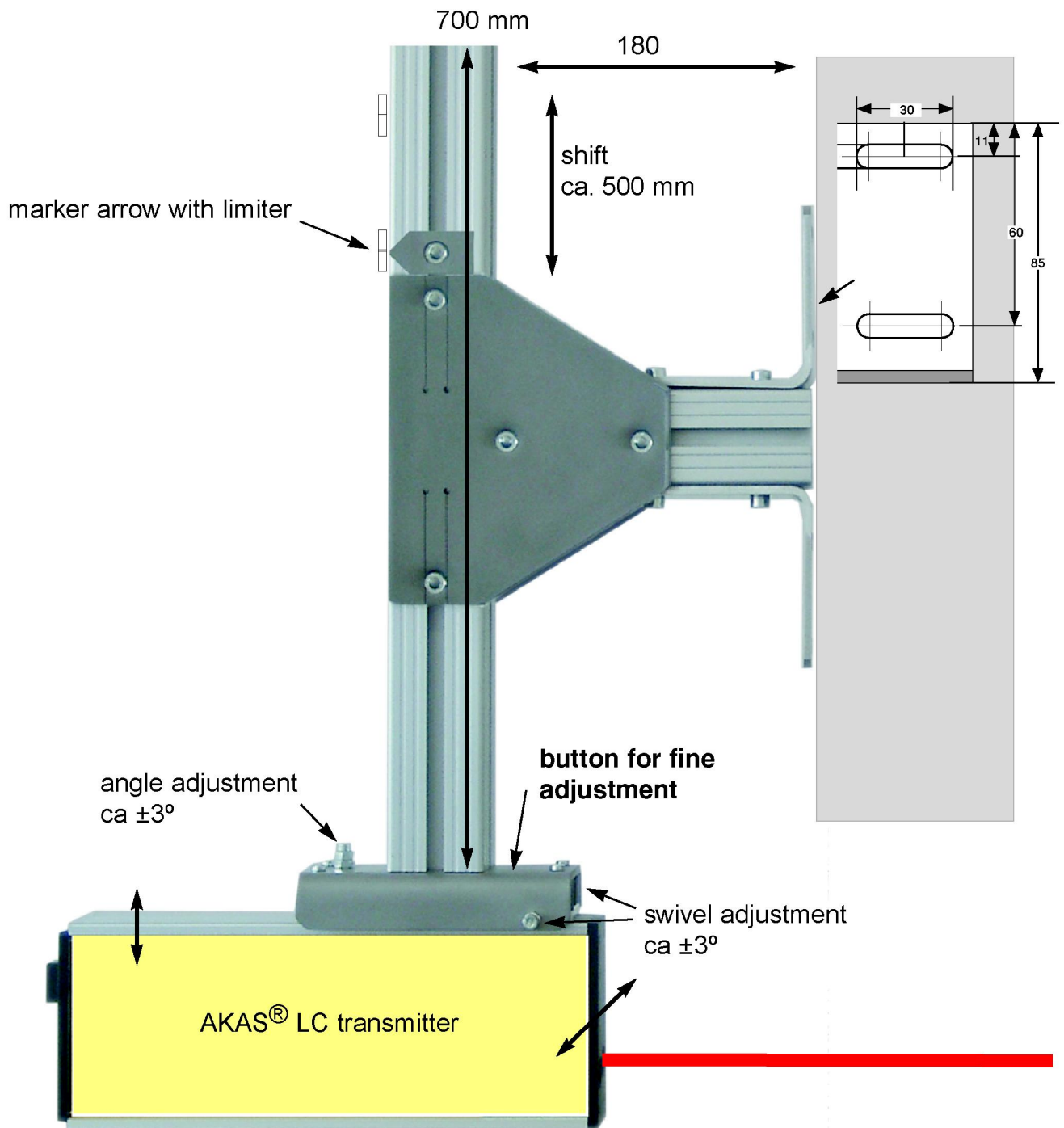
