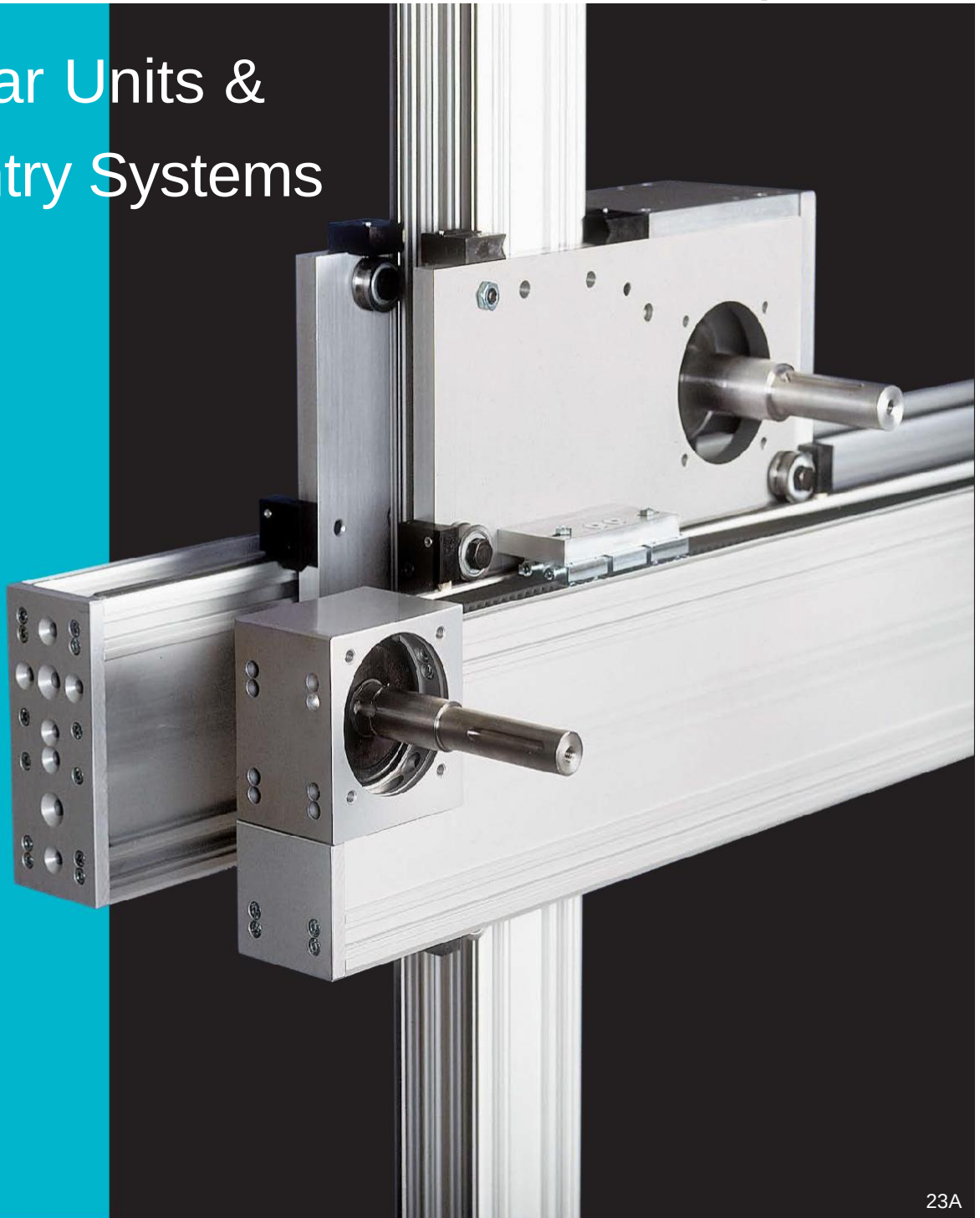


Linear Units & Gantry Systems



23A

» Linear unit, vertical sliding plate	» 3-axis gantries, light design	» Drives-couplings-gears-parallel drives
» Linear unit, horizontal sliding plate	» 3-axis gantries, balanced design	» Mounting examples
» Omega driven units	» Ordering data	» Accessories
» Linear units with guide rails	» Sliding plates, std versions	» Exampel solutions & combinations
» Linear gantries , light	» Profiles	» Robottracks
» Linear gantries, balanced design	» Drive shafts / pulleyboxes / gears	» Motors, linearmotors and drivers
www.aratron.se/sv/vara-produkter/linjarenheter/		Tel: +46 8-404 16 00

Linear units AL / AP

The linear system AL/AP is a system we developed to make customization and stability in combination with an interesting price level. Several basic designs with timing belt on the same side as the sliding plate or placed 90 degrees from the same provide versatility in the choice of system building. Right/left running solutions are also available.

This programme is based on aluminium-profiles in two sizes, 110 * 84 and 190 * 84. These are of a so-called closed hollow-room design. This means the system gets a high load capacity and torsional rigidity.

The linear units are therefore in many applications a direct building element not necessarily supported by a machine frame. The linear bearings can be either with rollers and hardened round shafts or linear guideways.

ALR = units with rollers

ALS = units with linear guideways

AP = multi-axis systems

we have considered the importance to get a high stability with rollers.

- The hardened shaft are supported in the profile in a V-angle resulting in a completely fixed center position regardless of load directions.
- The linear roller bearings are directly bolted into a single solid sliding plate with a minimum sidewise distance to the surface of the plate.
- The center distance of the linear shafts is adjusted for a high parallelism and smooth running. The distance between the rollers are relatively large due to guidance shafts being placed outside of the profile.
- 20 mm thick sliding plates, can easily be adapted to customer needs (or made by the customer based on our basic drawing).

For higher loads/stiffness linear guideways is available as an alternative.

- Surfaces for mounting the rails are machined a to get a smooth running.
- Guideways with X-geometry also contributes to an movement more free of unwanted "installation loads".
- The carriages can also be supplied with ball cage to reduce maintenance, the ball cage reduces the sound level with 5-7 dB.
- The sliding plate can be easily adapted for different needs, hole pattern, size, etc.

The sliding plates that are standard can be downloaded from our website as a PDF for the complete dimensioning of the mounting holes. Adaptations / extra mounting holes or custom designed plates we can easily offer.

The belt drives are designed for a direct mounting of hollow shaft gearboxes with output flange according to IEC std (wormgear, helical bevel gears, etc) can be mounted directly to the pulley housing.

We usually discuss the preferred brands with the customer to find out the appropriate gear and gear ratio for the cycle to be carried out. The drive shaft, we make to fit the selected gearbox (see further page 38). No shaft coupling or adapter required, provides a simple and compact assembly! No extra mounting brackets for motor and gear, these are mounted directly on the pulley housing.

As an alternative we have a number of adaptations for direct mounting of a planetary gear (see page 38 for more information).

Ball screws are for some solutions integrated in the linear systems.

Contact Aratron for additional info.

Tel +46-8-40 41 600

www.aratron.se

info@aratron.se



Content

The important features of our linear motion system are customization possibilities and stability.

The units are built on strong, specially designed, aluminum profiles and can be used individually or combined into gantry solutions for X-Y-Z-movements.

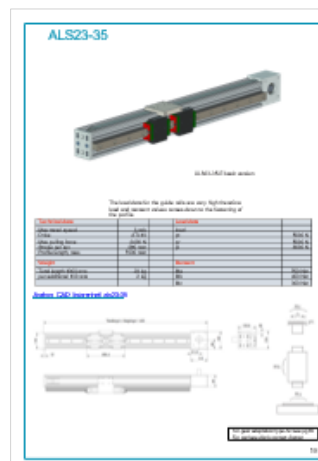
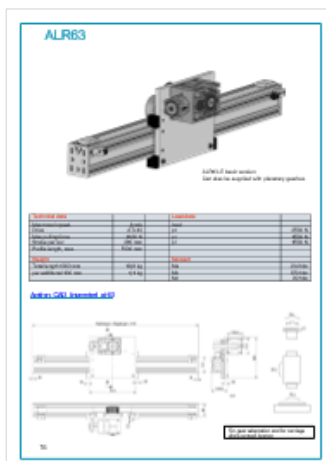
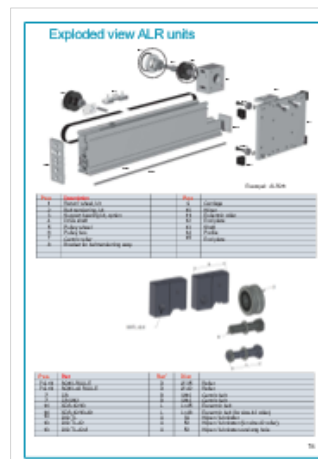
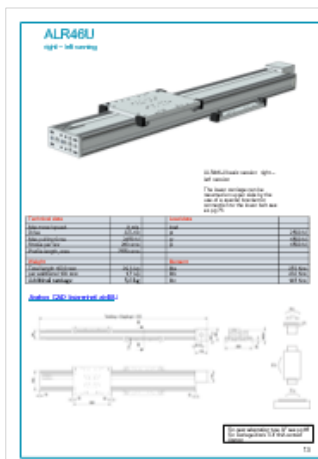
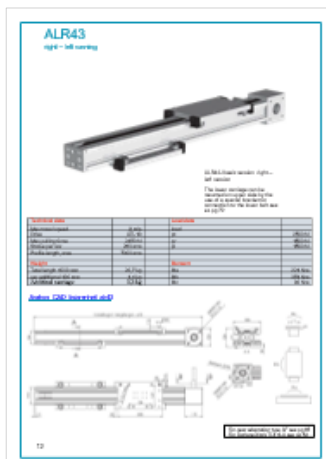
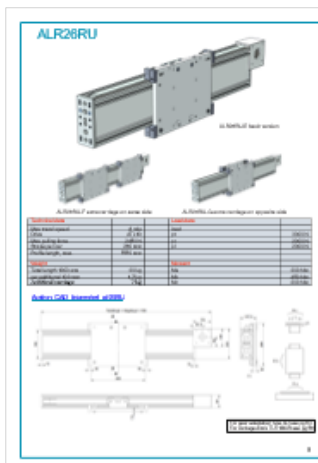
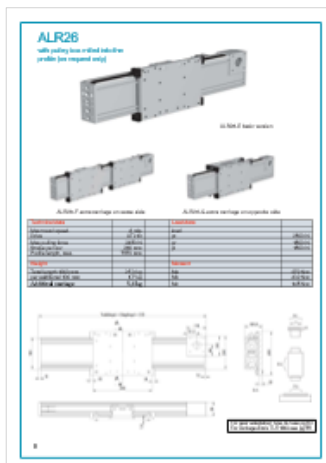
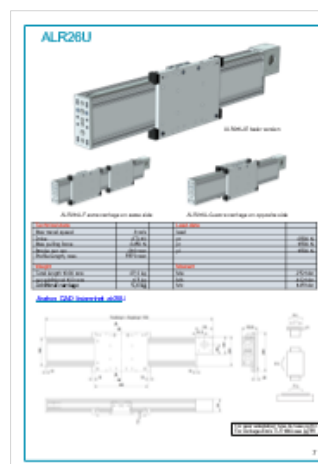
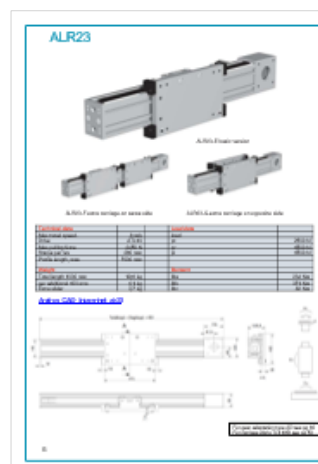
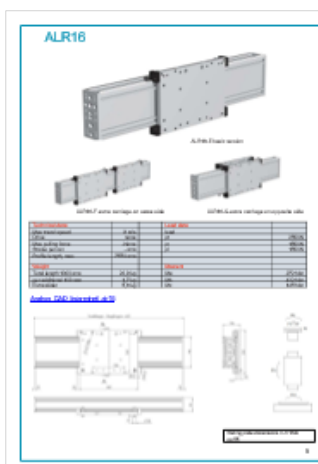
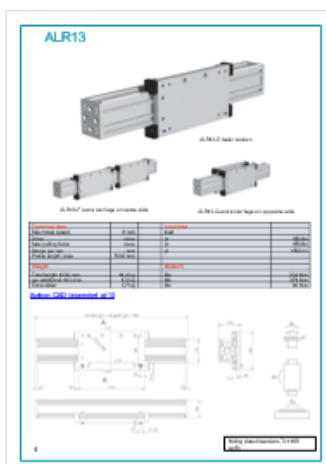
In this catalog, we show our standard range of units frequently used for pushers, machine loading/unloading, handling and palletizing. Our own production and development allow us an easy customization and adaption to your wishes.

