

HELIUM X

FRAME PASSPORT

type: 7E1
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#BeTOUGH

INDEX

- 0. UPDATES..... 3**
- 1. GENERAL..... 3**
 - 1.1. Description 3
 - 1.2. Part codes..... 3
- 2. MATERIAL 3**
- 3. WEIGHT 3**
 - 3.1. Frame..... 3
 - 3.2. Fork..... 3
- 4. GEOMETRY..... 4**
- 5. CABLE ROUTING 4**
 - 5.1. Compatibility 4
 - 5.2. Mechanical cable routing..... 4
 - 5.3. Electronic cable routing..... 5
- 6. PARTS 5**
 - 6.1. Fork..... 5
 - 6.1.1. Material 5
 - 6.1.2. Dimensions..... 5
 - 6.1.3. Part codes..... 5
 - 6.2. Headset..... 6
 - 6.3. Seat post..... 6
 - 6.4. Bottom bracket 6
 - 6.5. Brakes..... 6
 - 6.6. Derailleur 6
 - 6.6.1. Front 6
 - 6.6.2. Rear 6
 - 6.7. Drop outs 7
- 7. WHEELS AND TIRES..... 7**
 - 7.1. Frame..... 7
 - 7.2. Fork..... 7
 - 7.3. Tires 7
- 8. WARRANTY INFORMATION..... 7**
 - 8.1. Maximum rider weight 7

0. UPDATES

The development of frames, forks and components is a continuous running process. Therefore we strongly advise before reading this information sheet check our website for new updates.

1. GENERAL

1.1. DESCRIPTION

The Helium X is everything you don't see. No remarkable shapes and extra's, but just an excellent bike that does what it needs to do. It combines lightness with comfort, while its shape goes way back, making it a no-nonsense classic beauty. Because we all know that less is more.

1.2. PART CODES

All the Helium X frames have a particular part code composed by the letters "FRAHEXRID...", added by 3 numbers. The three numbers change depending on the design and size of the frame. Due to the big amount of frames we don't list all the numbers but you can contact your local dealer for more information if needed.

2. MATERIAL

Used frame materials:

- 24 ton High Modulus Carbon
- 30 ton High Modulus Carbon
- Stainless steel (drop out protection plates)

3. WEIGHT

3.1. FRAME

size	weight (*)
XXS	840
XS	850
S	870
M	900
L	940
XL	990

(*) Weight of painted frame, real weight may differ from the weight mentioned above by 10 %.

3.2. FORK

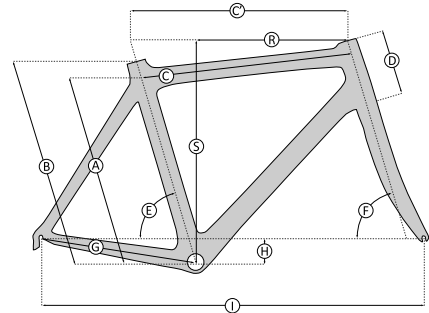
The weight of the 4ZA Helium X fork is around 310 g (*)

(*) Weight of painted fork, real weight may differ from the weight mentioned above by 10 %.

4. GEOMETRY

SIZE	A	B	C	C'	D	E	F	G	H	I	J*	S	R
XXS	410	450	501	515	110	75	71.8	405	68	970	721	507	379
XS	440	480	510	525	130	74	72	405	68	970	755	527	374
S	470	510	523	545	145	73.5	73	405	66	977	775	542	384
M	500	540	549	565	175	73	73.5	405	66	987	804	573	390
L	530	570	568	585	205	72.5	73.5	408	63	1005	834	599	396
XL	560	600	583	600	230	72.5	74	408	63	1014	961	624	403

