective operation         MIRAGE" rear hub       monolithic freewheel body >       weight savings         Oversize body >       greater rigidity, weight savings       greater rigidity, weight savings         Symmetric Action" lever on the release >       even and effective operation       greater rigidity, weight savings         Oversize body >       greater rigidity, weight savings       greater rigidity, weight savings         Symmetric Action" lever on the release >       even and effective operation         higher release lever housing >       better interface with the frames         WIRAGE" UD" 10s       sprocket synchronization >       fast precise shifting, less stress for the chain         Sprockets       Ultra-Drive <sup>TM</sup> machining of the teeth >       chain passage optimization <t< td=""><td></td><td>brake lever in technopolymer with oriented, long glass fibre</td><td>&gt;</td><td></td></t<>		brake lever in technopolymer with oriented, long glass fibre	>	
Image: second		body made of technopolymer with long glass fibre	>	mechanical strength and corrosion-proof, weight savings, rigidity, minimum ageing
Itemperatures           fast brake opening control in the brake lever         > greater ergonomics, greater security           MIRAGE" front hub         sealed bearings         > low maintenance           Image: Symmetric Action" lever on the release         > even and effective operation           MIRAGE" front hub         Symmetric Action" lever on the release         > even and effective operation           MIRAGE" rear hub         sealed bearings         > low maintenance           MIRAGE"         sealed bearings         > low maintenance           Symmetric Action" lever on the release         > even and effective operation           MIRAGE"         weight savings           Oversize body         > greater rigidity, weight savings           Symmetric Action" lever on the release         > even and effective operation           higher release lever housing         > better interface with the frames           Sprockets         Ultra-Drive <sup>TM</sup> machining of the teeth         > chain passage optimization           galvanized         rust-proof           VELOCE" Ultra-Narrow"         width 5.9 mm         > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		internal Escape™ mechanism	>	
MIRAGE"       sealed bearings       > low maintenance         front hub       aluminium axle       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         MIRAGE"       sealed bearings       > low maintenance         rear hub       monolithic freewheel body       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         higher release lever housing       > better interface with the frames         MIRAGE" UD" 10s sprockets       Sprocket synchronization       > fast precise shifting, less stress for the chain         galvanized       > rust-proof         VELOCE" Ultra-Narrow"       width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		silicone hood	>	
front hub       aluminium axle       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         MIRAGE"       sealed bearings       > low maintenance         rear hub       monolithic freewheel body       > weight savings         Oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         MIRAGE" UD" 10s       Symmetric Action" lever on the release       > even and effective operation         higher release lever housing       > better interface with the frames         MIRAGE" UD" 10s       sprocket synchronization       > fast precise shifting, less stress for the chain         sprockets       Ultra-Drive <sup>TM</sup> machining of the teeth       > chain passage optimization         galvanized       rust-proof         VELOCE" Ultra-Narrow"       width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		fast brake opening control in the brake lever	>	greater ergonomics, greater security
aluminum axle > weight savings         oversize body > greater rigidity, weight savings         Symmetric Action** lever on the release > even and effective operation         MIRAGE** rear hub       sealed bearings > low maintenance         oversize body > greater rigidity, weight savings         oversize body > weight savings         oversize body > greater rigidity, weight savings         oversize body > greater rigidity, weight savings         Symmetric Action** lever on the release > even and effective operation         higher release lever housing > better interface with the frames         MIRAGE** UD** 10s         sprockets         UItra-Drive <sup>TM</sup> machining of the teeth > chain passage optimization         galvanized > rust-proof         VELOCE** Ultra-Narrow**         width 5.9 mm       quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		sealed bearings	>	low maintenance