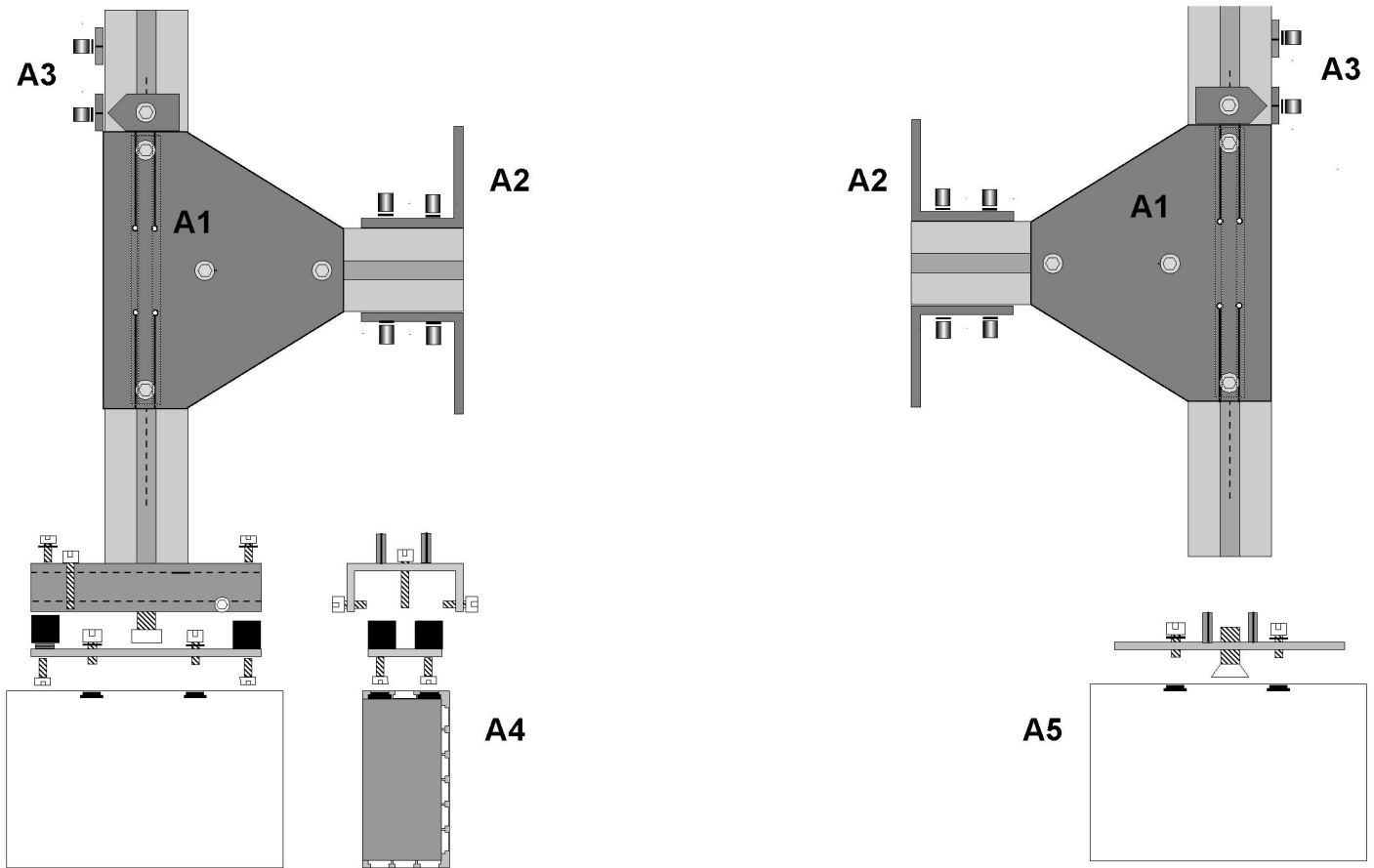