The distinguishing features for the system are:

- *Simple assembly*
- *Optimized stability*
- *Self-supporting beam*
- *Direct mounting of gearboxes*
- *Simple adaptation to customer needs*
- *High quality components*

Linear unit, vertical sliding plate	Page	Linear gantries, balanced design	page
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Content – click for fast access

ALS23-35 RB

rotary table



ALS23-35 RB rotary table

The motorized table allows any application that will require rotation around the horizontal axis.

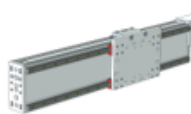
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Table diameter	230	mm	350	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the ALS23-35 RB](#)



10 pages including the ALS23-35 RB

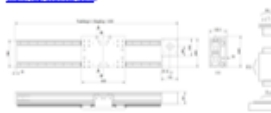
ALS26U



ALS26U linear motor

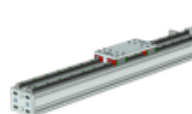
Parameter	Value	Unit	Value	Unit
Table diameter	260	mm	260	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the ALS26U](#)



10 pages including the ALS26U

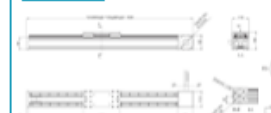
ALS33



ALS33 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	330	mm	330	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

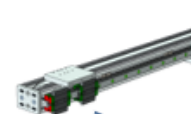
[Click here to download the ALS33](#)



10 pages including the ALS33

ALS43-30

right - left moving



ALS43-30 linear motor

The motorized table allows any application that will require rotation around the horizontal axis.

Parameter	Value	Unit	Value	Unit
Table diameter	430	mm	430	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the ALS43-30](#)



10 pages including the ALS43-30

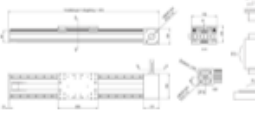
ALS56



ALS56 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	560	mm	560	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

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10 pages including the ALS56

ALS56

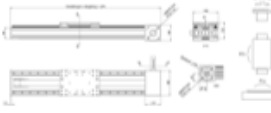
example with carriage designed for robot



ALS56 for mounting of a robot

Parameter	Value	Unit	Value	Unit
Table diameter	560	mm	560	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the ALS56](#)



10 pages including the ALS56

AP133R



AP133R linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	133	mm	133	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP133R](#)



10 pages including the AP133R

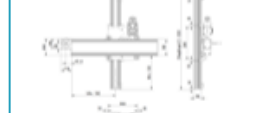
AP163RU



AP163RU linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	163	mm	163	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP163RU](#)



10 pages including the AP163RU

AP230



AP230 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	230	mm	230	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP230](#)



10 pages including the AP230

AP234

double Z-axis



AP234 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	234	mm	234	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP234](#)



10 pages including the AP234

AP237



AP237 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	237	mm	237	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP237](#)



10 pages including the AP237

AP260U



AP260U linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	260	mm	260	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP260U](#)



10 pages including the AP260U

AP260RU



AP260RU linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	260	mm	260	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP260RU](#)



10 pages including the AP260RU

AP264U

double Z-axis



AP264U linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	264	mm	264	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

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10 pages including the AP264U

AP264RU

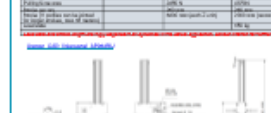
double Z-axis



AP264RU linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	264	mm	264	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP264RU](#)



10 pages including the AP264RU

AP267



AP267 linear motor

Parameter	Value	Unit	Value	Unit
Table diameter	267	mm	267	mm
Table weight	15	kg	25	kg
Table speed	10	rpm	10	rpm
Table torque	10	Nm	10	Nm
Table power	10	W	10	W
Table voltage	24	V	24	V
Table current	0.4	A	0.4	A

[Click here to download the AP267](#)



10 pages including the AP267

Content – click for fast access

[illegible][illegible]

AP360RU

• Standard design for Connection
 • Two-part design, easy to install
 • Simple to install on various sizes
 • 4 different sizes of connection
 • Simple to install in different
 • Standard design for Connection

AP360RU, 4 different sizes

Connection size	AP	AP	AP
Connection size	100	150	200
Connection size	250	300	350
Connection size	400	450	500
Connection size	550	600	650
Connection size	700	750	800
Connection size	850	900	950
Connection size	1000	1050	1100
Connection size	1150	1200	1250
Connection size	1300	1350	1400
Connection size	1450	1500	1550
Connection size	1600	1650	1700
Connection size	1750	1800	1850
Connection size	1900	1950	2000
Connection size	2050	2100	2150
Connection size	2200	2250	2300
Connection size	2350	2400	2450
Connection size	2500	2550	2600
Connection size	2650	2700	2750
Connection size	2800	2850	2900
Connection size	2950	3000	3050
Connection size	3100	3150	3200
Connection size	3250	3300	3350
Connection size	3400	3450	3500
Connection size	3550	3600	3650
Connection size	3700	3750	3800
Connection size	3850	3900	3950
Connection size	4000	4050	4100
Connection size	4150	4200	4250
Connection size	4300	4350	4400
Connection size	4450	4500	4550
Connection size	4600	4650	4700
Connection size	4750	4800	4850
Connection size	4900	4950	5000
Connection size	5050	5100	5150
Connection size	5200	5250	5300
Connection size	5350	5400	5450
Connection size	5500	5550	5600
Connection size	5650	5700	5750
Connection size	5800	5850	5900
Connection size	5950	6000	6050
Connection size	6100	6150	6200
Connection size	6250	6300	6350
Connection size	6400	6450	6500
Connection size	6550	6600	6650
Connection size	6700	6750	6800
Connection size	6850	6900	6950
Connection size	7000	7050	7100
Connection size	7150	7200	7250
Connection size	7300	7350	7400
Connection size	7450	7500	7550
Connection size	7600	7650	7700
Connection size	7750	7800	7850
Connection size	7900	7950	8000
Connection size	8050	8100	8150
Connection size	8200	8250	8300
Connection size	8350	8400	8450
Connection size	8500	8550	8600
Connection size	8650	8700	8750
Connection size	8800	8850	8900
Connection size	8950	9000	9050
Connection size	9100	9150	9200
Connection size	9250	9300	9350
Connection size	9400	9450	9500
Connection size	9550	9600	9650
Connection size	9700	9750	9800
Connection size	9850	9900	9950
Connection size	10000	10050	10100
Connection size	10150	10200	10250
Connection size	10300	10350	10400
Connection size	10450	10500	10550
Connection size	10600	10650	10700
Connection size	10750	10800	10850
Connection size	10900	10950	11000
Connection size	11050	11100	11150
Connection size	11200	11250	11300
Connection size	11350	11400	11450
Connection size	11500	11550	11600
Connection size	11650	11700	11750
Connection size	11800	11850	11900
Connection size	11950	12000	12050
Connection size	12100	12150	12200
Connection size	12250	12300	12350
Connection size	12400	12450	12500
Connection size	12550	12600	12650
Connection size	12700	12750	12800
Connection size	12850	1	

AP365U

Material: extruded aluminium
 Dimensions in mm
 • 2000/2500/3000/3500/4000
 • Support 7 - 20 mm diameter
 • 1000/1500/2000/2500/3000

