



WARNING!

Always wear protective gloves and glasses while working on the bicycle.



THIS TECHNICAL MANUAL IS INTENDED FOR USE BY PROFESSIONAL MECHANICS.



Anyone who is not professionally qualified to assemble bicycles should not attempt to install and operate on the components because of the risk of carrying out incorrect operations that could cause the components to malfunction with the consequent risk of accidents, physical injury or even death.

The actual product may differ from what is illustrated, as the specific purpose of these instructions is to explain the procedures for using the component.

INTERFACE WITH FRAME / HANDLEBAR

1 - PREPARING THE FRAME

• Remove all traces of paint from the areas where the callipers are to be installed on the fork and the left-hand chain stay. Also remove all traces of paint from the bottom part of the holes on the chain stay, where the rear calliper screw heads rest. (Fig.1 - 1.1).

1.1 - FRONT FORK

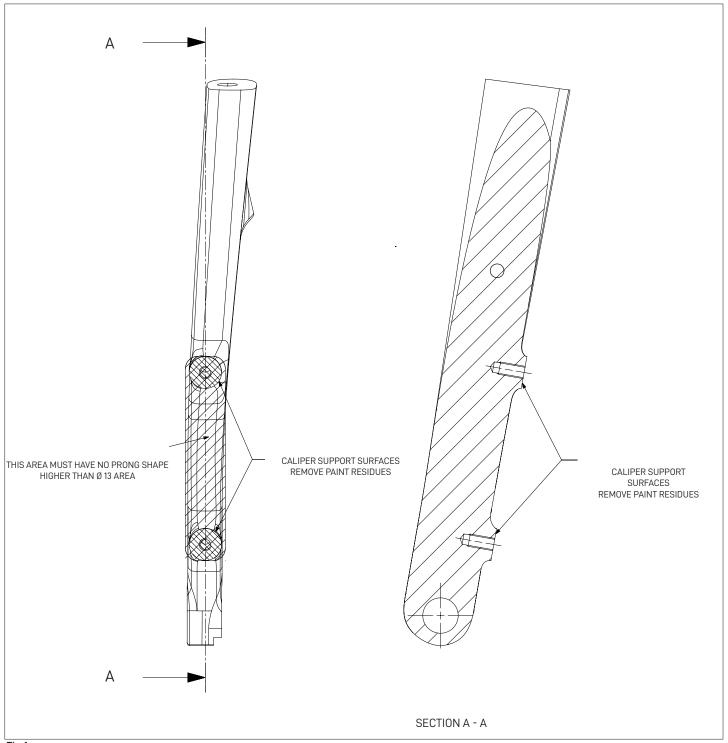
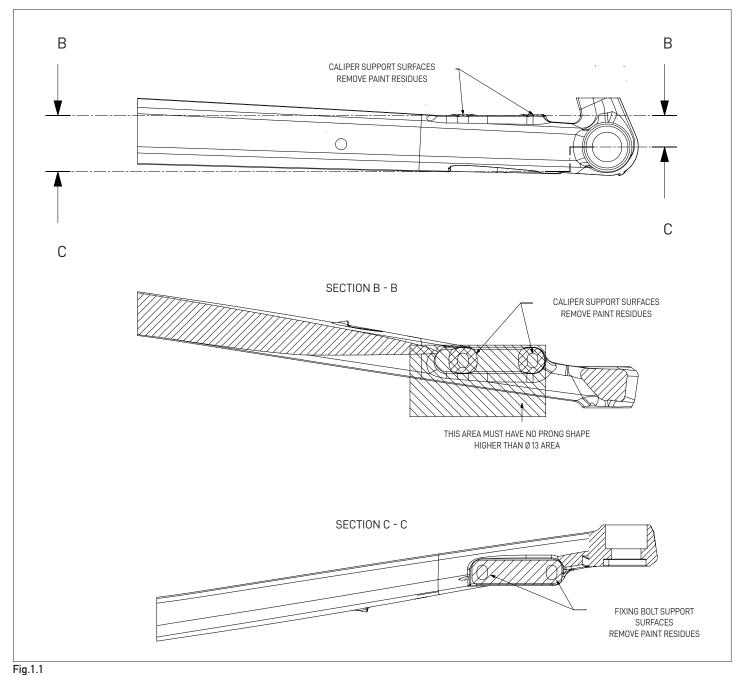


Fig.1

Important: where not specified, all measurements are expressed in millimetres.