Symmetric Action" lever on the release       > even and effective operation         MIRAGE"       sealed bearings       > low maintenance         rear hub       monolithic freewheel body       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         higher release lever housing       > better interface with the frames         MIRAGE" UD" 10s       sprocket synchronization       > fast precise shifting, less stress for the chain         sprockets       Ultra-Drive™ machining of the teeth       > chain passage optimization         VELOCE" Ultra-Narrow"       width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting	front hub	aluminium axle	>	weight savings
MIRAGE"       sealed bearings       > low maintenance         rear hub       monolithic freewheel body       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action" lever on the release       > even and effective operation         higher release lever housing       > better interface with the frames         MIRAGE" UD" 10s       sprocket synchronization       > fast precise shifting, less stress for the chain         Sprockets       Ultra-Drive™ machining of the teeth       > chain passage optimization         VELOCE" Ultra-Narrow"       width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting	P-1	oversize body	>	greater rigidity, weight savings
rear hub       monolithic freewheel body > weight savings         oversize body > greater rigidity, weight savings         Symmetric Action" lever on the release > even and effective operation         higher release lever housing > better interface with the frames         MIRAGE" UD" 10s         sprockets         Ultra-Drive <sup>TM</sup> machining of the teeth > chain passage optimization         galvanized > rust-proof         VELOCE" Ultra-Narrow"         width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
Impondition: treewheel body       > weight savings         oversize body       > greater rigidity, weight savings         Symmetric Action <sup>™</sup> lever on the release       > even and effective operation         higher release lever housing       > better interface with the frames         MIRAGE <sup>™</sup> UD <sup>™</sup> 10s       sprocket synchronization       > fast precise shifting, less stress for the chain         Sprockets       Ultra-Drive <sup>™</sup> machining of the teeth       > chain passage optimization         galvanized       > rust-proof         VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		sealed bearings	>	low maintenance
Symmetric Action <sup>™</sup> lever on the release       even and effective operation         higher release lever housing       better interface with the frames         MIRAGE <sup>™</sup> UD <sup>™</sup> 10s sprockets       sprocket synchronization       fast precise shifting, less stress for the chain         Ultra-Drive <sup>™</sup> machining of the teeth       chain passage optimization         galvanized       rust-proof         VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain       width 5.9 mm       quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting	rear hub	monolithic freewheel body	>	weight savings
MIRAGE <sup>™</sup> UD <sup>™</sup> 10s       sprocket synchronization > fast precise shifting, less stress for the chain         Sprockets       Ultra-Drive <sup>™</sup> machining of the teeth > chain passage optimization         galvanized       rust-proof         VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> width 5.9 mm > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting	production to	oversize body	>	greater rigidity, weight savings
MIRAGE <sup>™</sup> UD <sup>™</sup> 10s       sprocket synchronization > fast precise shifting, less stress for the chain         sprockets       Ultra-Drive <sup>™</sup> machining of the teeth > chain passage optimization         galvanized       rust-proof         VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> width 5.9 mm > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		Symmetric Action <sup>™</sup> lever on the release	>	even and effective operation
sprockets       Ultra-Drive™ machining of the teeth > chain passage optimization         galvanized       rust-proof         VELOCE™ Ultra-Narrow™       width 5.9 mm > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting         WD_Link™       outcomply high retention force		higher release lever housing	>	better interface with the frames
Ultra-Drive <sup>™</sup> machining of the teeth > chain passage optimization         galvanized > rust-proof         VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> width 5.9 mm       > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting		sprocket synchronization	>	fast precise shifting, less stress for the chain
VELOCE™ Ultra-Narrow™       width 5.9 mm > quiet operation, less interference with adjacent chainrings and sprockets, high-performance shifting         HD Link™       optemply high retention force	sprockets	Ultra-Drive™ machining of the teeth	>	chain passage optimization
chain sprockets, high-performance shifting	0	galvanized	>	rust-proof
UD Link <sup>™</sup> > avtromaly high rotantian force		width 5.9 mm	>	
	0 0 0	 HD-Link™	>	