AP365U: Cross section

- 2000/2500/3000/3500/4000
- 1000/1500/2000/2500/3000

Technical data	mm	mm
Profile	40	40
Weight	1,2	1,2
Weight/m	1,2	1,2
Weight/m²	1,2	1,2
Weight/m³	1,2	1,2
Weight/m⁴	1,2	1,2
Weight/m⁵	1,2	1,2
Weight/m⁶	1,2	1,2
Weight/m⁷	1,2	1,2
Weight/m⁸	1,2	1,2
Weight/m⁹	1,2	1,2
Weight/m¹⁰	1,2	1,2
Weight/m¹¹	1,2	1,2
Weight/m¹²	1,2	1,2
Weight/m¹³	1,2	1,2
Weight/m¹⁴	1,2	1,2
Weight/m¹⁵	1,2	1,2
Weight/m¹⁶	1,2	1,2
Weight/m¹⁷	1,2	1,2
Weight/m¹⁸	1,2	1,2
Weight/m¹⁹	1,2	1,2
Weight/m²⁰	1,2	1,2
Weight/m²¹	1,2	1,2
Weight/m²²	1,2	1,2
Weight/m²³	1,2	1,2
Weight/m²⁴	1,2	1,2
Weight/m²⁵	1,2	1,2
Weight/m²⁶	1,2	1,2
Weight/m²⁷	1,2	1,2
Weight/m²⁸	1,2	1,2
Weight/m²⁹	1,2	1,2
Weight/m³⁰	1,2	1,2
Weight/m³¹	1,2	1,2
Weight/m³²	1,2	1,2
Weight/m³³	1,2	1,2
Weight/m³⁴	1,2	1,2
Weight/m³⁵	1,2	1,2
Weight/m³⁶	1,2	1,2
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Weight/m⁴¹	1,2	1,2
Weight/m⁴²	1,2	1,2
Weight/m⁴³	1,2	1,2
Weight/m⁴⁴	1,2	1,2
Weight/m⁴⁵	1,2	1,2
Weight/m⁴⁶	1,2	1,2
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Weight/m⁴⁸	1,2	1,2
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Weight/m⁵²	1,2	1,2
Weight/m⁵³	1,2	1,2
Weight/m⁵⁴	1,2	1,2
Weight/m⁵⁵	1,2	1,2
Weight/m⁵⁶	1,2	1,2
Weight/m⁵⁷	1,2	1,2
Weight/m⁵⁸	1,2	1,2
Weight/m⁵⁹	1,2	1,2
Weight/m⁶⁰	1,2	1,2
Weight/m⁶¹	1,2	1,2
Weight/m⁶²	1,2	1,2
Weight/m⁶³	1,2	1,2
Weight/m⁶⁴	1,2	1,2
Weight/m⁶⁵	1,2	1,2
Weight/m⁶⁶	1,2	1,2
Weight/m⁶⁷	1,2	1,2
Weight/m⁶⁸	1,2	1,2
Weight/m⁶⁹	1,2	1,2
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Weight/m⁷¹	1,2	1,2
Weight/m⁷²	1,2	1,2
Weight/m⁷³	1,2	1,2
Weight/m⁷⁴	1,2	1,2
Weight/m⁷⁵	1,2	1,2
Weight/m⁷⁶	1,2	1,2
Weight/m⁷⁷	1,2	1,2
Weight/m⁷⁸	1,2	1,2
Weight/m⁷⁹	1,2	1,2
Weight/m⁸⁰	1,2	1,2
Weight/m⁸¹	1,2	1,2
Weight/m⁸²	1,2	1,2
Weight/m⁸³	1,2	1,2
Weight/m⁸⁴	1,2	1,2
Weight/m⁸⁵	1,2	1,2
Weight/m⁸⁶	1,2	1,2
Weight/m⁸⁷	1,2	1,2
Weight/m⁸⁸	1,2	1,2
Weight/m⁸⁹	1,2	1,2
Weight/m⁹⁰	1,2	1,2
Weight/m⁹¹	1,2	1,2
Weight/m⁹²	1,2	1,2
Weight/m⁹³	1,2	1,2
Weight/m⁹⁴	1,2	1,2
Weight/m⁹⁵	1,2	1,2
Weight/m⁹⁶	1,2	1,2
Weight/m⁹⁷	1,2	1,2
Weight/m⁹⁸	1,2	1,2
Weight/m⁹⁹	1,2	1,2
Weight/m¹⁰⁰	1,2	1,2

Technical drawing showing dimensions and details of the AP365U profile system.

[illegible][illegible][illegible]

AP520

- Intermediate and end connector
- Intermediate length 1,7 m
- 500 mm (20 in) wide
- Weight 17,200 kg (38,000 lb)
- 4000 kg (8800 lb) capacity

AP520 intermediate

	U.S.	Metric
Capacity	4000 kg	8800 lb
Weight	17,200 kg	38,000 lb
Length	1,700 mm	67 in
Width	500 mm	20 in
Height	1,000 mm	39 in
Material	Aluminum	Aluminum
Finish	Mill	Mill

www.apc.com/apc/eng/eng_products/apc_products/apc_products.asp?category=520

www.apc.com/apc/eng/eng_products/apc_products/apc_products.asp?category=520

Top View

Side View

AP520 intermediate

	U.S.	Metric
Capacity	4000 kg	8800 lb
Weight	17,200 kg	38,000 lb
Length	1,700 mm	67 in
Width	500 mm	20 in
Height	1,000 mm	39 in
Material	Aluminum	Aluminum
Finish	Mill	Mill

www.apc.com/apc/eng/eng_products/apc_products/apc_products.asp?category=520

[illegible]

AP537U

- Reinforced with composite reinforcement in Y-axis
- 200mm wide reinforced
- Weight 0,250kg/m (100mm wide reinforced)

AP537U beam section

Technical data	L ₁	L ₂	L ₃
Production	AP537U	AP537U	AP537U
Reinforcement	AP537U	AP537U	AP537U
Reinforcement area	AP537U	AP537U	AP537U
Weight	0,250kg/m	0,250kg/m	0,250kg/m
Reinforcement area	AP537U	AP537U	AP537U
Weight	0,250kg/m	0,250kg/m	0,250kg/m

Technical drawing showing the beam section and reinforcement details. Dimensions include L₁, L₂, L₃, and L₄. A note indicates: "If the reinforcement is not reinforced, the reinforcement area is 0,250kg/m".

[illegible][illegible][illegible]

AP630RU

- Regenerierbar und wiederverwendbar
- Dimensionen in mm
- Regel 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
- Nachrüstbar für andere Modelle

AP630RU/Universal support

Dimensions in mm			
AP630RU	AP630RU	AP630RU	AP630RU
1. 1000	1. 1000	1. 1000	1. 1000
2. 1000	2. 1000	2. 1000	2. 1000
3. 1000	3. 1000	3. 1000	3. 1000
4. 1000	4. 1000	4. 1000	4. 1000
5. 1000	5. 1000	5. 1000	5. 1000
6. 1000	6. 1000	6. 1000	6. 1000
7. 1000	7. 1000	7. 1000	7. 1000
8. 1000	8. 1000	8. 1000	8. 1000
9. 1000	9. 1000	9. 1000	9. 1000
10. 1000	10. 1000	10. 1000	10. 1000
11. 1000	11. 1000	11. 1000	11. 1000
12. 1000	12. 1000	12. 1000	12. 1000
13. 1000	13. 1000	13. 1000	13. 1000
14. 1000	14. 1000	14. 1000	14. 1000
15. 1000	15. 1000	15. 1000	15. 1000
16. 1000	16. 1000	16. 1000	16. 1000
17. 1000	17. 1000	17. 1000	17. 1000
18. 1000	18. 1000	18. 1000	18. 1000
19. 1000	19. 1000	19. 1000	19. 1000
20. 1000	20. 1000	20. 1000	20. 1000
21. 1000	21. 1000	21. 1000	21. 1000
22. 1000	22. 1000	22. 1000	22. 1000
23. 1000	23. 1000	23. 1000	23. 1000
24. 1000	24. 1000	24. 1000	24. 1000
25. 1000	25. 1000	25. 1000	25. 1000
26. 1000	26. 1000	26. 1000	26. 1000
27. 1000	27. 1000	27. 1000	27. 1000
28. 1000	28. 1000	28. 1000	28. 1000
29. 1000	29. 1000	29. 1000	29. 1000
30. 1000	30. 1000	30. 1000	30. 1000
31. 1000	31. 1000	31. 1000	31. 1000
32. 1000	32. 1000	32. 1000	32. 1000
33. 1000	33. 1000	33. 1000	33. 1000
34. 1000	34. 1000	34. 1000	34. 1000
35. 1000	35. 1000	35. 1000	35. 1000
36. 1000	36. 1000	36. 1000	36. 1000
37. 1000	37. 1000	37. 1000	37. 1000
38. 1000	38. 1000	38. 1000	38. 1000
39. 1000	39. 1000	39. 1000	39. 1000
40. 1000	40. 1000	40. 1000	40. 1000
41. 1000	41. 1000	41. 1000	41. 1000
42. 1000	42. 1000	42. 1000	42. 1000
43. 1000	43. 1000	43. 1000	43. 1000
44. 1000	44. 1000	44. 1000	44. 1000
45. 1000	45. 1000	45. 1000	45. 1000
46. 1000	46. 1000	46. 1000	46. 1000
47. 1000	47. 1000	47. 1000	47. 1000
48. 1000	48. 1000	48. 1000	48. 1000
49. 1000	49. 1000	49. 1000	49. 1000
50. 1000	50. 1000	50. 1000	50. 1000
51. 1000	51. 1000	51. 1000	51. 1000
52. 1000	52. 1000	52. 1000	52. 1000
53. 1000	53. 1000	53. 1000	53. 1000
54. 1000	54. 1000	54. 1000	54. 1000
55. 1000	55. 1000	55. 1000	55. 1000

[illegible]

AP665RU

• The unit is made of stainless steel
 • The unit is made of stainless steel
 • The unit is made of stainless steel
 • The unit is made of stainless steel
 • The unit is made of stainless steel

Dimensions (mm)

Symbol	Value	Symbol	Value
A	1000	F	1000
B	1000	G	1000
C	1000	H	1000
D	1000	I	1000
E	1000	J	1000
K	1000	L	1000
M	1000	N	1000
O	1000	P	1000
Q	1000	R	1000
S	1000	T	1000
U	1000	V	1000
W	1000	X	1000
Y	1000	Z	1000

Technical drawing details:

- View A: Shows the front view of the unit with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- View B: Shows the side view of the unit with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

Content – click for fast access

Drives

Fixed length, fixed assembly of gear
 Having gear and worm, bearing, intermediate gear and output additional parts.