(*) J: Stand over height



5. CABLE ROUTING

5.1. COMPATIBILITY

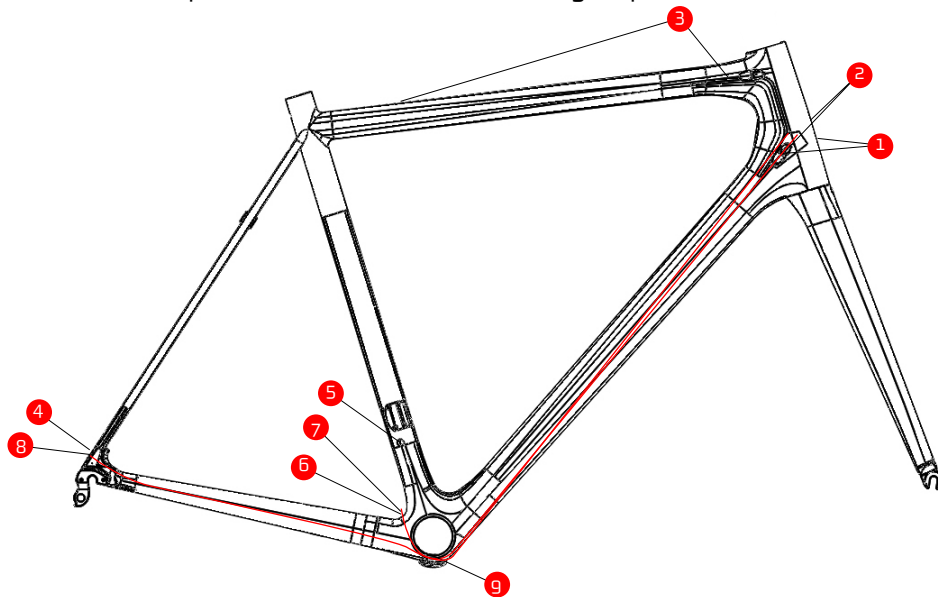
The Helium X is compatible for:

Mechanical groupsets*

Electronical groupsets: Shimano Di2 ,Campagnolo EPS & SRAM eTap*

5.2. MECHANICAL CABLE ROUTING

Below you can find the parts needed for a mechanical groupset:

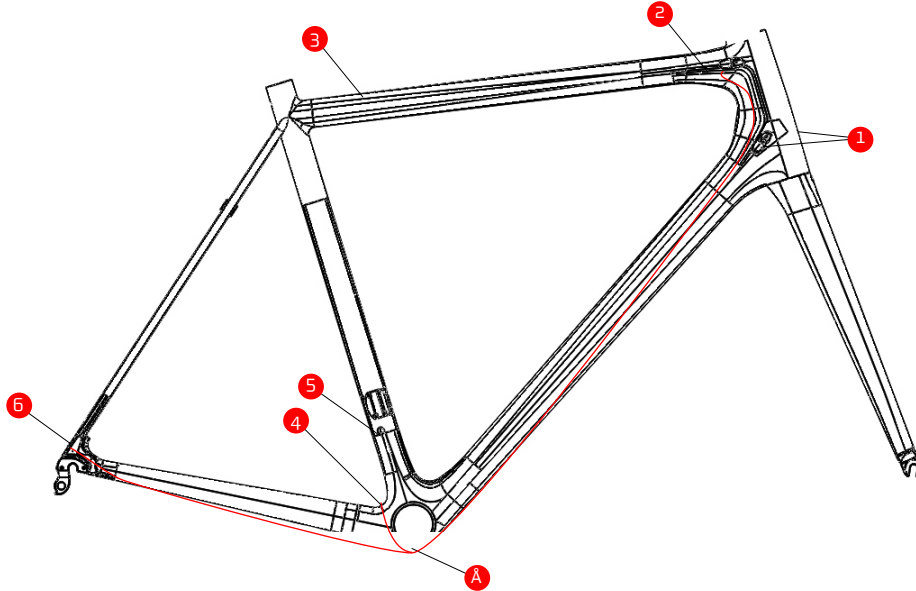


no.	part	part code	quantity
1	Integrated cable stopper - Shift	FRPSTORID012	2
2	End cap, shifter cable	CABSTIJAG037	2
3	Integrated cable stopper - Brake	FRPSTORID013	4
4	CLOSED GROMMET 10MM	FRPSTORID007	1
5	Plug flat top - closed	FRPGROJAG002	1
6	grommet flat top - open	FRPGROJAG003	1
7	rain and dirt cable protector	CABSTIJAG038	1
8	sti cable liner	CABSTIRID001	1
9	bb cable guide internal routing	CBGR CERID016	1

