



PA40HEX, PA63HEX,
PA100HEX, PA160HEX,
PA250HEX

Hexapod Port Aligner

Alignment Manual

31.07.2024

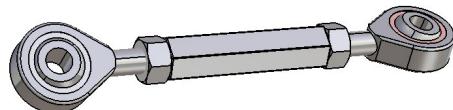
Introduction

This short manual contains instructions for the correct adjustment of a Hexapod Port Aligner. Please read them carefully and follow them precisely to prevent any damage.

Adjustable Support Unit

The adjustable support unit consists of a left/right threaded turnbuckle sleeve, two accordingly threaded joint-heads and two counter nuts.

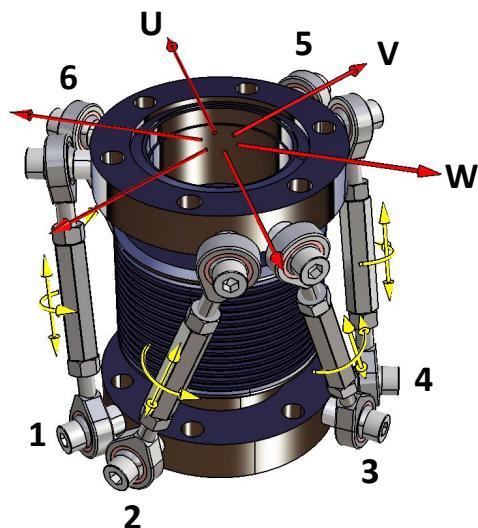
By loosening the counter nuts and screwing the threaded turnbuckle in a clockwise direction, the distance between the two joint-head bore axes is shortened. Screwing it in a counterclockwise direction will lengthen the support unit.



Lateral Adjustment

For lateral translation in the U-, V- or W- axis adjust the oppositely arranged support units according to the instructions above.

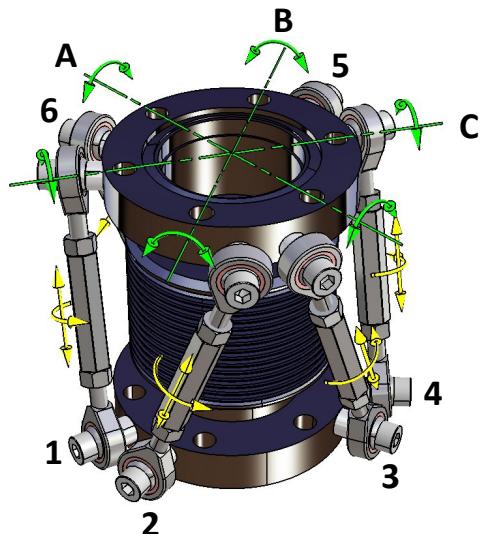
axis	support unit
U	1 and 4
V	3 and 6
W	2 and 5



Angular Adjustment

For angular rotation around the A-, B- or C- axis adjust the oppositely arranged support unit pairs.

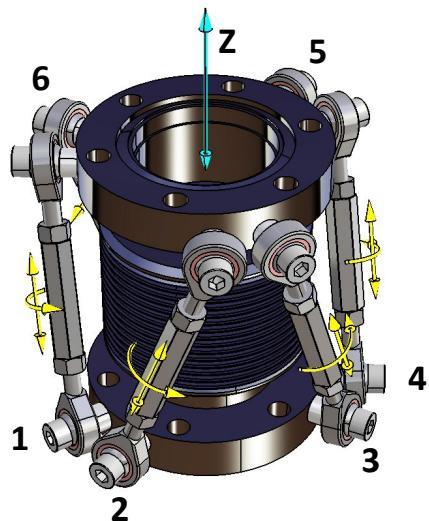
axis	support unit
A	lengthen 1 and 2 / shorten 4 and 5
B	lengthen 3 and 4 / shorten 6 and 1
C	lengthen 2 and 3 / shorten 5 and 6



Lengthwise Adjustment

For linear translation along the Z-axis adjust the support unit pairs in their length one by one.

axis	support unit
Z	lengthen 1 and 2, than lengthen 3 and 4, than lengthen 5 and 6



Incorrect Adjustments

Never adjust the support units at the same time as listed below. This can cause **torsional load** and damage the bellows. When adjusting the Hexapod Port Aligner always keep an eye on the bellow to be aware of unusual bellow movements and prevent serious damage.

axis	support unit
Incorrect adjustments	1 and 3 2 and 4 3 and 5 4 and 6 5 and 1 6 and 2