Fixed internal helical
 Having gear and worm, bearing, intermediate gear and output additional parts. The intermediate gear can be adjusted.

Fixed internal with planet frame
 The intermediate gear with planet frame. (in this mode)

Fixed internal planetary gear
 Planetary gear, worm gear reduction, worm gear, intermediate reduction. This will change like a single helical gear (in this mode).

Variable length gear with...
 (change gear length for torque density)
 1. compound gear and intermediate 2 gear and output in addition to intermediate

[illegible]

Sliding of profiles

Sliding system by HST profile

The sliding system is designed for the sliding of the door profile. The door profile is shown in two views: a side view and a front view. The side view shows the door profile with a roller assembly at the top. The front view shows the door profile with rollers and a guide track. Dimensions are indicated with arrows and numbers.

Sliding system by HST profile

The sliding system is designed for the sliding of the door profile. The door profile is shown in two views: a side view and a front view. The side view shows the door profile with a roller assembly at the top. The front view shows the door profile with rollers and a guide track. Dimensions are indicated with arrows and numbers.

[illegible]

Accessories

Come ridge

corner and/or quarter connecting T-grooves and for reinforcement/bracing up, but for also the grooves themselves (max. 10mm long)

grey	 0000079
white	 0000079
red	 0000084
black	 0000085
black	 0000079



Tegel Surcoum

all angles and corners joining base connecting holes (connection for 20mm and 25mm hole)

These are available in grey and white, depending on the groove in the profile (see table)

Probably delivery not finished

Part no.	7 600 000 000
---------------	---------------



Threshold

for the base and/or grooves in threshold must not be exceeded

Threshold grooves are a 20mm-thick profile with the following dimensions:

Part no. 8079	 8079 15 00
---------------	------------------

Part no. 8079 15 00



10

[illegible][illegible]

Combinations

Combinations

AV 800 - AV 800
End-to-end design combination with the maximum load rate for maximum performance ratings.



AV 800 - AV 800
End-to-end design combination with the maximum load rate for maximum performance ratings. The roller bearing is placed over the entire length of the end-to-end roller bearing.



Pulse end-to-end mounted on a common shaft
End-to-end design combination with the maximum load rate for maximum performance ratings. The roller bearing is placed over the entire length of the end-to-end roller bearing.



76

Solutions from Anatron

High-speed roller coilers

These machines are designed to handle the most difficult coil materials without loss of efficiency. The design allows the increased slip between rollers to be

SPIN-unloaders

For unloading and rewinding, spinning requirements, a Spin-unloader is the best solution. It's designed to handle coils of any size, including difficult materials like 6061-T6 aluminum. An unloaders is a fully adjustable unit that can be used in a wide range of applications. It's a simple, efficient solution that's not too hard to use.

2" X 6 unloader

Available in two configurations to meet your specific unloading requirements. For more details,

77

Creative system solutions from Anatron

IPSPS-16 PDS
 High precision system for material handling in the machine industry. Anatron's IPSPS-16 PDS is a highly accurate and reliable system for material handling.

IPSPS modification
 The Anatron IPSPS modification is a highly accurate and reliable system for material handling. It is designed for applications requiring high precision and reliability.

IPSPS modification
 The Anatron IPSPS modification is a highly accurate and reliable system for material handling. It is designed for applications requiring high precision and reliability.

175

Creative system solutions from Aratlon

APRIS cell solution

Reduction in total parting unit volume of 2.5 times. Moves with speed for the maximum throughput. The top is not connected to the base and can move in the vertical plane.

Line-guiding solution

Maximum stroke speed of up to 100 mm/s. "Pushing" instead of "pulling" principle. The maximum stroke is 1000 mm. Direction is between the vertical axis.

APRIS mobile

Reduction in total investment with low installation costs. The mobile unit can be moved to the required position. The unit is not connected to the base and can move in the vertical plane.

10

Creative system solutions from Anatron

Three-gangley
 Bei dieser Three-rodholder-127 mm Rodholder-Systeme kann man die drei Rodholder-Systeme in einer Reihe anordnen und sie in einer Reihe anordnen.

Three-rodholder-127 mm rod holder
 Bei dieser Three-rodholder-127 mm Rodholder-Systeme kann man die drei Rodholder-Systeme in einer Reihe anordnen und sie in einer Reihe anordnen.

Three-gangley
 Bei dieser Three-rodholder-127 mm Rodholder-Systeme kann man die drei Rodholder-Systeme in einer Reihe anordnen und sie in einer Reihe anordnen.

Solutions

Worklift III (boomlift):
 Depending on the load and height, worklift III can be used in its telescopic or 360° boom mode and can be used for maintenance of overhead lines and towers. The telescopic mode is ideal for power line and tower work. The 360° boom mode is ideal for the maintenance of overhead lines, tower supporting systems and towers.

Scissor lift:
 Scissor lifts are ideal for the maintenance of overhead lines and towers. The telescopic mode is ideal for power line and tower work. The 360° boom mode is ideal for the maintenance of overhead lines, tower supporting systems and towers.

Telescopic handler:
 Telescopic handlers are ideal for the maintenance of overhead lines and towers. The telescopic mode is ideal for power line and tower work. The 360° boom mode is ideal for the maintenance of overhead lines, tower supporting systems and towers.

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Content – click for fast access

Linear motors

Linear motor drives

Linear motor drives are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

Linear motor drives

Linear motor drives are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

Servo, motor and drives

HIWIN

HIWIN Servomotors are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

CONTROL TECHNIQUES

CONTROL TECHNIQUES Servomotors are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

EtherCAT

EtherCAT Servomotors are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

HIWIN

NEW!

HIWIN Servomotors Serie E1

HIWIN Servomotors are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

EtherCAT

EtherCAT Servomotors are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required. They are used in many applications where high precision and high speed are required.

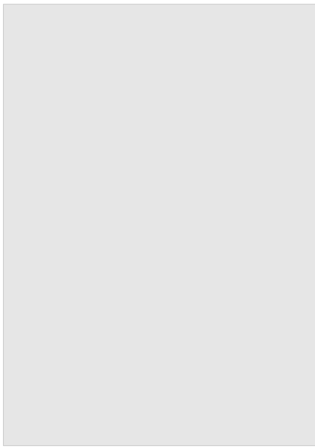
CONTROL TECHNIQUES

DIGITAX HD

DIGITAX HD is a new system for all your industrial needs. It is a new system for all your industrial needs. It is a new system for all your industrial needs.

CONTROL TECHNIQUES

CONTROL TECHNIQUES is a new system for all your industrial needs. It is a new system for all your industrial needs. It is a new system for all your industrial needs.



ALR13



ALR13-E basic version



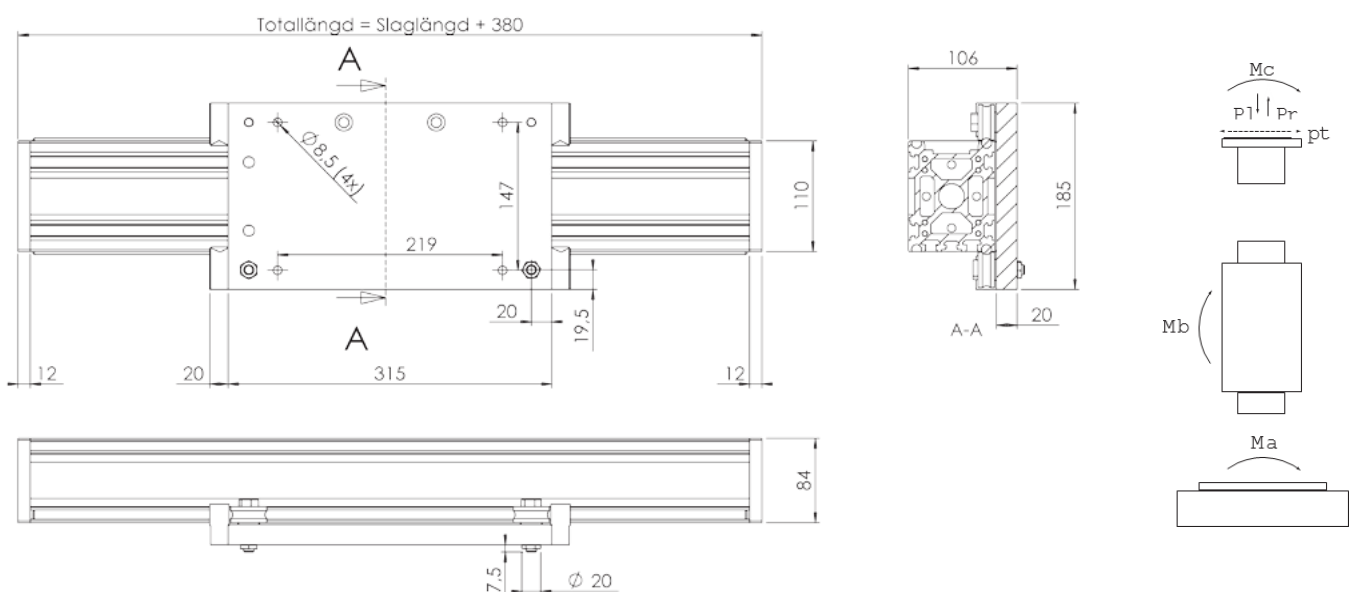
ALR13-F extra carriage on same side



ALR13-G extra carriage on opposite side

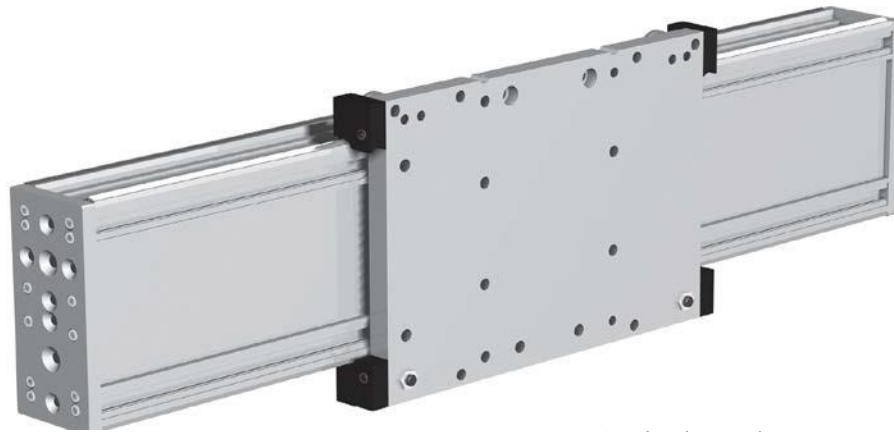
Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	none	pt	2500N
Max pulling force	none	pr	1500N
Stroke per rev	- mm	pl	1500 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	14,4 kg	Ma	234 Nm
per additional 100 mm	1,0 kg	Mb	371 Nm
Extra slider	3,7 kg	Mc	82 Nm