COMPONENT	FEATURES		BENEFITS
XENON <sup>™</sup> crankset	forged aluminium cranks	>	excellent mechanical specifications, longer fatigue life
	sheared-drawn chainrings	>	more rigid for same weight
(AD)	rolled pedal thread	>	longer fatigue life
	8 pins on the large chainring	>	faster shifting
VELOCE <sup>™</sup> bottom bracket	ISO spindle	>	reliable and simple to fit
	sealed cartridge	>	maintenance-free, easy to fit
XENON <sup>™</sup> brakes	forged arms	>	stronger, maximum life cycle
2	special pad compound	>	excellent balance between performance on dry and wet surface modulable braking and long pad life
RECORD <sup>™</sup> sub-shell plate	technopolymer with PTFE	~	self-lubricating, minimum friction

### 52 TECHNICAL SPECIFICATIONS

### Xenon<sup>™</sup> 2008

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
XENON <sup>™</sup> 10s	short cage	upper to lower pulley-axle: 55 mm	253
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	258
XENON <sup>™</sup> QS <sup>™</sup> CT <sup>™</sup> 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT <sup>™</sup> crankset - capacity 16 – chainring max 50 - chainring min 34	108
XENON <sup>™</sup> QS <sup>™</sup> 10s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible – composite body and levers - ESCA- PE <sup>™</sup> mechanism - not compatible with ErgoBrain <sup>™</sup>	363
MIRAGE <sup>™</sup> front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	140
MIRAGE <sup>™</sup> rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	303
MIRAGE <sup>™</sup> UD™ 10s sprockets steel	11-25, 12-23, 12-25, 13-26, 13-29	Ultra·Drive <sup>™</sup> - single sprockets - galvanized - supplied without lockring (except for 11-25)	259
VELOCE <sup>™</sup> Ultra-Narrow <sup>™</sup> chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive <sup>™</sup> - requires HD-Link <sup>™</sup> for Ultra Narrow <sup>™</sup> chain	2,39/ link **
XENON <sup>™</sup> CT <sup>™</sup> crankset	170, 172,5, 175 mm	Exa·Drive <sup>™</sup> chainrings – 34-50 - requires b.b. with L. 111 mm - requires CT <sup>™</sup> front derailleur	768
VELOCE <sup>™</sup> bottom bracket	ITA, ENG	111 mm - cartridge b.b solid axle - light alloy cups	299
MIRAGE <sup>™</sup> brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adj. ratio: 40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut)	340
RECORD <sup>™</sup> cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
 \*\* Example: 2,39 x 108 links = 258 g



58 KIT

TRIPLE

Comp Triple™



Race Triple<sup>™</sup>



There are three triple drivetrain kits available for enthusiasts of the steepest climbs, two 10-speeds and a 9-speed one, to have the most agile possible ratio set at your fingertips. The kits consist of a crankset, front derailleur and a rear derailleur with a long cage, and require the use of 111 mm and 115.5 mm ISO bottom brackets.

Champ Triple<sup>™</sup>



## KITTRIPLE 59

### • TECHNICAL SPECIFICATIONS

## TRIPLE 2008

## Comp Triple™

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
COMP TRIPLE <sup>™</sup> 10s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	238
COMP TRIPLE <sup>™</sup> front derailleur	braze-on / clip-on: Ø 32, 35 mm	for triple crankset - capacity 22 – chainring max 53 - chainring min 30	98
COMP TRIPLE <sup>™</sup> 10s Triple crankset	170, 175 mm 30-40-50, 30-42-53	Ultra·Drive <sup>™</sup> chainrings - requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	788
CENTAUR <sup>™</sup> bottom bracket	ITA, ENG 111, 115,5 mm	cartridge b.b hollow axle- light alloy cups	233

## Race Triple™

Component	OPTIONS	DESCRIPTION	WEIGHT (G.)*
RACE TRIPLE <sup>™</sup> 10s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	275
RACE TRIPLE <sup>™</sup> front derailleur	braze-on / clip-on: Ø 32, 35 mm	for triple crankset - capacity 22 – chainring max 52 - chainring min 30	118
RACE TRIPLE <sup>™</sup> 10s Triple crankset	170, 175 mm	30-42-52 - Exa DriveTM chainrings requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	882
VELOCE <sup>™</sup> bottom bracket	ITA, ENG 111, 115,5 mm	cartridge b.b solid axle - light alloy cups	299