1.2 - REAR FORK



Important: where not specified, all measurements are expressed in millimetres.

• Using the frame cutter tool make sure the calliper contact surface on the fork and the left-hand chain stay are perpendicular to the discs, grinding the chain stay if necessary in order to achieve this (Fig.2).

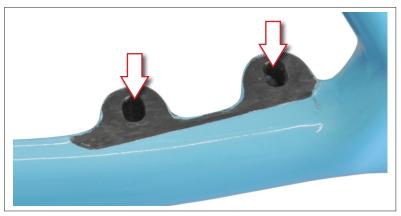


Fig.2

2 - ERGOPOWER CONTROL LEVERS

2.1 - INTERFACE WITH HANDLEBAR FOR ERGOPOWER CONTROLS



WARNING!

Combinations other than those provided for in the above table could cause the drivetrain to malfunction and potentially be the cause of accidents, physical injury or even death.

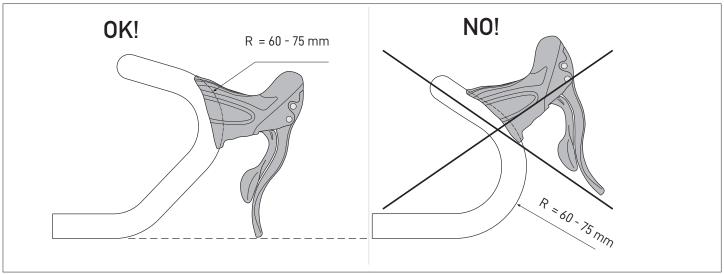


Fig.1

- Do not lodge the upper part of the command in the rectilinear section of the handlebar (Fig. 1 / Fig. 2).
- Lodge the command in the curved section measuring R = 60 75 mm with a diameter = 23.8 24.2 mm (including any ovalization) to guarantee more effective fastening (Fig. 1/Fig. 2).

CAUTION: Make sure that the curved section of the handlebar where the command is to be fixed, has a sufficiently rough surface to ensure a better grip.