Aratron CAD linjarenhet alr13



Sliding plate dimensions TL1 1KB
pg 53

ALR16



ALR16-E basic version



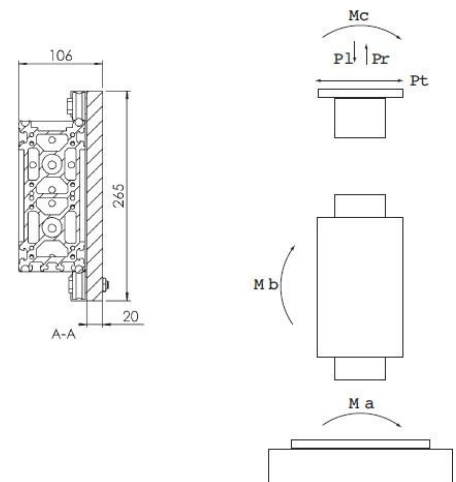
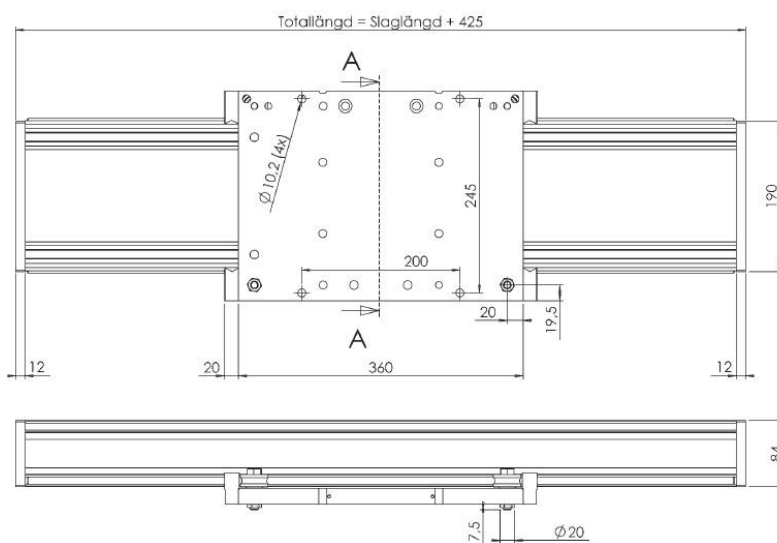
ALR16-F extra carriage on same side



ALR16-G extra carriage on opposite side

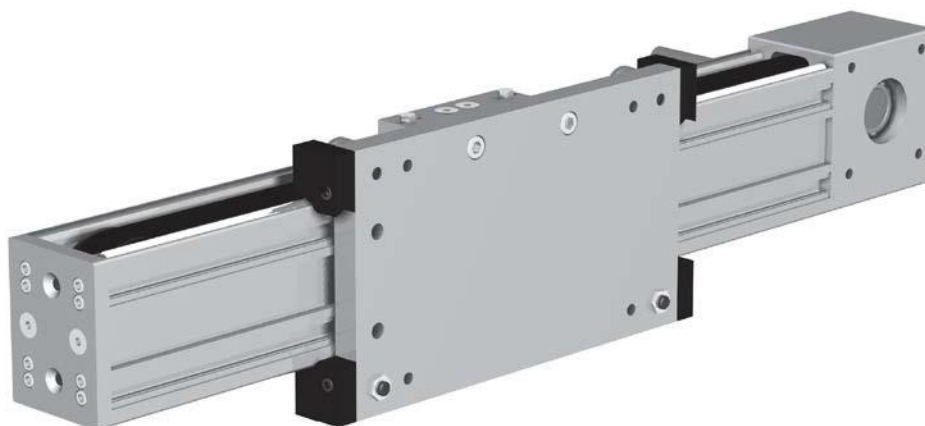
Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	none	pt	2500N
Max pulling force	-None	pr	1500N
Stroke per rev	- mm	pl	1500N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	22,8 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	432 Nm
Extra slider	5,6 kg	Mc	145 Nm

[Aratron CAD linjarenhet alr16](#)



Sliding plate dimensions TL1 1MA
pg 55

ALR23



ALR23-E basic version



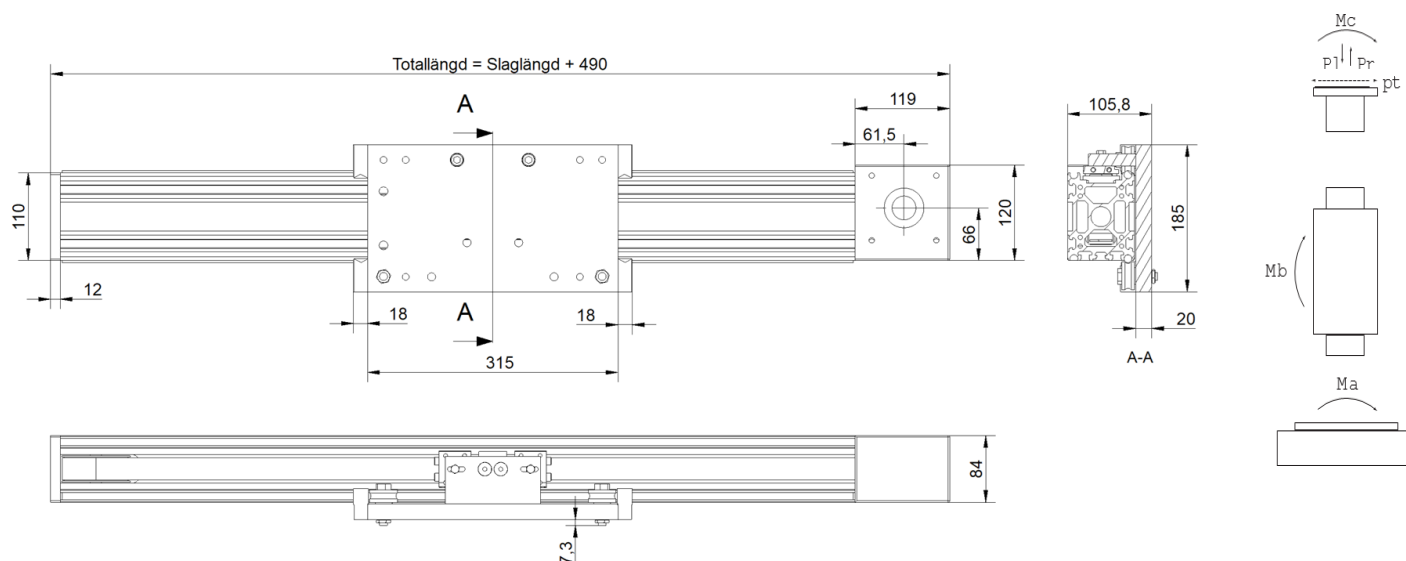
ALR23-F extra carriage on same side



ALR23-G extra carriage on opposite side

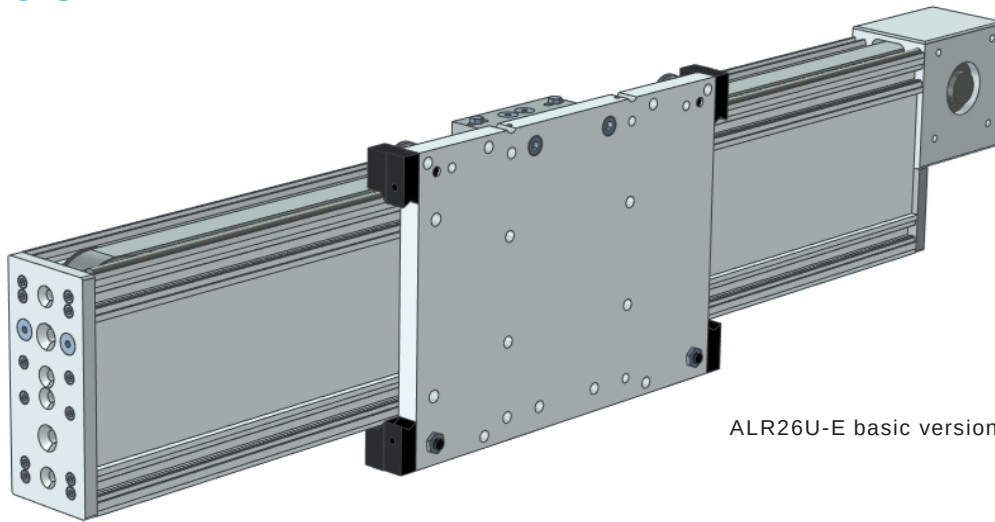
Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2450 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	18,6 kg	Ma	234 Nm
per additional 100 mm	1,1 kg	Mb	371 Nm
Extra slider	3,7 kg	Mc	82 Nm

