



HOPE

HEADSET TECHNICAL GUIDE

HEADSET ANATOMY

As you might have worked out by now, headsets are a bit of a minefield! Integrated, integral, reducers, dimensions and types all contribute to confusing the situation. Don't panic! Hopefully this booklet will help you through choosing the right headset for your bike.

A couple of things to remember though - we don't necessarily do a headset to fit your bike! We have 4 'off the shelf' combinations and a further 18 'Pick n Mix' options. There are other styles, types and fittings out there. The thing to remember is that you need accurate dimensions if you are at all unsure of what type you need.

The second point to remember is that unfortunately there is no 'standard' - OK, we have the dimension 1 1/8", which covers the majority of headsets now, but as far as Integral, integrated etc... these are simply terms used by different manufacturers to determine what they consider that style to be. Measure, check and measure again!

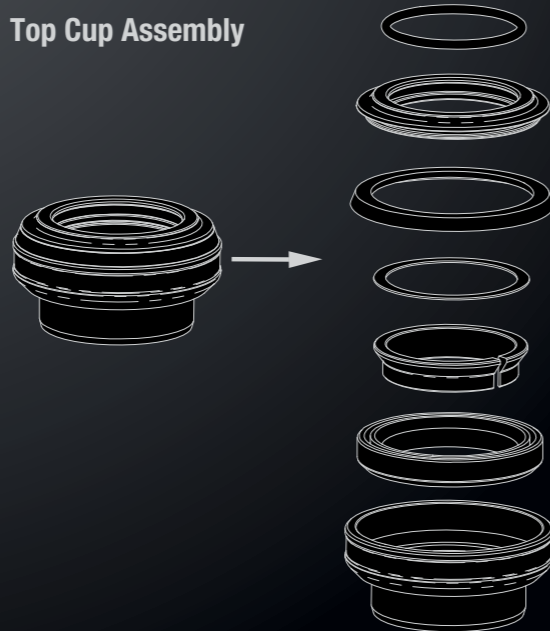
One thing that is common throughout our range is the quality of materials used to manufacture them, here in our Barnoldswick Factory, the quality of the custom made stainless steel bearings and the time taken to hand assemble each and every one before it leaves, on it's way to you!



1 1/8" (1A) assembly

All headsets are built in this order. If in doubt, call the Technical line on +44 (0) 1282 818413 for help.

Top Cup Assembly



Top Cap O'ring

Top Cap

Top Cap Outer Seal

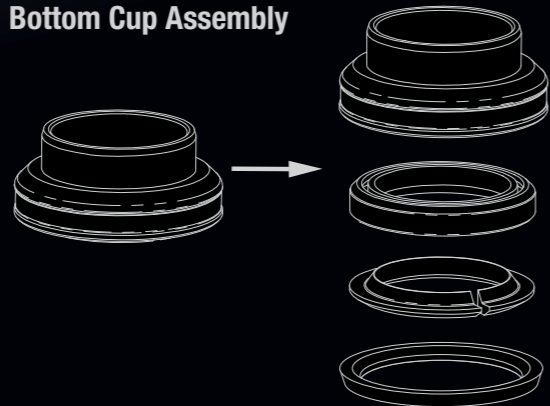
Shim (Optional upto 3)

Tapered Ring

Top Bearing

Top Cup

Bottom Cup Assembly



Bottom Cup

Bottom Bearing

Crown Race

Crown Race Outer Seal

HOPE OFF THE SHELF HEADSETS

Our **traditional** headset is made to fit standard frames and 1 1/8" fork steerers. They include custom made stainless steel bearings (which are replaceable). The cups, taper ring and crown race (which is split for easy installation and removal) are all machined from 2014 T6 aluminium.

The **integral** headset is made to fit low stack 1 1/8" frames (please check drawings for exact sizing). They include custom made stainless steel bearings (which are replaceable). The cups, taper ring and crown race (which is split for easy installation and removal) are all machined from 2014 T6 aluminium.

The **integrated** headset is made to fit in 1 1/8" frames where the bearings fit directly into the frame. They include custom made stainless steel bearings (which are

replaceable). The taper ring and crown race (which is split for easy installation and removal) are all machined from 2014 T6 aluminium.

The **tapered** headset is designed to fit frames which are sized to accept integral 1 1/8" top cup and 1.5" integral bottom cups, where the fork steerer has a 1.5 crown and a 1 1/8" top.

It is also possible to fit a standard 1 1/8" steerer using an additional conversion crown. The headsets include custom made stainless steel bearings (which are replaceable). The cups, taper ring and crown race (which is split for easy installation and removal) are all machined from 2014 T6 aluminium.

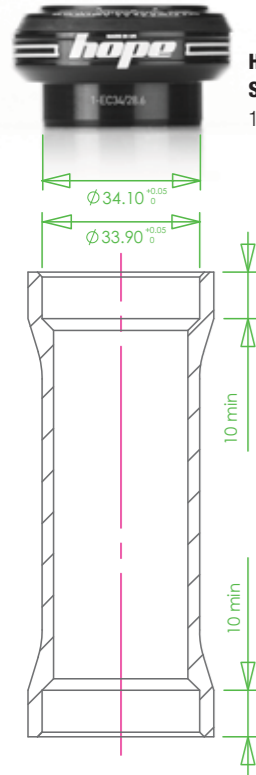
All off the shelf headsets come complete with the Hed Doctor. Sealing is achieved through an adjustable taper ring cover and integrated rubber seal. The bearings also incorporate their own sealing, and being made from stainless steel to resist corrosion - a real advantage over a conventional steel bearing.