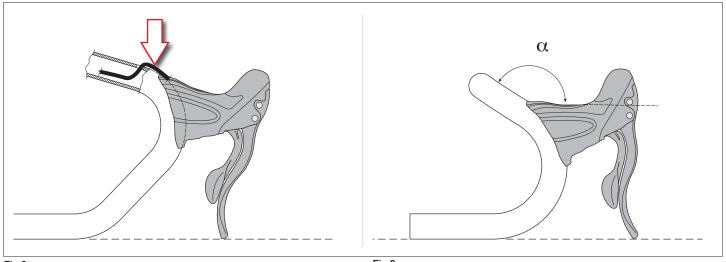


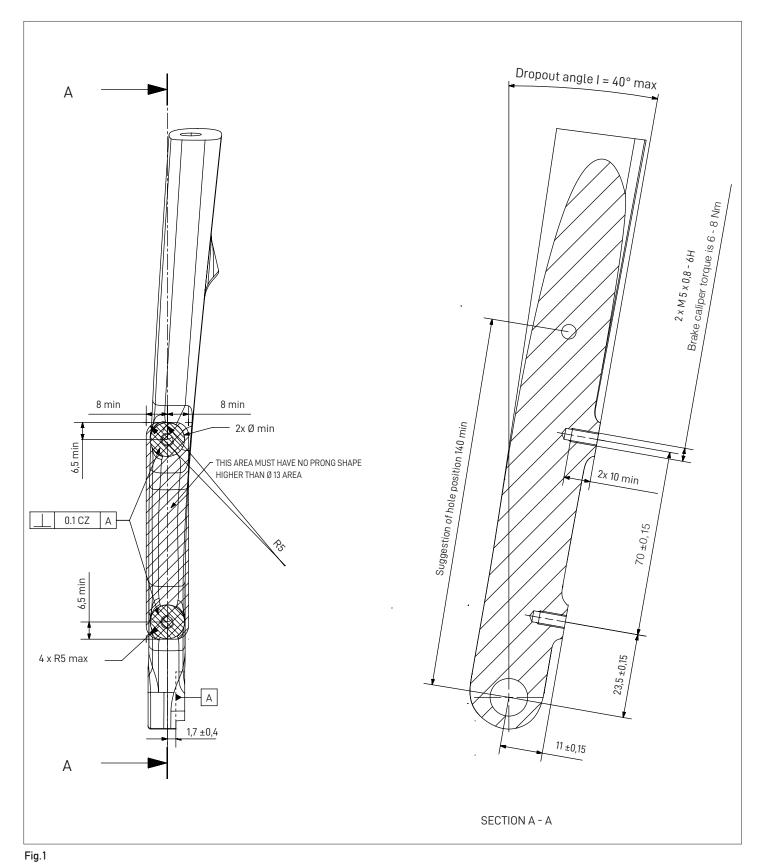
Fig.2 Fig.3

CAUTION: The cable routing illustrated in Figure 2 seriously compromises the drivetrain's gear shift and derailing performance. **DO NOT USE HANDLEBAR BENDS WITH THIS KIND OF ROUTING**.

• Make sure that angle α is sufficiently wide to ensure that the housing is mounted correctly and the cable runs through it easily (Fig. 3).

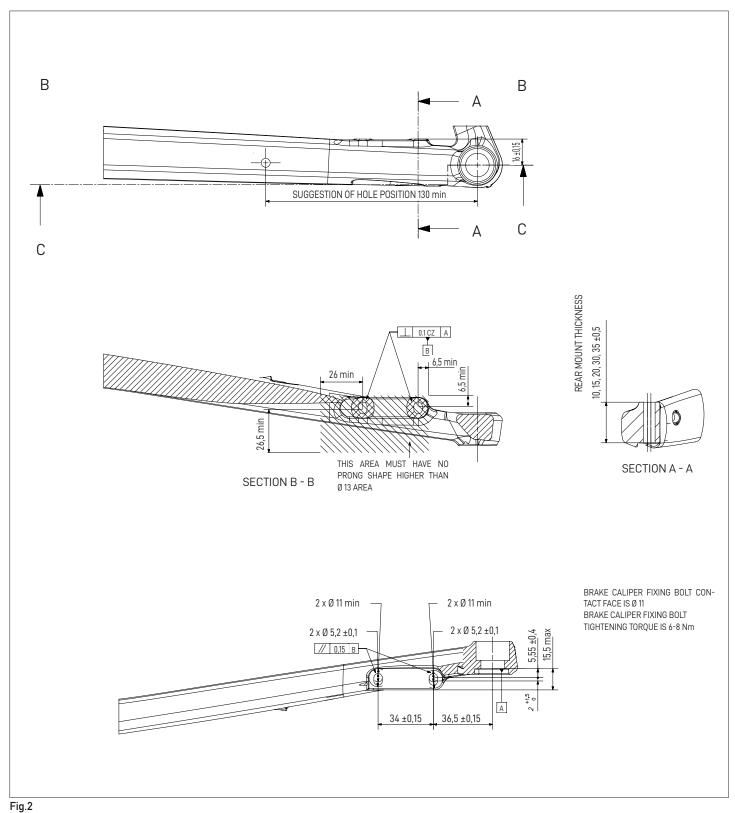
3 - FORK SPECIFICATIONS

3.1 - FORK SPECIFICATIONS FOR THE FRONT CALIPER



Important: where not specified, all measurements are expressed in millimetres.

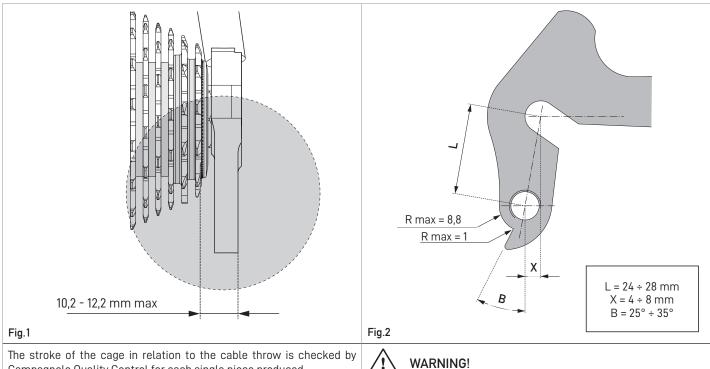
3.2 - LEFT-HAND CHAINSTAY FOR REAR CALIPER



Important: where not specified, all measurements are expressed in millimetres.