## Champ Triple™

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
CHAMP TRIPLE <sup>™</sup> 9s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	263
CHAMP TRIPLE <sup>™</sup> front derailleur	braze-on / clip-on: Ø 32 mm	for triple crankset - capacity 22 – chainring max 52 - chainring min 30	
XENON <sup>™</sup> 9s Ergopower <sup>™</sup> shifters		for caliper brakes - double/triple crankset compatible – composite lever and body - ESCA- PE <sup>™</sup> mechanism - not compatible with ErgoBrain <sup>™</sup>	357
CHAMP TRIPLE <sup>™</sup> 9s Triple crankset	170, 175 mm	30-42-52 - Exa Drive <sup>™</sup> chainrings requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	
VELOCE <sup>™</sup> bottom bracket	ITA, ENG 111, 115,5 mm	cartridge b.b solid axle - light alloy cups	

\* The nominal weight refers to the lighter specification among the available options. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.



# **RECORD<sup>™</sup> PISTA<sup>™</sup>**



The Record<sup>™</sup> Pista<sup>™</sup> groupset is a set of high-range components designed to excel in the velodrome. It includes the crankset, hubs and bottom bracket. Three products designed exclusively for the specific needs of use on the track. The other components, such as seat posts, pedals and headsets have been borrowed directly from the Record road groupset.

COMPONENT	OPTIONS	DESCRIPTION light alloy body – lubrication port - small flanges - O.L.D. 100 mm	
RECORD <sup>™</sup> PISTA <sup>™</sup> front hub	32, 36 holes		
RECORD <sup>™</sup> PISTA <sup>™</sup> rear hub	32, 36 holes	light alloy body – lubrication port - small flanges - O.L.D. 120 mm	
RECORD <sup>™</sup> PISTA <sup>™</sup> crankset	165, 170 mm 47, 48, 49, 50, 51, 52	requires b.b. L. 111 mm (asymmetrical)	
RECORD <sup>™</sup> PISTA <sup>™</sup> bottom bracket	ITA, ENG	axle L. 111 mm (asymmetrical) - composite and light alloy cartridge - light alloy cups - without sealings	
RECORD <sup>™</sup> Pro∙Fit Plus <sup>™</sup> pedals		Titanium axle -light alloy body - with floating (standard) or fixed (optional) cleats - compo- site axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain <sup>™</sup> magnet	
RECORD <sup>™</sup> CARBON seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	
RECORD <sup>™</sup> headset		BC 1"x24tpi - height 36.5 mm	
RECORD <sup>™</sup> Threadless <sup>™</sup> headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	
RECORD <sup>™</sup> Hiddenset <sup>™</sup> headset	1-1/8" 1-1/8" TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC™: height 15.9 mm - patent pending system - composite cover and light alloy fixing screw - composite/light alloy cap	

\* The nominal weight refers to the lighter specification among the available options. The weight of the hubs does not include the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.

# **TIMETRIAL**<sup>™</sup>

Racing against the clock. Every detail is critical. Nothing is left to chance. Lightness and aerodynamics are the keywords. Campagnolo® dedicates various special components to time trials: bar-end controls, chainrings with oversized toothing and super-light brake levers in composite material.

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (G.)*
bar-end 10s shift. levers		composite body and lever	163
RECORD <sup>™</sup> brake levers		composite body and lever	210
inner chainrings	42,44	Exa Drive <sup>™</sup> system	51
RECORD <sup>™</sup> 10s inner chainrings	54, 55	Exa Drive <sup>™</sup> system	88
CHORUS™ 10s inner chainrings	54, 55	Exa Drive <sup>™</sup> system	88