HELIUM ISP
FRAME PASSPORT

type: 7dD
last update: 05/10/2017

#BeTOUGH

INDEX

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 offers the lightweight advantages of the Helium SL at a very aggressive price. Optimized for stiffness to weight, the Helium offers unparalleled performance and comfort in its range. Brutal Belgian pave and Tour de France hors category climbs are no match for the Helium.

1.2. PART CODES

All the Helium frames have a particular part code composed by the letters “FRAHELRID...”, 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:
- 30 ton High Modulus Carbon
- 24 ton High Modulus Carbon
- Stainless steel (drop out protection plates)

3. WEIGHT

3.1. FRAME

SIZE	WEIGHT (*)
XS	1180 GRAMS
S	1210 GRAMS
M	1250 GRAMS
L	1290 GRAMS
XL	1330 GRAMS

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

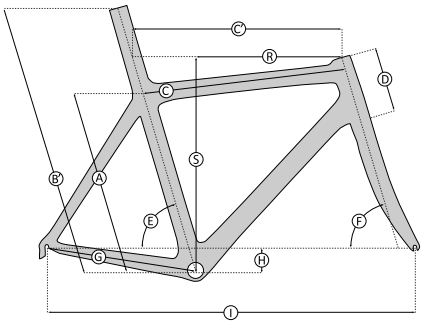
3.2. FORK

The weight of the 4ZA Helium fork is around 380 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
XS	440	670	510	525	130	74	72	405	66	974	740	530	375
S	470	700	530	545	145	73,5	73	405	66	977	750	545	385
M	500	740	550	560	175	73	73,5	405	66	990	780	575	390
L	530	770	570	585	205	72,5	73,5	408	63	1003	810	602	400
XL	560	800	585	600	230	72,5	74	408	63	1012	840	625	405

(*) J: Stand over height



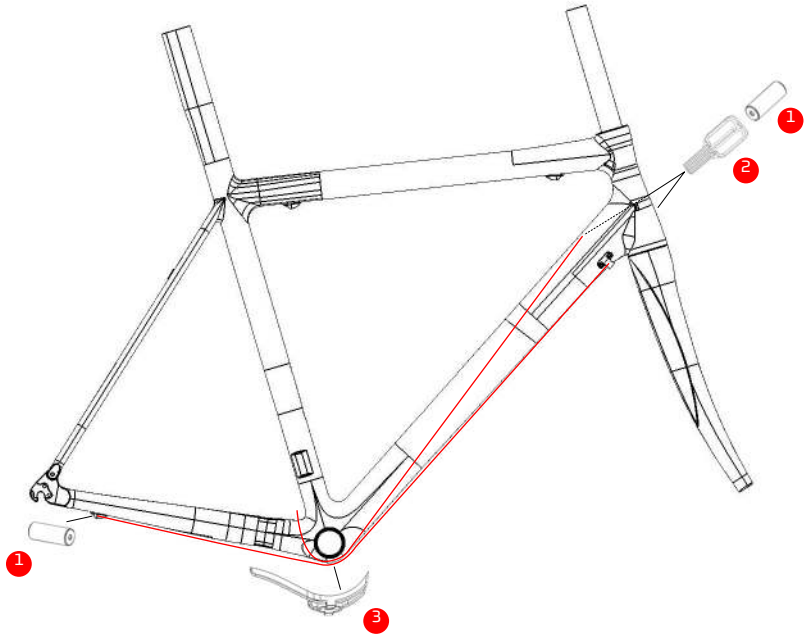
5. CABLE ROUTING

5.1. COMPATIBILITY

This Helium is compatible for mechanical group sets only (*).
(*) There's also a Helium available, compatible for electronic group sets.

5.2. MECHANICAL CABLE ROUTING

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



NO.	PART	PART CODE	QUANTITY
1	END CAP	CABSTIJAG002	3
2	CABLE ADJUSTER	CABSTI4ZA005	2
3	CABLE GUIDE	CBGRCERID002	1

6. PARTS

6.1. FORK

The standard fork, used for a Helium, is the 4ZA Helium 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 1/2" lower ring
- Fork rake: 45 mm
- OLD (OverLock nut Distance): 100 mm

6.1.3. PART CODES

All the 4ZA Helium 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° Oversized angular contact bearing (S.H.I.S.: IS42/28,6|IS47/33):

- Lower bearing: 1 1/2"
- Upper bearing: 1 1/8"

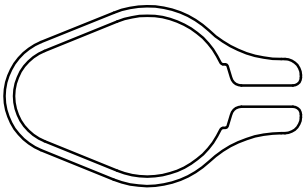
Recommended headsets:

RIDLEY PART CODE	TYPE	BRAND
HSERACFSA004	NO.42/ACB	FSA
HSERACFSA005	NO.42/CFST/ACB	FSA

6.3. SEAT POST

6.3.1. CUTTING THE SEAT POST

Cut the integrated seat post at a desired length with the help of a standard metal saw and the Ridley cutting guide
(Part code: SPCHEL4ZA008). Use a Ridley aero saddle clamp to fit the integrated seat post.