Aratron CAD linjarenhet alr23

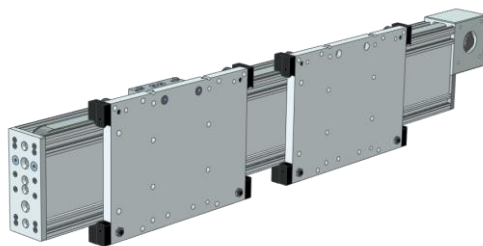


For gear adaptation type AD see pg 63
For carriage dim's TL1 1KB see pg 53

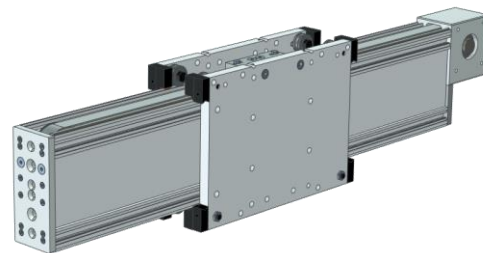
ALR26U



ALR26U-E basic version



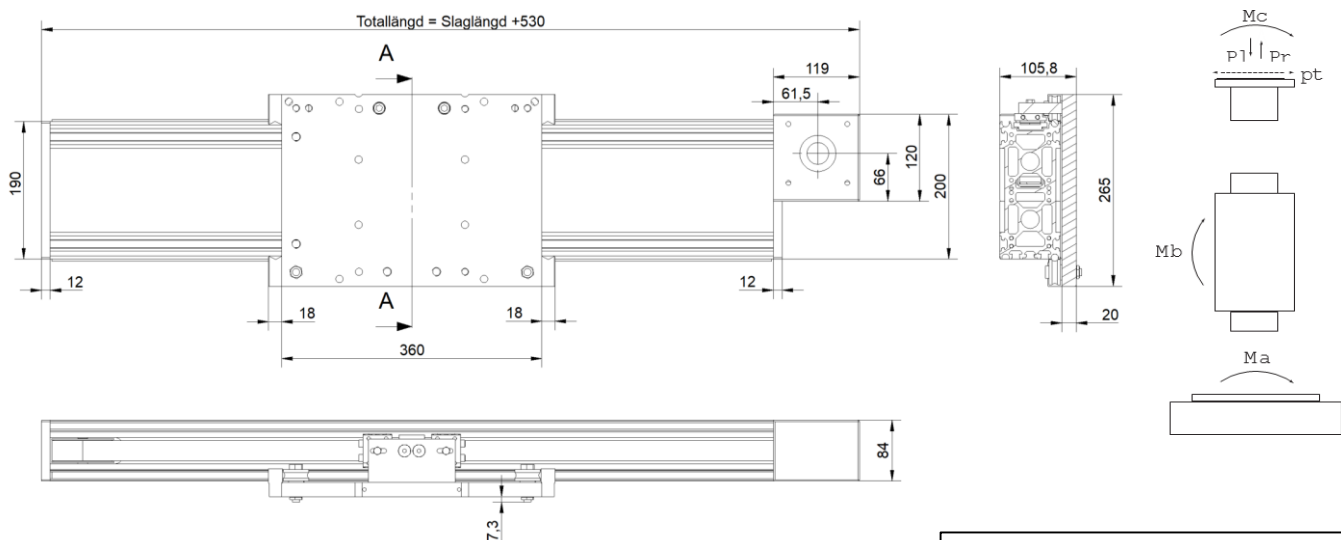
ALR26U-F extra carriage on same side



ALR26U-G extra carriage on opposite side

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2450 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	27,3 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	432 Nm
Additional carriage	5,6 kg	Mc	145 Nm

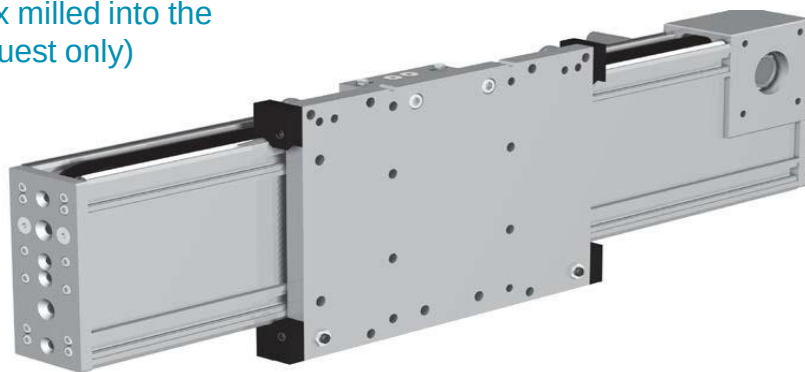
[Aratron CAD linjarenhet alr26U](#)



For gear adaptation type AD see pg 63
For carriage dim's TL1 1MA see pg 55

ALR26

with pulley box milled into the profile (on request only)



ALR26-E basic version

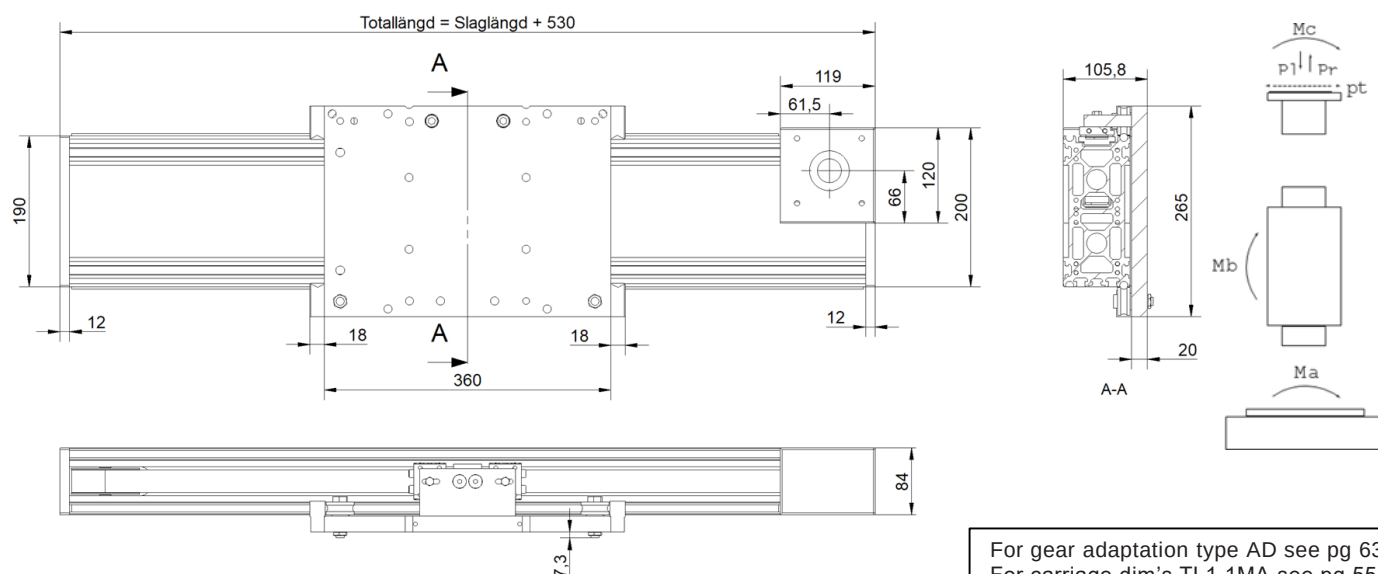


ALR26-F extra carriage on same side



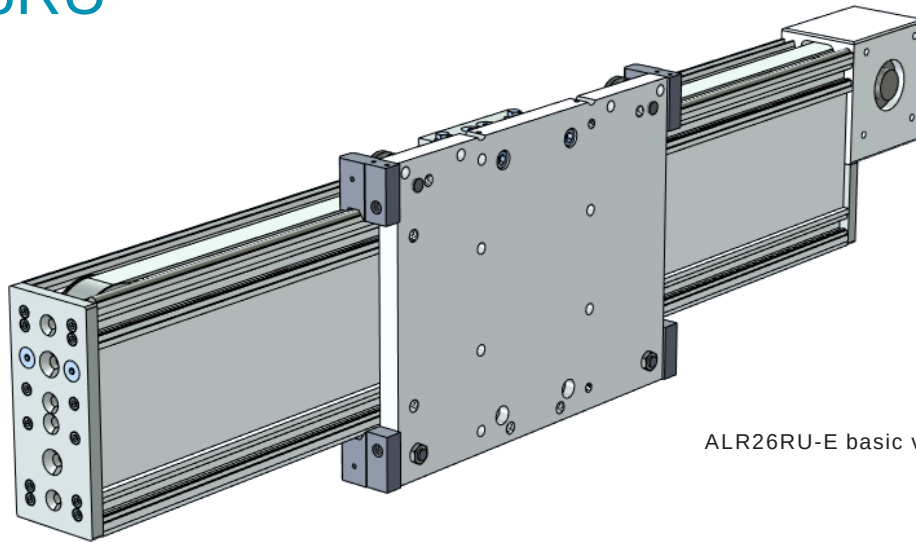
ALR26-G extra carriage on opposite side

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2450 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	27,3 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	432 Nm
Additinal carriage	5,6 kg	Mc	145 Nm