4 - REAR DERAILLEUR

4.1 - STANDARD DROP-OUT SPECIFICATIONS



Campagnolo Quality Control for each single piece produced.

The distance of the rear derailleur hanger from the first sprocket influences this stroke, so it is indispensable to stay within the tolerance prescribed as per the drawing (Fig. 1).

Campagnolo® rear derailleurs are designed to work with dropouts that have the dimensions shown in Fig. 2.

For your safety and for the performance of the drivetrain please make sure that the dropout of your bicycle has those dimensions.

If you have any doubts please have a qualified mechanic inspect your bike before using it.

Drop-outs outside these specifications can lead to a serious loss of performance.

4.2 - FRAME SPECIFICATIONS

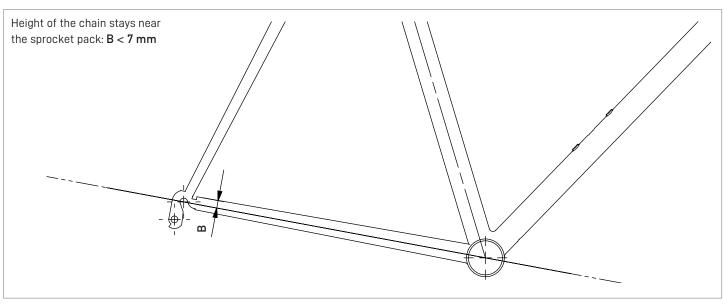


Fig.3

4.3 - PREPARING THE FRAME

Check and, if necessary, realign the rear derailleur dropout only be using Campagnolo® tool UT-VS030 (Fig. 4).

NEVER straighten the dropout with the rear derailleur assembled because you could damage the dropout and cause irreparable damage or loss in functionality to your rear derailleur.

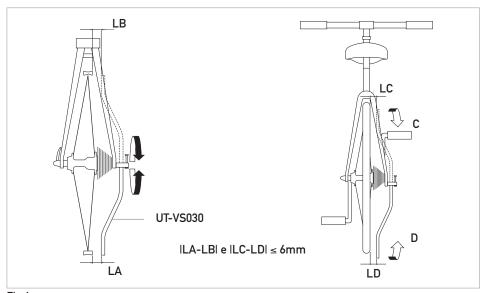
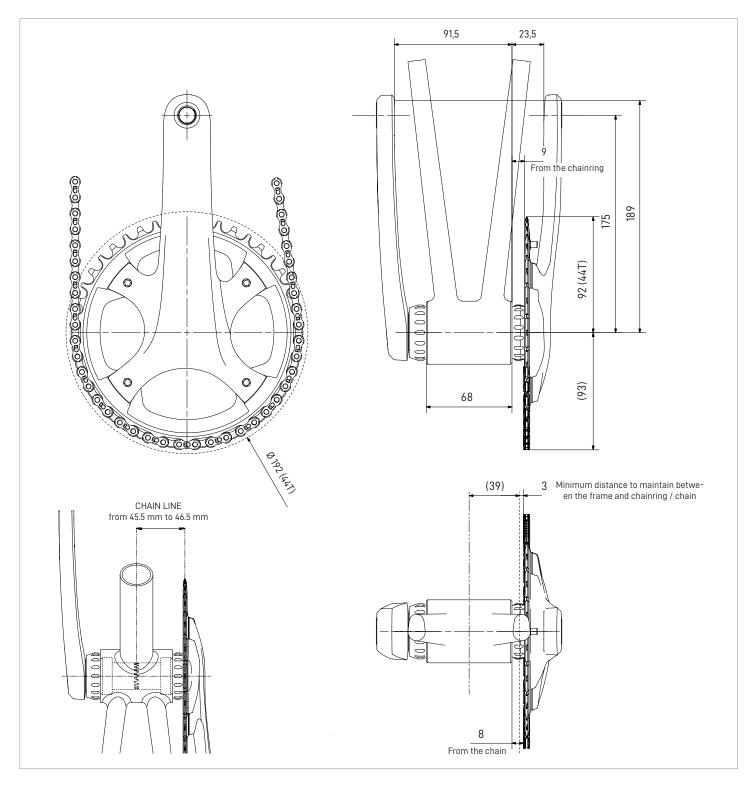