COMPATIBLE HEAD TUBE TYPES



Traditional

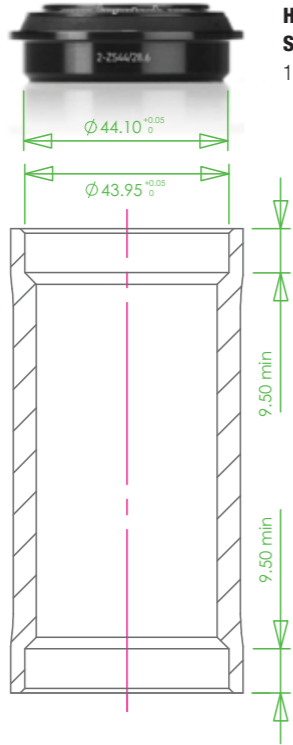


HOPE : 1
S.H.I.S. : EC34/28.6
 1 1/8" Traditional



HOPE : A
S.H.I.S. : EC34/30
 1 1/8" Traditional

Integral



HOPE : 2
S.H.I.S. : ZS44/28.6
 1 1/8" Integral

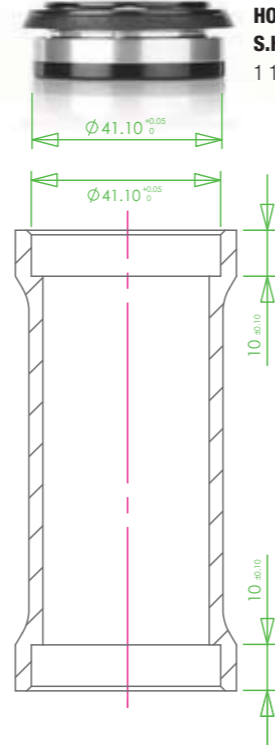


HOPE : B
S.H.I.S. : ZS44/30
 1 1/8" Integral



HOPE : H
S.H.I.S. : EC44/40
 1.5" Traditional

Integrated

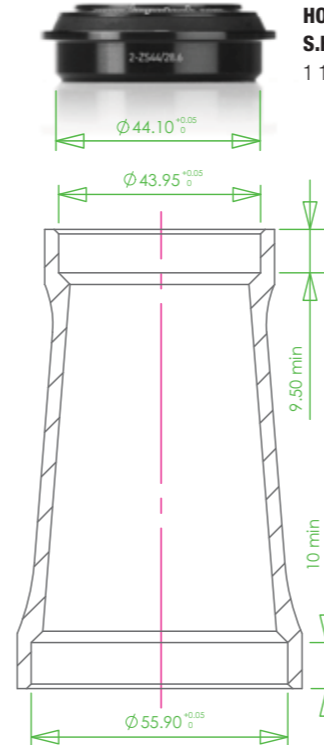


HOPE : 3
S.H.I.S. : IS41/28.6
 1 1/8" Integrated

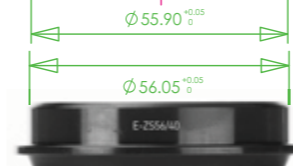


HOPE : C
S.H.I.S. : IS41/30
 1 1/8" Integrated

Tapered/E2

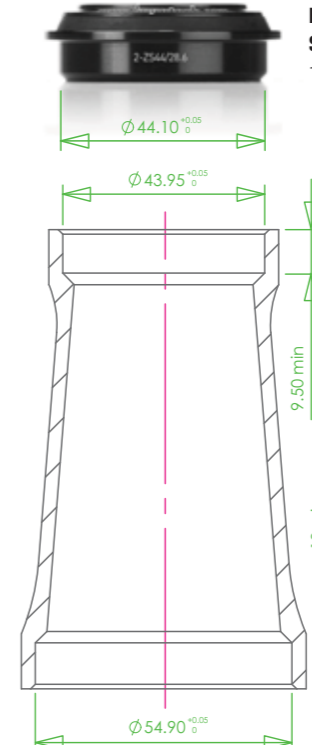


HOPE : 2
S.H.I.S. : ZS44/28.6
 1 1/8" Integral

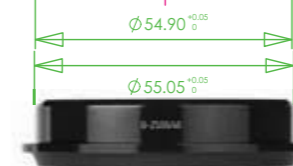


HOPE : E
S.H.I.S. : ZS56/40
 1.5" Integral

Tapered Scott / Lapierre

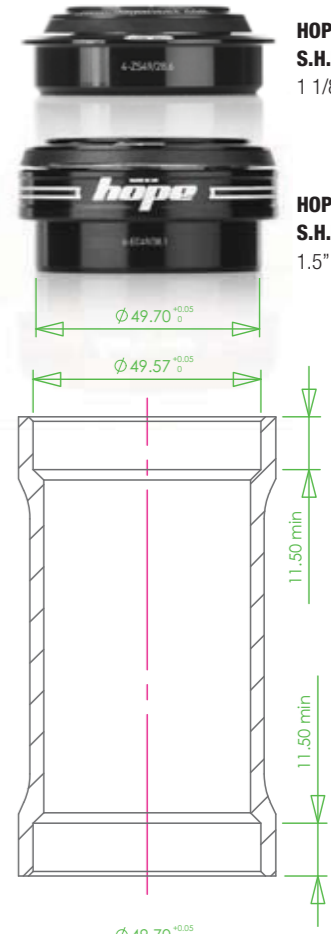


HOPE : 2
S.H.I.S. : ZS44/28.6
 1 1/8" Integral



HOPE : G
S.H.I.S. : ZS55/40
 1.5" Integral

1.5"



HOPE : 4
S.H.I.S. : ZS49/28.6
 1 1/8" Integral

HOPE : 6
S.H.I.S. : EC49/38.1
 1.5" Traditional



HOPE : D
S.H.I.S. : ZS49/30
 1 1/8" Integral



HOPE : F
S.H.I.S. : EC49/40
 1.5" Traditional

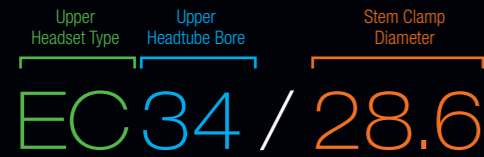


HOPE : HS136
 1 1/8" to 1.5" lower steerer crown converter

Standardized Headset Identification System [S.H.I.S.]

EXAMPLE:

Upper headset description



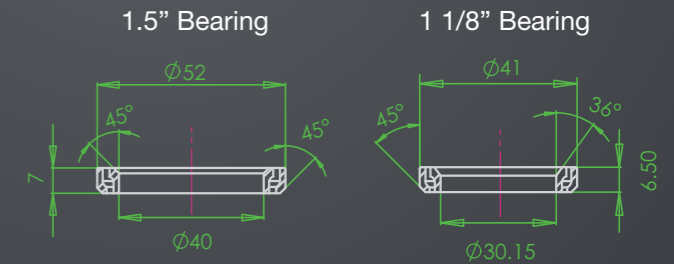
Lower headset description

Green characters describe the general style of headset type (note these can be different for upper and lower)

Blue characters describe the headtube bore (2 digits)

| UPPER | | LOWER | |
|-----------|----------|----------|----------|