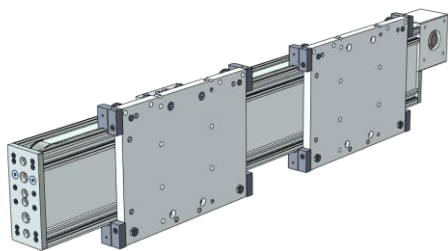


For gear adaptation type AD see pg 63
For carriage dim's TL1 1MA see pg 55

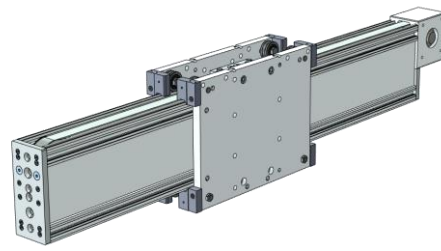
ALR26RU



ALR26RU-E basic version



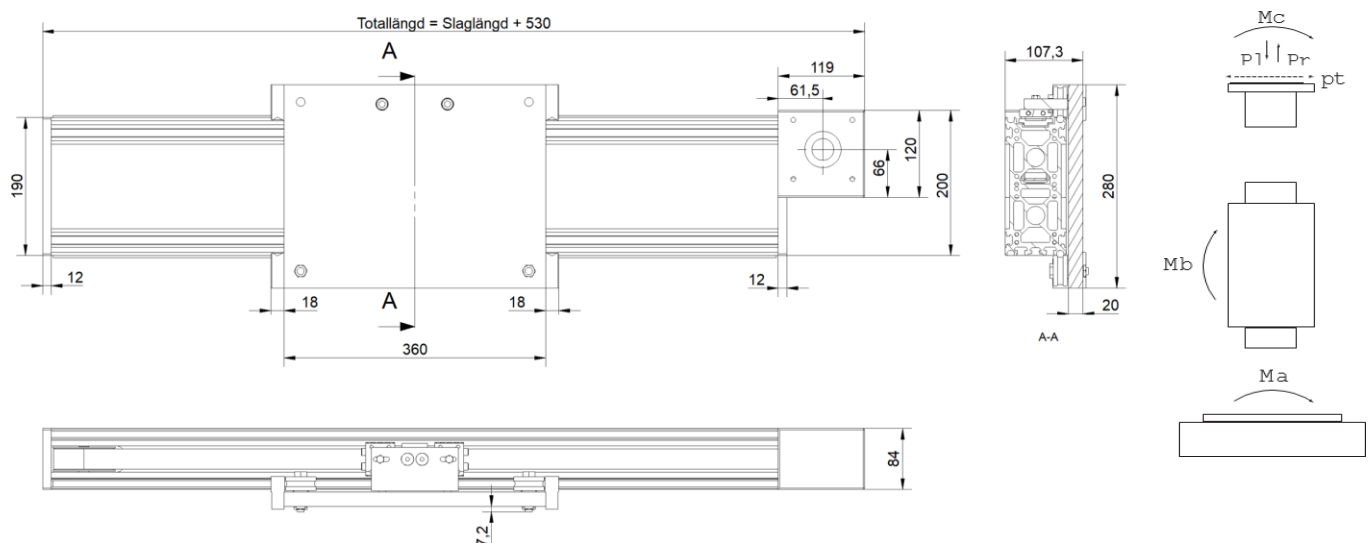
ALR26RU-F extra carriage on same side



ALR26RU-G extra carriage on opposite side

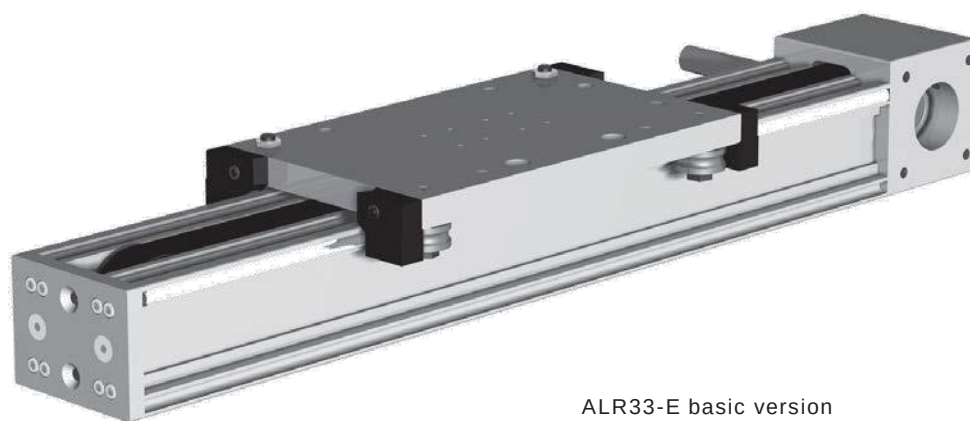
Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	3000 N
Max pulling force	2450 N	pr	2000 N
Stroke per rev	260 mm	pl	2000 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	30 kg	Ma	300 Nm
per additional 100 mm	1,7 kg	Mb	450 Nm
Additional carriage	7 kg	Mc	200 Nm

Aratron CAD linjarenhet alr26RU



For gear adaptation type AD see pg 63
For carriage dim's TL1 1MAR see pg 56

ALR33



ALR33-E basic version



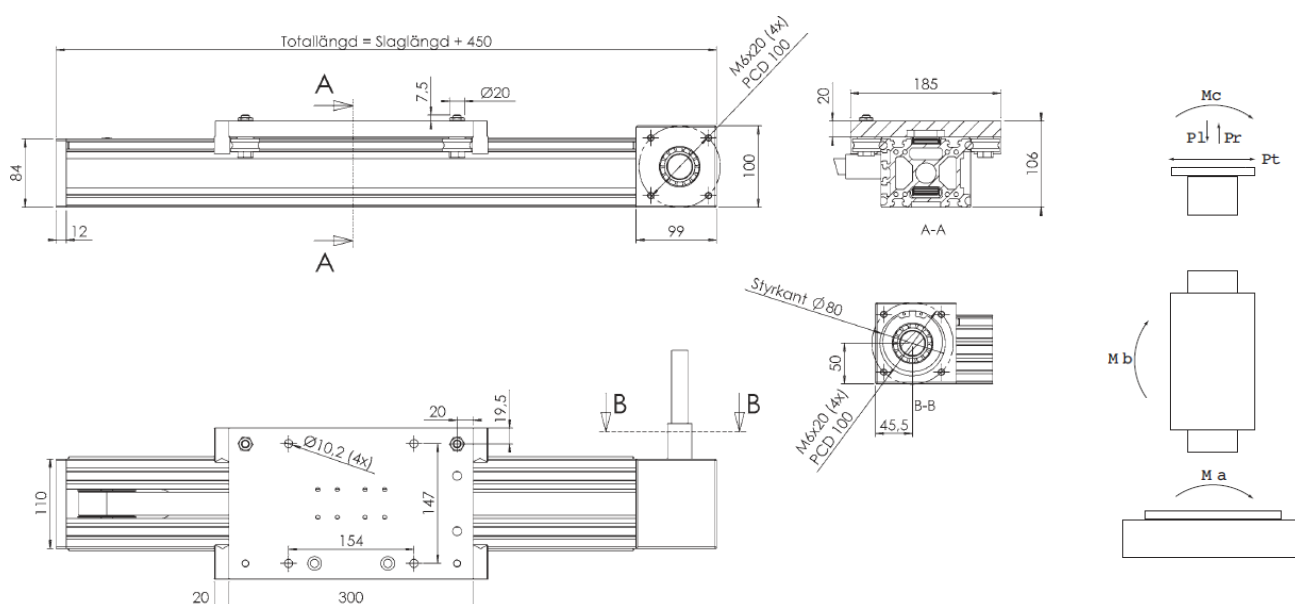
ALR33-F extra carriage on same side



ALR33-G extra carriage on opposite side

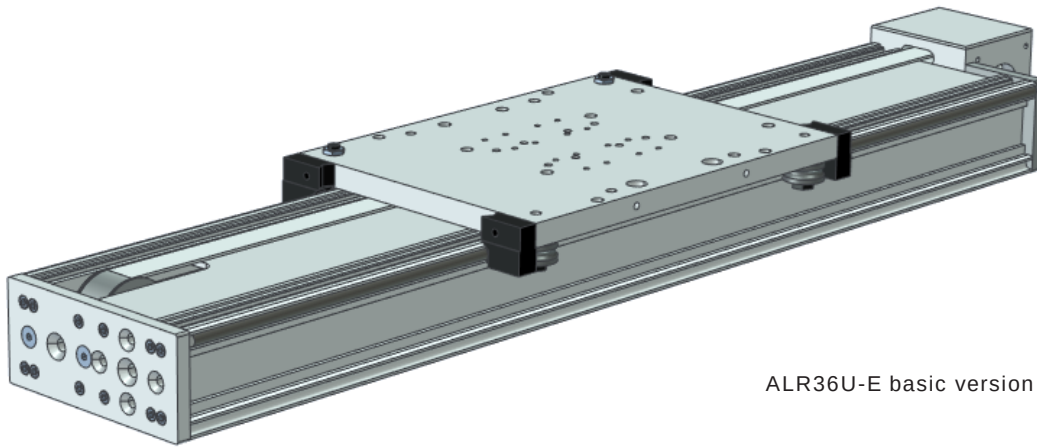
Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2000 N	pr	1500 N
Stroke per rev	210 mm	pl	1500 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	16,7 kg	Ma	221 Nm
per additional 100 mm	1,1 kg	Mb	351 Nm
Additional carriage	3,7 kg	Mc	82 Nm