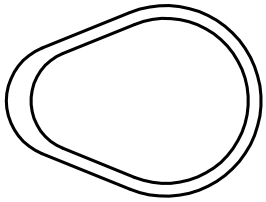


! KEEP IN MIND THE MAXIMUM CUT OFF LENGTH OF 70 MM.

6.3.2. SPACERS

The bottom of the saddle clamp has to be supported. If the saddle clamp doesn't touch the top of the seat tube it's necessary to fill up the gap between seat tube and saddle clamp with spacers. Below you can find a list with all the available spacers.

PART CODE	DESCRIPTION	THICKNESS
SPCHEL4ZA003	ALLOY SPACER	10 MM
SPCHEL4ZA004	ALLOY SPACER	1 MM
SPCHEL4ZA005	ALLOY SPACER	3 MM
SPCHEL4ZA006	ALLOY SPACER	5 MM
SPCHEL4ZA007	ALLOY SPACER	8 MM



! KEEP IN MIND THAT THERE IS A MAXIMUM AMOUNT OF SPACERS. THE MINIMUM INSERT LINE ON THE SADDLE CLAMP HAS TO BE BELOW THE TOP OF THE SEAT TUBE.

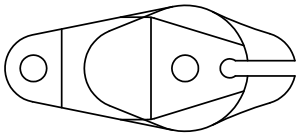
6.3.3. SADDLE CLAMPS

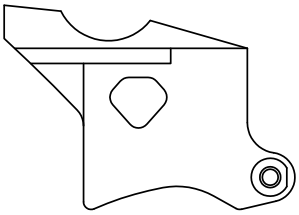
Below you can find a list with all the available saddle clamps, followed by a drawing and detailed information of each clamp.

PART CODE	DESCRIPTION
SPCHELZA002	SADDLE CLAMP RACE, BLACK, EXTRA HIGH
SPCHELZA010	SADDLE CLAMP RACE, BLACK
SPCHELZA013	SADDLE CLAMP RACE, WHITE
SPCHELZA014	SADDLE CLAMP RACE, WHITE, EXTRA HIGH

SPCHEL4ZA010 (Black) & SPCHEL4ZA013 (White): Saddle Clamp Race

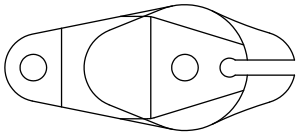
AVAILABLE COLOR OPTIONS	BLACK & WHITE
MAXIMUM SPACER HEIGHT(1)	20 MM

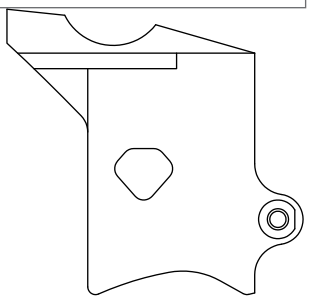




SPCHELZA002 (Black) & SPCHEL4ZA014 (White): Saddle Clamp Race, Extra High

AVAILABLE COLOR OPTIONS	BLACK & WHITE
MAXIMUM SPACER HEIGHT(1)	40 MM





(1) The maximum allowed spacers height between the integrated seat post and the saddle clamp. This is just a reference value, never use more spacers then the mark mentioned on the saddle clamp.

6.4. BOTTOM BRACKET

The bottom bracket is BSA threaded and has a width of 68 mm to fit standard BSA68 cups.

6.5. BRAKES

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

6.6. DERAILLEUR

6.6.1. FRONT

The frame is designed to use a clamp on derailleur for a 34,9 mm seat tube. Also a braze on derailleur can be used if it's used together with the 4ZA 34,9 mm front derailleur clamp (Part code: FD-CNOB4ZA004).

6.6.2. REAR

The hanger, used for the Helium is the HAARCERID023.

6.7. DROP OUTS

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

7. WHEELS AND TIRES

7.1. 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.

7.2. 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.

8. WARRANTY INFORMATION

8.1. MAXIMUM RIDER WEIGHT

The maximum advised rider weight is 95 kg.

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