- High repeating accuracy
- Integrated transmitter fine adjustment
- Self-locking vertical adjustment at limiter
- No squeezing risk in case of unwanted closing movement
- Marker arrows for using different tools
- High quality construction made of aluminium/stainless steel
- Integrated transmitter vibration absorber

AKAS-LC holders



Doku Nr. 848 30.07.2004 SO

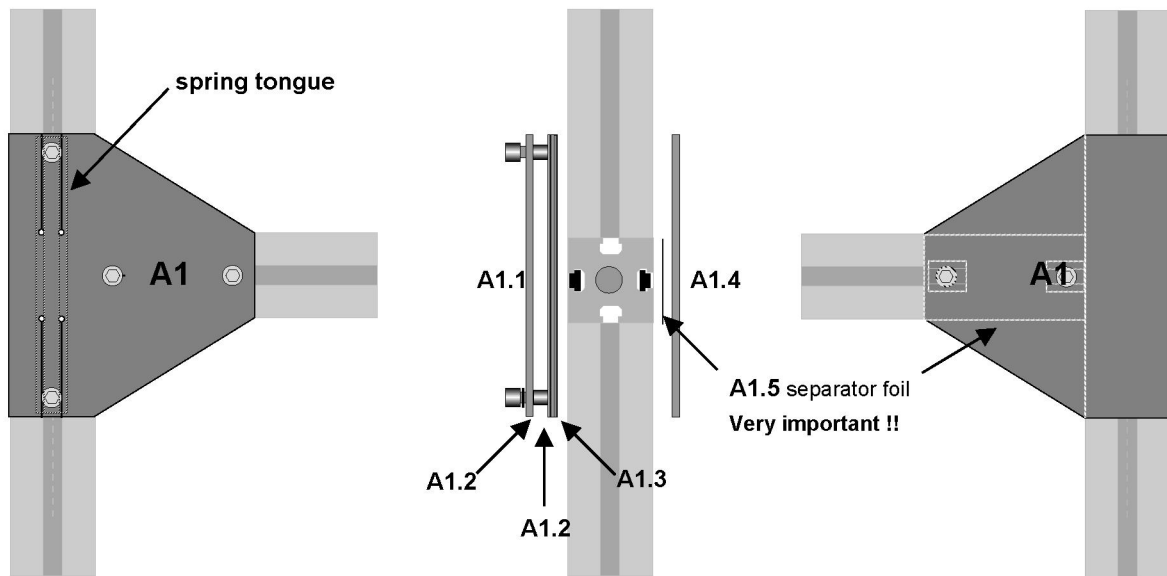


List of parts BG A1 (same for transmitter/Receiver)	No. in drawing	Qty. transmitter	Qty. receiver	total qty.	bag no.
butt plate with flexible tongues	A1.1	1	1	2	box tray
distance pieces $\varnothing 8 \times 7,5$ mm	A1.2	2	2	4	1
guiding rod	A1.3	1	1	2	box tray
butt plate without flexible tongues	A1.4	1	1	2	box tray.
separator foils for plate 2	A1.5	1	1	2	1
fastening screw M6x15		2	2	4	1
tenon blocks with spring		4	4	8	2
fastening screw M6x12 w. lock washer		4	4	8	2,1
profile 45 x 45x700 mm, vertical, single. M10, plastic cap		1	1	2	box tray.
profile 45 x 45 x 180 mm, horizontal		1	1	2	box tray.

list of parts BG A2 (same for transmitter/Receiver)	No. in drawing	Qty. transmitter	Qty. receiver		
fixing angles	A2.1	2	2	4	box tray.
tenon blocks with spring		4	4	8	2
fastening screw M6x12 m. w. lock washer		4	4	8	2,1

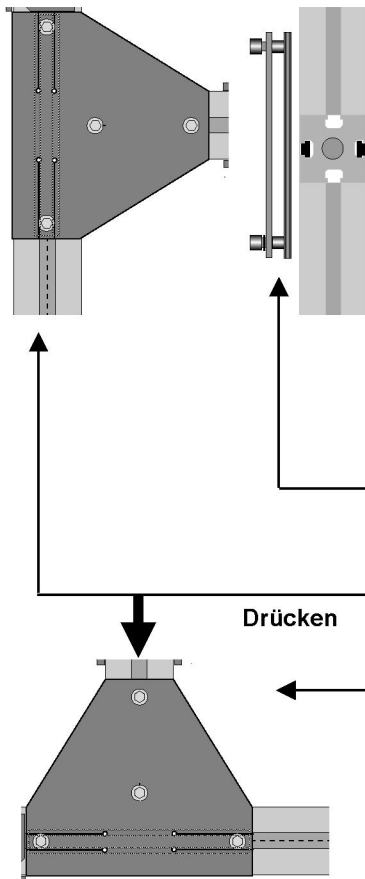
list of parts BG A3 (same for transmitter/Receiver)	No. in drawing	Qty. transmitter	Qty. receiver		
marking arrows	A3.1	3	3	6	3
tenon blocks with spring		3	3	6	2
fastening screw M6x12 w. lock washer		3	3	6	2,1