*Use a hard, plastic tool to insert the lid for part NO.1 and NO.3

5.3. ELECTRONIC CABLE ROUTING

Below you can find a drawing of the parts needed for an electronic groupset:



no.	part	part code	quantity
1	Integrated cable stopper - closed	FRPGRORID011	2
2	Integrated cable stopper - elec	FRPSTORID012	1
3	Integrated cable stopper - MECH	FRPSTORID013	1
4	Plug flat top - closed	FRPGROJAG002	1
5	grommet flat top - open	FRPGROJAG003	1
6	CLOSED GROMMET 10MM	FRPSTORID007	1
7	BB plug inner cable guide	FRPGRORID005	1

*Use a hard, plastic, tool to insert the lid for part NO.2 and NO.3

Battery mount position:

Both the campagnolo EPS and the Shimano DI2 battery have to be mounted inside the seatpost.

6. PARTS

6.1. FORK

The standard fork, used for a Helium X, is the 4ZA Helium X fork.

6.1.1. MATERIAL

Fork legs: Carbon
Steerer tube: Carbon

6.1.2. DIMENSIONS

Steerer tube length: 300 mm
Headset: 1 1/8" upper ring - 1 1/4" lower ring
Fork rake: 45 mm
OLD (OverLock nut Distance): 100 mm

6.1.3. PART CODES

All the 4ZA Helium X forks have a particular part code composed by the letters "FORCFR4ZA...", added by 3 numbers. The three numbers, depending on the design. Due to the big amount of forks we don't list all the numbers but you can contact your local dealer for more information if needed.

6.2. HEADSET

45° Semi oversized angular contact bearing (S.H.I.S.: IS42/28,6 | IS47/33):

Lower bearing: 1 1/4"

Upper bearing: 1 1/8"

Recommended headset:

ridley part code	type	brand
HSERACFSA006	NO.44/cf	FSA

6.3. SEAT POST

The Helium X is developed to use a 27,2 mm seat post. The recommended Ridley seat post clamp is the SPCSNG4ZA015.

6.4. BOTTOM BRACKET

The bottom bracket is designed for press fit 30 cups with a diameter of 46 mm and width of 68 mm.

Below bottom bracket cups are being used for the standard assembled bikes.

part code	brand	description	compatible cranksets
BBRPF3SRA001	Sram	Press Fit 30 cups	Sram Press Fit 30 cranksets
BBRPF3SRA003	Sram	Press Fit 30 to BSA 68 adapter	SRAM BSA 68 cranksets shimano bsa 68 cranksets
BBRPF3CAM002	Campagnolo	Ultra Torque™ OS-Fit™ integrated cups BB30 68x46	Campagnolo Ultra Torque cranksets
BBRPF3CAM003	Campagnolo	Power Torque™ OS-Fit™ integrated cups BB30 68x46	Campagnolo Power Torque cranksets

6.5. BRAKES

The Helium X is suited for most standard brakes, available in the market.

6.6. DERAILLEUR

6.6.1. FRONT

The frame is provided with a braze on mount.

6.6.2. REAR

The hanger, used for the Helium X is the HAARCERIDO33.



6.7. DROP OUTS

The carbon drop outs have stainless steel inserts for extra protection.

7. WHEELS AND TIRES

7.1. FRAME

The frame is developed for 700C race wheels with a build in width of 130 mm and a quick release system with a maximum diameter of 10 mm.

7.2. FORK

The fork is developed for 700C race wheels with a build in width of 100 mm and a quick release system with a maximum diameter of 9 mm.

7.3. TIRES

We recommend a maximum tire width of 25 mm with a maximum rim width of 28 mm. Please note that not all tire manufacturers use the same sizing standard so we recommend to do assembly check and confirm clearances.

8. WARRANTY INFORMATION

8.1. MAXIMUM RIDER WEIGHT

The maximum advised rider weight is 110 kg.

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