Fig.4

5 - CRANKSET

5.1 - DIMENSIONS FOR EKAR 13s PRO-TECH CRANKSETS

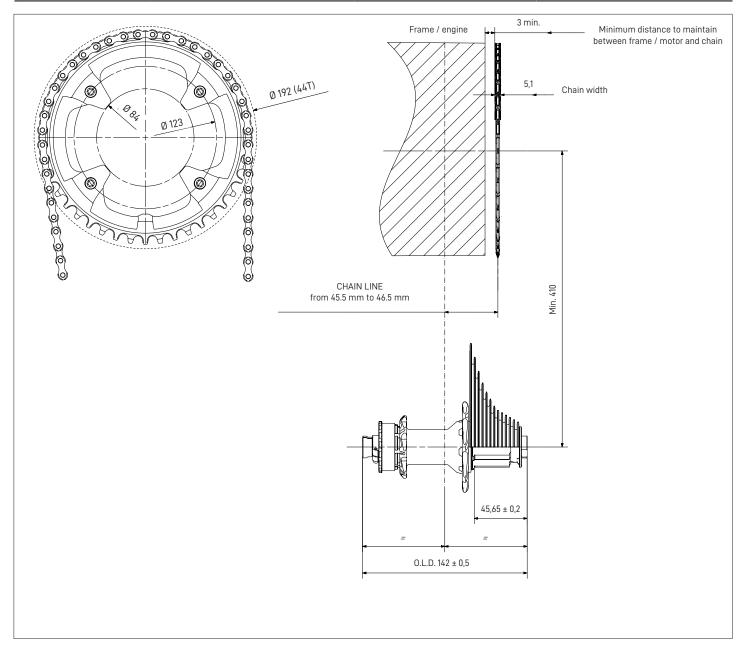
| CHAINRINGS | BOLT CIRCLE DIAMETER | CHAIN LINE | MINIMUM CHAINSTAY LENGTH |
|-------------|----------------------|-------------------------|-----------------------------|
| 38-40-42-44 | 123 mm | from 45.5 mm to 46.5 mm | 410 mm |



 $\textbf{Important}: where \ not \ specified, \ all \ measurements \ are \ expressed \ in \ millimetres.$

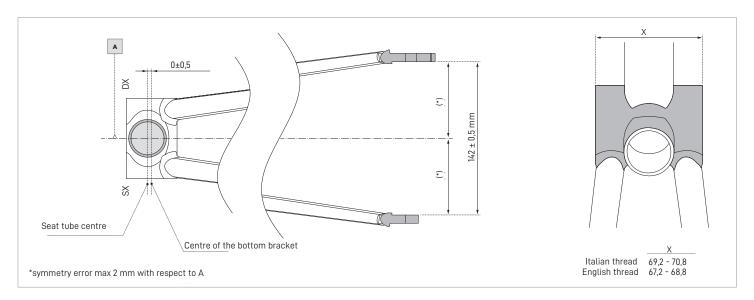
5.2 - DIMENSIONS FOR EKAR 13s PRO-TECH CRANKSETS WITHOUT CRANKS

| CHAINRINGS | BOLT CIRCLE DIAMETER | CHAIN LINE | MINIMUM CHAINSTAY LENGTH |
|-------------|----------------------|-------------------------|-----------------------------|
| 38-40-42-44 | 123 mm | from 45.5 mm to 46.5 mm | 410 mm |

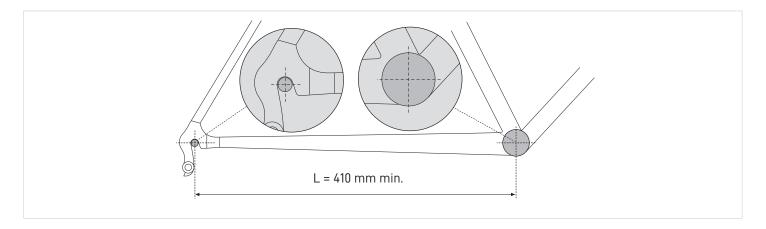


Important: where not specified, all measurements are expressed in millimetres.

5.3 - EKAR 13s PRO-TECH CRANKSET ENCUMBRANCES



5.4 - MINIMUM CHAINSTAY LENGTH



5.5 - PIVOT PEDAL COMPATIBILITY

WARNING!