list of parts BG A4/A5, mounting of transm./Receiv	No. in drawing	Qty. transmitter			
mounting plate transmitter/receiver	A4.1/A5.1	1		1	box tray.
vibration absorber (metallic)	A4.2	4		4	4
fastening screws M4x10 w. lock washer		4	4	8	4
washer für M4	A4.4	4		4	4
tenon blocks M5	A4.5/A5.3	4	4	8	4
fastening screws M5x10 m. lock washer	A4.10/A5.4	4	4	8	4
U-shaped fastening metal sheet	A4.6	1		1	box tray.
fastening screws M10x20 (1x flat head, 1x countersunk)	A4.7/A5.2	1	1	2	4
adjustment screw M4x25, inclining	A4.8	1		1	4
adjustment screw M4x16, slewing	A4.9	2		2	4



transmitter

receiver



list of parts BG A1 (same for transm./receiver)

- linking plate with spring tongues
- distance sleeve $\varnothing 8 \times 7,8$ mm
- guiding rod
- linking plate without spring tongues
- separator foil for plate 2
- fastening screw M6x15
- tenon blocks with spring
- fastening screw M6x12 with lock washer
- profile 45 x 45 x 700 mm, vertical, single M10, plastic cap
- profile 45 x 45 x 180 mm, horizontal, single M10

No. in drawg.	qty. transm	qty. receiv.
A1.1	1	1
A1.2	2	2
A1.3	1	1
A1.4	1	1
A1.5	1	1
	2	2
	4	4
	4	4
	1	1
	1	1

Function subassembly A1:

The subassembly A1 is used for the linking of the vertical and the horizontal tubes. The spring tongues push via the distance sleeves the guiding rod into the groove of the profile. This creates an automatically adjusting sliding clutch effect, that pushes the profile tube upwards in order to prevent a collision.

Mounting:

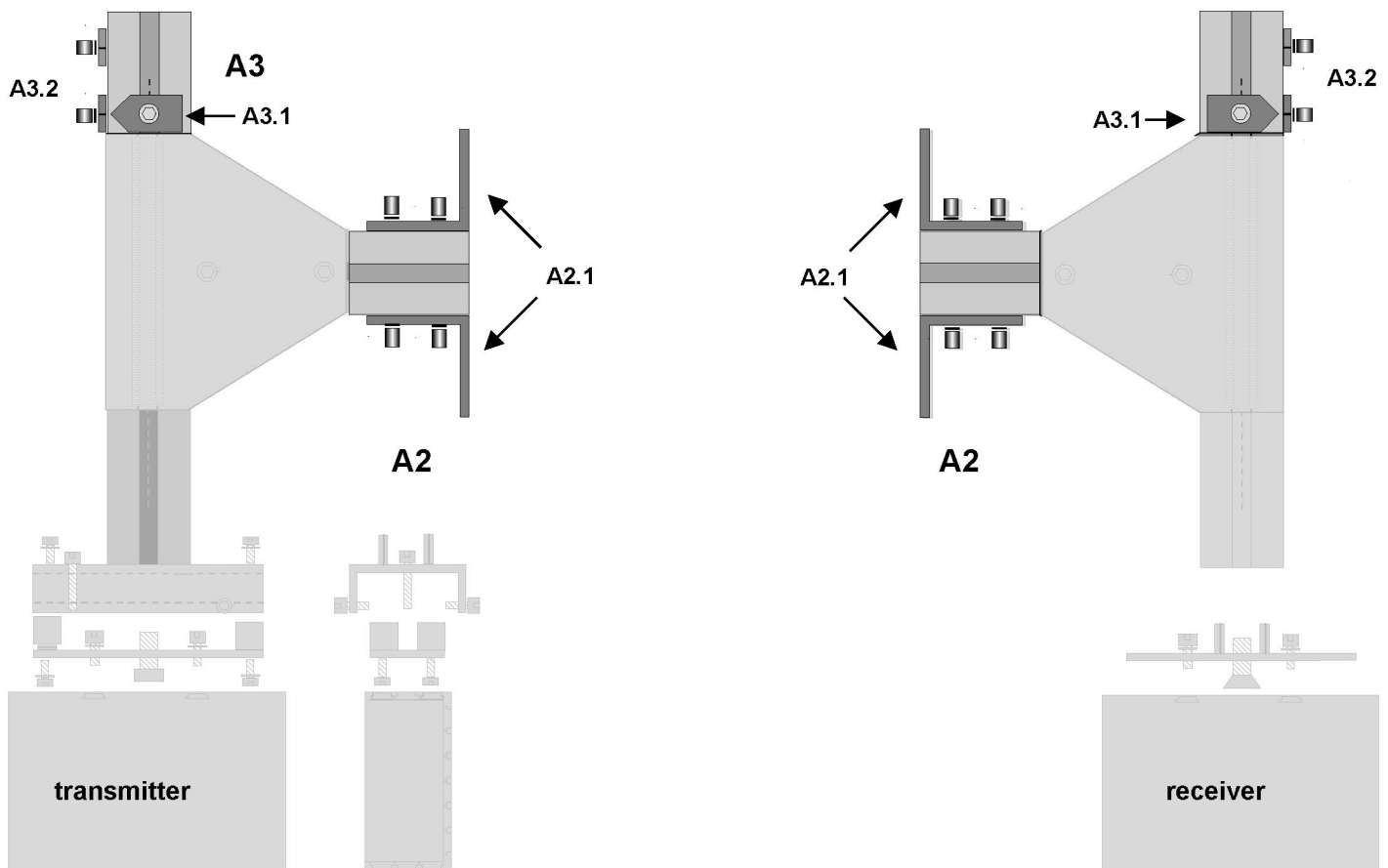
1. Link the linking plate A1.1 (without spring tongues) and the separator foil to the horizontal tube using the tenon blocks and the screw M 6 and the lock washer. Only bring the screws into their position. Do not tighten screw yet.
 2. Link the linking plate A1.1 (with spring tongues) via the distance sleeves and the M6x15 screws (without lock washer) to the guiding rod.
 3. Insert the linking plate A1.4 without spring tongues with the guiding rod into the groove of the long profile tube. Place the already mounted shorter profile tube at an opposed position. Insert the tenon block into the shorter tube and screw both parts. Only bring the screws into their position. Do not tighten screw yet.
- Place the long profile with the linked short profile on a even surface, push it slightly down and tighten the screws. Apply plastic cover.

Function test : must be always performed as follows!!!!

Place the long profile at its end on the table and push the assembly downwards. The pressure required for this action must not hurt a hand that is placed beneath it. (ca.. 10 kp)

Displacement is not possible: PVerify if the separating foil is applied and if the guiding rod is mounted with the chamfer to the inside.

Stiffness during displacement : slightly lubricate the spring tongues, the groove and the guiding rod. (e.g. lubricant WD 40)



list of parts BG A2 (same for transm./receiv	No. in drawing	qty. transm	qty. receiv.er
fastening angles	A2.1	2	2
tenon blocks with spring		4	4
fastening screw M6x12 w. lock washer		4	4

list of parts BG A3 (same for transm./receiv	No. in drawing	qty. transm	qty. receiv.er
marking arrows	A3.1/A3.2	3	3
tenon blocks with hole, with spring		3	3
fastening screw M6x12 with lock washer		3	3

Function Subassembly A2:

The subassembly A2 is a means to fasten the holders on the machine. The sides of this assembly form an angle of $>90^\circ$, in order to provide a certain tension within the fastening.

Mounting::

1. Link the fastening angles using the tenon blocks and the screw M6x12 with lock washer. The oblong holes are meant for the mounting of the holders at the side of the machine and enable a lateral sliding.