| S.H.I.S. | HOPE REF | S.H.I.S. | HOPE REF |
| EC34/28.6 | 1 | EC34/30 | A |
| ZS44/28.6 | 2 | ZS44/30 | B |
| IS41/28.6 | 3 | IS41/30 | C |
| ZS49/28.6 | 4 | ZS49/30 | D |
| ZS56/38.1 | 5 | ZS56/40 | E |
| EC49/38.1 | 6 | EC49/40 | F |
| | | ZS55/40 | G |
| | | EC44/40 | H |

BEARING DIMENSIONS



Orange characters describe the fork steerer, these codes have different values for upper and lower due to the step on steerers (2.1 digits for the upper, 2 for the lower)

S.H.I.S. : **EC** Representing : External Cup

S.H.I.S. [mm] Traditional

- 30** : 30,0
- 34** : 34,0
- 37** : 37,1
- 44** : 44,0
- 49** : 49,65

S.H.I.S. : **ZS** Representing : Zero Stack

S.H.I.S. [mm] Integral

- 44** : 44,0
- 49** : 49,65
- 55** : 55,0
- 56** : 56,0

S.H.I.S. : **IS** Representing : Integrated

S.H.I.S. [mm] Integrated

- 41** : 41,0
- 42** : 41,8
- 47** : 47,0
- 49** : 49,0
- 52** : 52,0

Fork Steerer Type : 1 1/8" Fork Steerer Type : 1 1/8" - 1 1/2" Fork Steerer Type : 1 1/2"

Upper S.H.I.S. : **28.6**
Lower S.H.I.S. : **30**

Upper S.H.I.S. : **28.6**
Lower S.H.I.S. : **40**

Upper S.H.I.S. : **38.1**
Lower S.H.I.S. : **40**

Fork Steerer Type : 1" Fork Steerer Type : 1" Threaded Fork Steerer Type : 1 1/4" Fork Steerer Type : 1 1/8" - 1 1/4"

Upper S.H.I.S. : **25.4**
Lower S.H.I.S. : **27**

Upper S.H.I.S. : **25.4-24tpi**
Lower S.H.I.S. : **27**

Upper S.H.I.S. : **31.7**
Lower S.H.I.S. : **33**

Upper S.H.I.S. : **28.6**
Lower S.H.I.S. : **33**

START



Hope Technology (IPCO) Ltd

Calf Hall Road, Barnoldswick
Lancashire, United Kingdom,
BB18 5PX

GENERAL: +44 (0)1282 851400

SALES: +44 (0)1282 851200

FAX: +44 (0)1282 851201

www.hopetech.com