Do not put washers between the pedal axle and hand crank as they would give rise to abnormal tensions in the interface area. Such tensions could lead to premature breaks and be the cause of accidents, physical injuries or even death.



The stop chain ring of the pedal pivot must respect the dimensions indicated in Fig.1.

These conditions are necessary to minimise the possibility of abnormal tensions in the hand cranks. Such tensions could lead to premature breaks and be the cause of accidents, physical injuries or even death.

NOTE

Q-factor: 145.5 mm (nominal value).

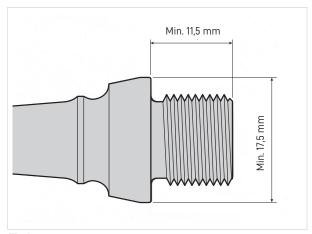
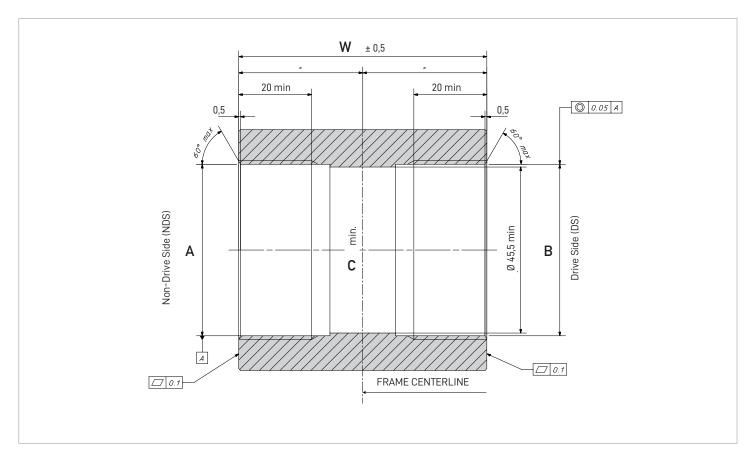


Fig.1

PEDAL THREAD
9/16x20 TPI

6 - PRO-TECH CUPS

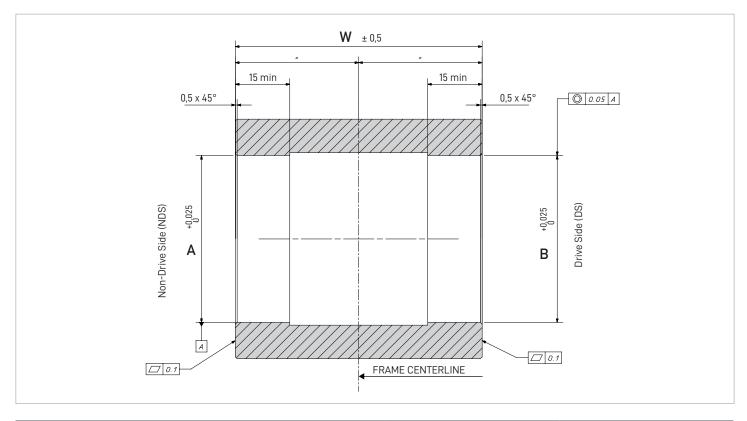
6.1 - BOTTOM BRACKET SHELL FOR STANDARD CUPS



| MODEL | W | Α | В | С |
|-----------------------|------|---------------------|--------------------|------|
| ITA | 70 | 36 mm x 24 TPI R.H. | | 33 |
| BSA | 68 | 1,37"x24 TPI R.H.* | 1,37"x24 TPI L.H.* | 33 |
| T47 x 86 | 85,5 | 47 x 1M - RH | 47 x 1M - LH | 45,5 |
| T47 x 68 | 68 | 47 x 1M - RH | 47 x 1M - LH | 45,5 |
| *Reference JIS B 0225 | | | | |

 $\textbf{Important}: where \ not \ specified, \ all \ measurements \ are \ expressed \ in \ millimetres.$

6.2 - BOTTOM BRACKET SHELL FOR PRESS-FIT CUPS



| MODEL | W | Α | В |
|----------|------|----|----|
| BB86 | 86,5 | 41 | 41 |
| PF30 | 68 | 46 | 46 |
| BB386 | 86,5 | 46 | 46 |
| BB Right | 79 | 46 | 46 |
| BB30 | 68 | 42 | 42 |

Important: where not specified, all measurements are expressed in millimetres.