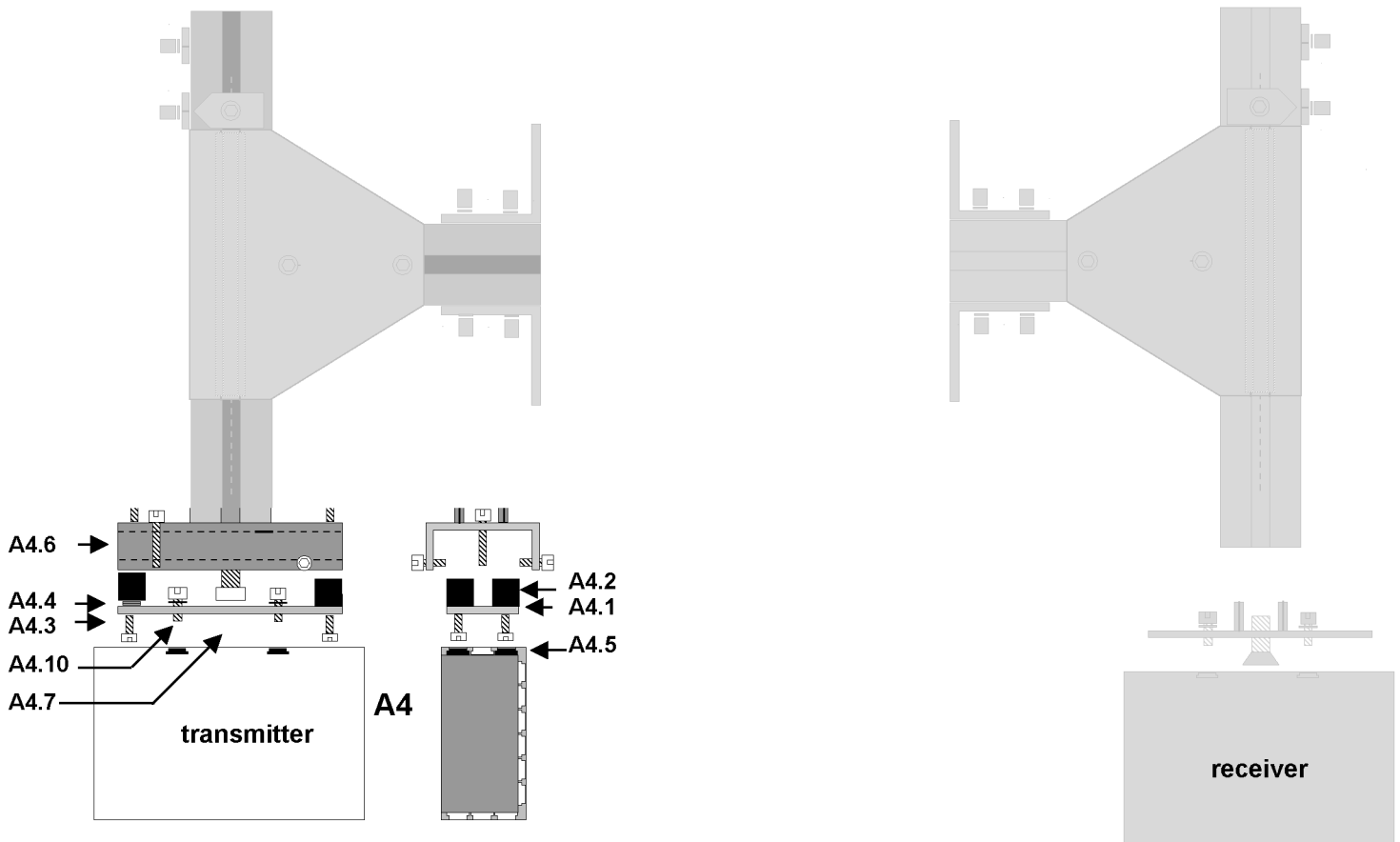
Function Subassembly A3:

The Subassembly A3 is a means to simplify the adjustment if tools with different heights are utilised.

The arrow A3.1 serves as a stopper. the two other arrows A3.2 mark the position of the different tools. The marking arrows are positioned after the initial adjustment onto one tool.

Mounting:

1. Link the marking arrows to the profile by using the tenon blocks with springs and screw M6x12 with lock washer.



list of parts BG A4, transmitter's holder with fine adjustment

mounting plate transmitter
 vibration absorber (Metal)
 fastening screw M4x10 w. lock washer
 butt plate for M4
 tenon blocks M5
 fastening screw M5x10 w. lock washer
 U-shaped supporting metal sheet
 fastening screw M10x20
 adjustment screw M4x25, (inclination)
 adjustment screw M4x16, (swiveling/slewing)

no. in drawing qty. transmi.

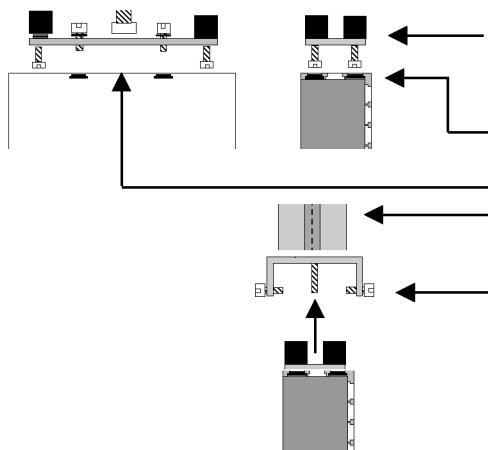
A4.1	1
A4.2	4
A4.3	8
A4.4	4
A4.5	4
A4.10	4
A4.6	1
A4.7	1
A4.8	1
A4.9	2

A4.4 →
 2 buttplates

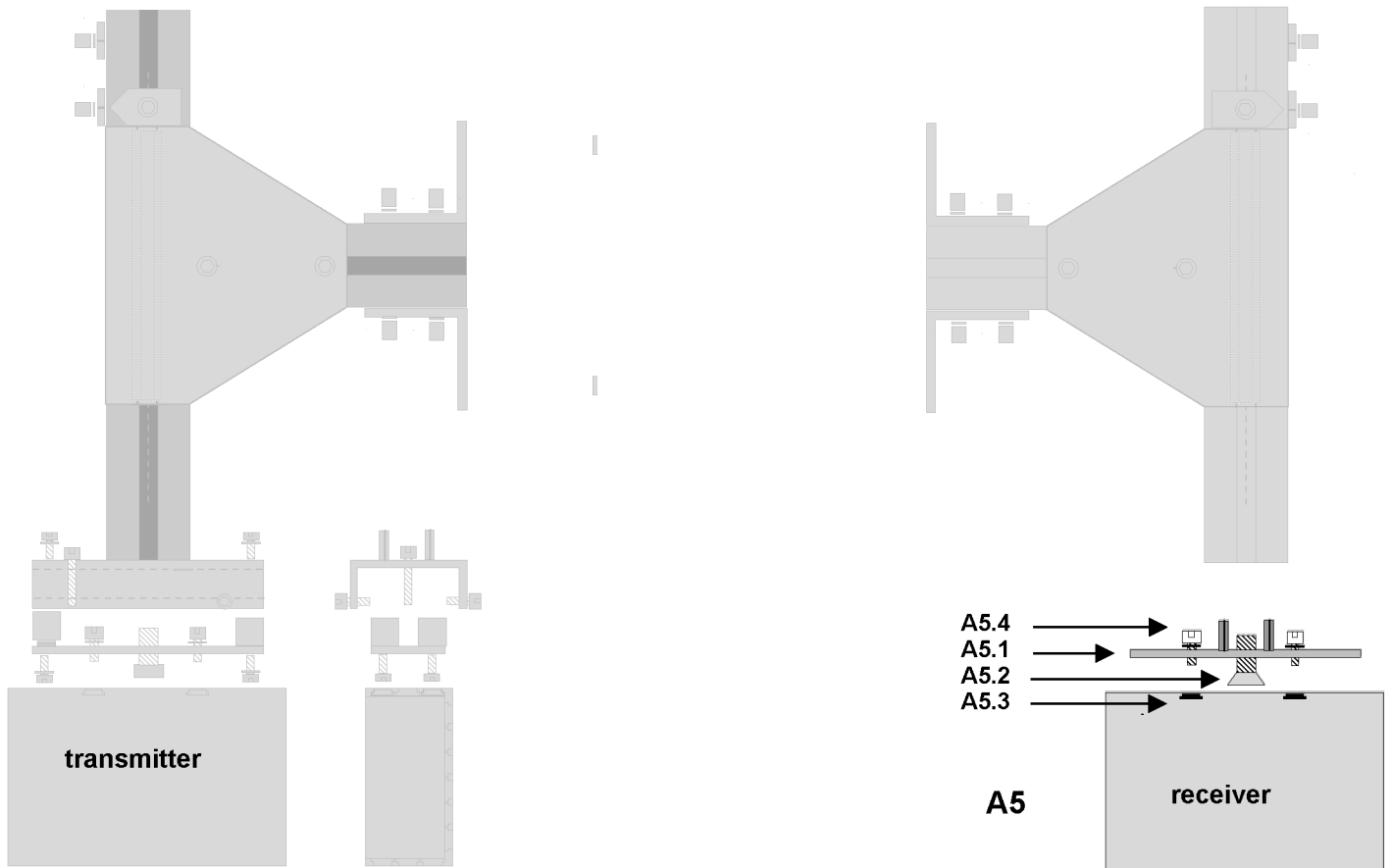
Function subassembly A4:

The subassembly A4 serves as link between the horizontal profile and the AKAS LC light barrier transmitter and for the fine adjustment of the laser beams.

Mounting:



1. Link the mounting plate of the transmitter (A4.1) to the metal vibration absorbers (A4.2) by using the fastening screws M4 (A4.3). By doing that, use 2x2 butt plates (A4.4) at the narrow edge. These butt plates execute a certain pressure by which the transmitter is pushed down, in order to enable a slight inclination by the adjustment screw.
2. Introduce the tenon blocks M5 into the outer grooves of the AKAS-LC transmitter and fasten the pre-assembled transmitter mounting plate.
3. Fasten the U-shaped supporting metal sheet (A4.6) to the profile by using the screw M10 x 20 (A4.7).
4. Introduce the Screw to A4.8 for inclination adjustment. Link the U-shaped supporting metal sheet to the mounting plate of the transmitter by using the screws M4x10 with lock washer.
5. Introduce and tighten the adjustment screws.

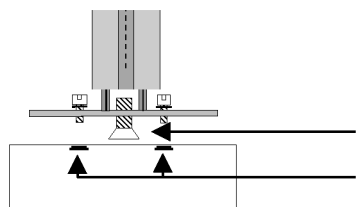


list of parts BG A5, receiver holder

	No. in drawing	qty. receiver
mounting plate receiver	A5.1	1
fastening screw M10x20, countersunk head	A5.2	1
tenon blocks M5	A5.3	4
fastening screw M5x10 with lock washer	A5.4	4

Function subassembly A5:

The subassembly A5 serves as link between the horizontal profile and the AKAS LC light barrier receiver. Here, no fine adjustment is required.



Mounting

1. Fasten the mounting plate of the receiver (A5.1) to the vertical profile by using the fastening screw M10 (A5.2).
2. Introduce the tenon blocks M5 into the outer grooves of the AKAS LC receiver and fasten the pre-assembled receiver mounting plate.

Contents of the bags:

Bag 1:

4 distance sleeves,
2 separator foils
4 crews M6x15 with lock
washer

Bag 2:

16 tenon blocks with spring

Bag 2.1:

22 screws M6x12 w. lock
washer

Bag 4

Accessories transmitter/re-
ceiver plate:

4 metallic vibration absor-
bers
8 screws M4 x 10 w. lock
washer
4 butt plates for M4
8 tenon blocks M5
8 screws M5 x 10 w. lock
washer
2 fastening screws M10 x 20
1 adjustment screw M4 x 25,
inclination
2 adjustment screws M4 x
16, sivering

Bag 3

6 arrows
6 tenon blocks with bores