Aratron CAD linjarenhet alr33

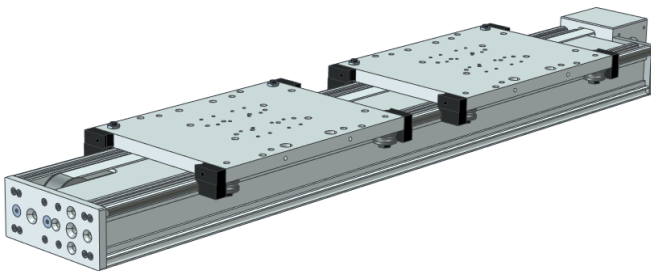


For gear adaptation type AE see pg 64
For carriage dim's TL1 1LA see pg 54

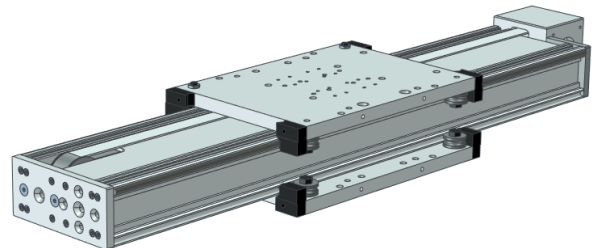
ALR36U



ALR36U-E basic version



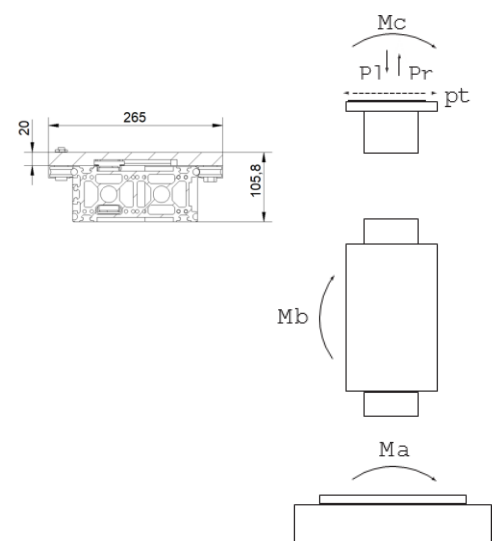
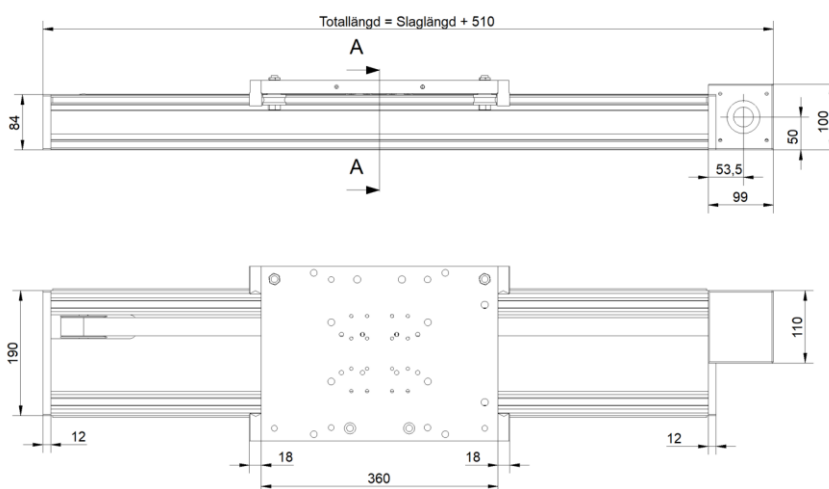
ALR36U-F extra carriage on same side



ALR36U-G extra carriage on opposite side

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2000 N	pr	1500 N
Stroke per rev	210 mm	pl	1500 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	25,8 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	432 Nm
Additinal carriage	5,6 kg	Mc	145 Nm

Aratron CAD linjarenhet alr36U



For gear adaptation type AE see pg 64
For carriage dim's TL1 1NA contact
Aratron

ALR43

right – left running

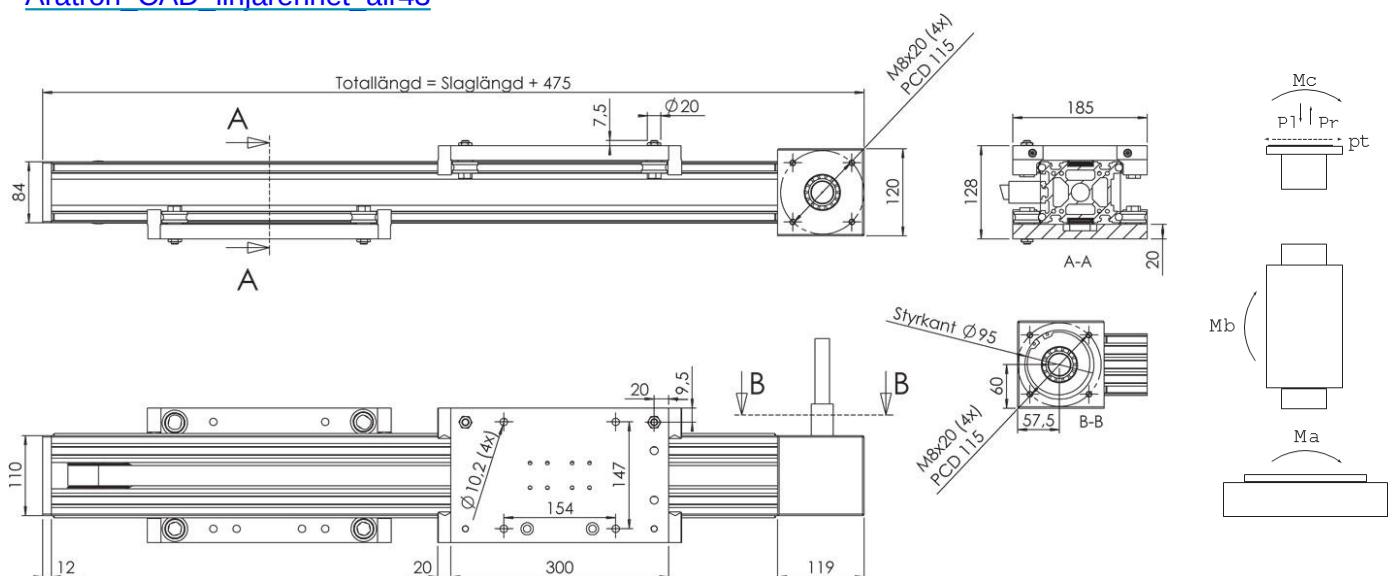


ALR43J basic version right – left version

The lower carriage can be mounted on upper side by the use of a special bracket for connection to the lower belt see ex pg 72

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2450 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	22,7 kg	Ma	221 Nm
per additional 100 mm	1,1 kg	Mb	351 Nm
Additinal carriage	3,3 kg	Mc	82 Nm

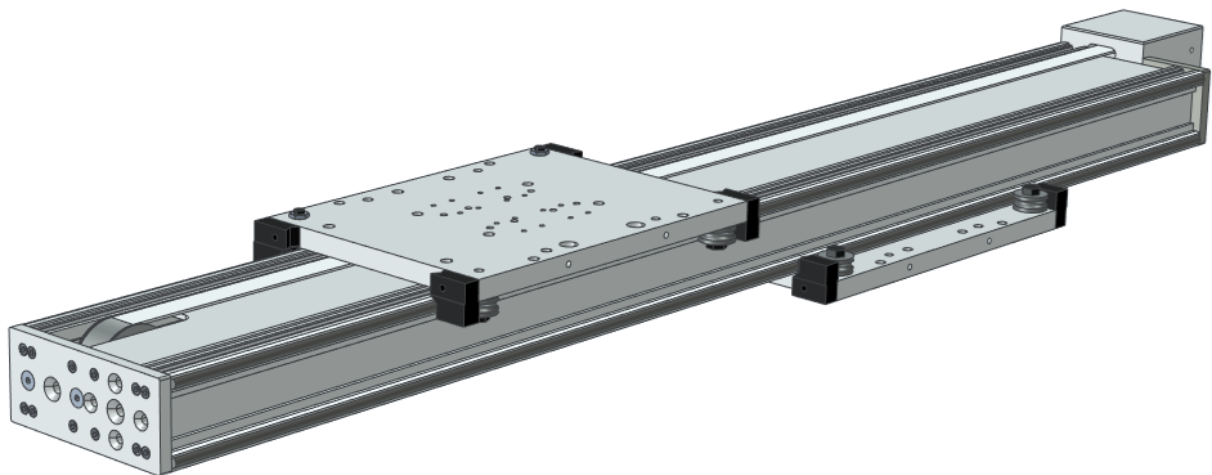
Aratron CAD linjarenhet alr43



For gear adaptation type AF see pg 65
For carriage dim's TL1 1LA see pg 54

ALR46U

right – left running

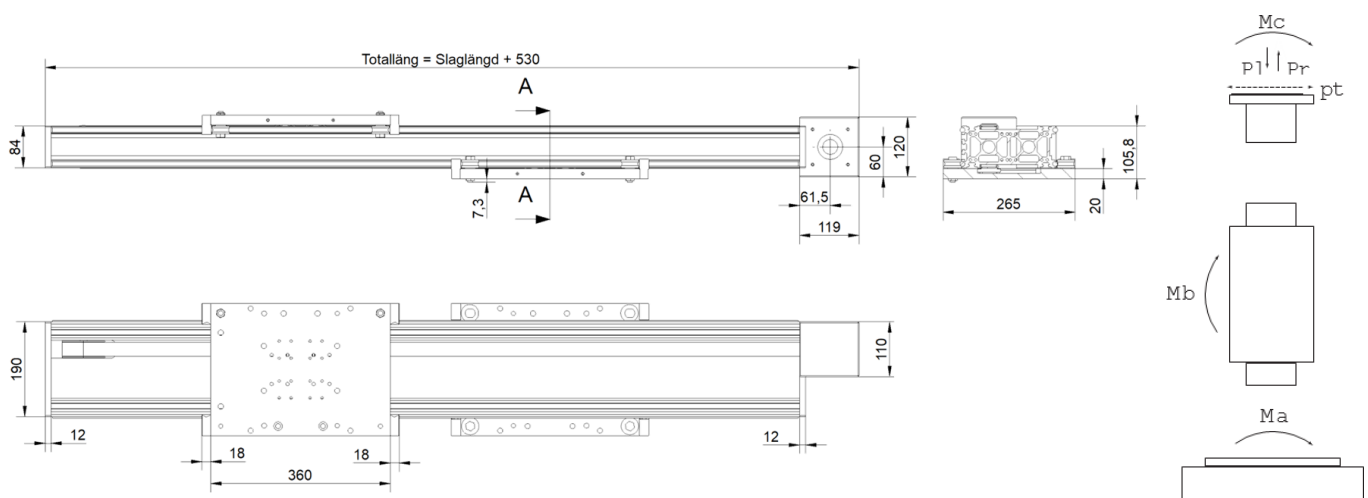


ALR46UJ basic version right – left version

The lower carriage can be mounted on upper side by the use of a special bracket for connection to the lower belt see ex pg 73

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	2450 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	29,3 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	432 Nm
Additional carriage	5,6 kg	Mc	145 Nm

Aratron_CAD_linjarenhet_alr46U



For gear adaptation type AF see pg 65
For carriage dim's TL1 1NA contact Aratron

ALR56



ALR56-E basic version



ALR56-F extra carriage
on same side



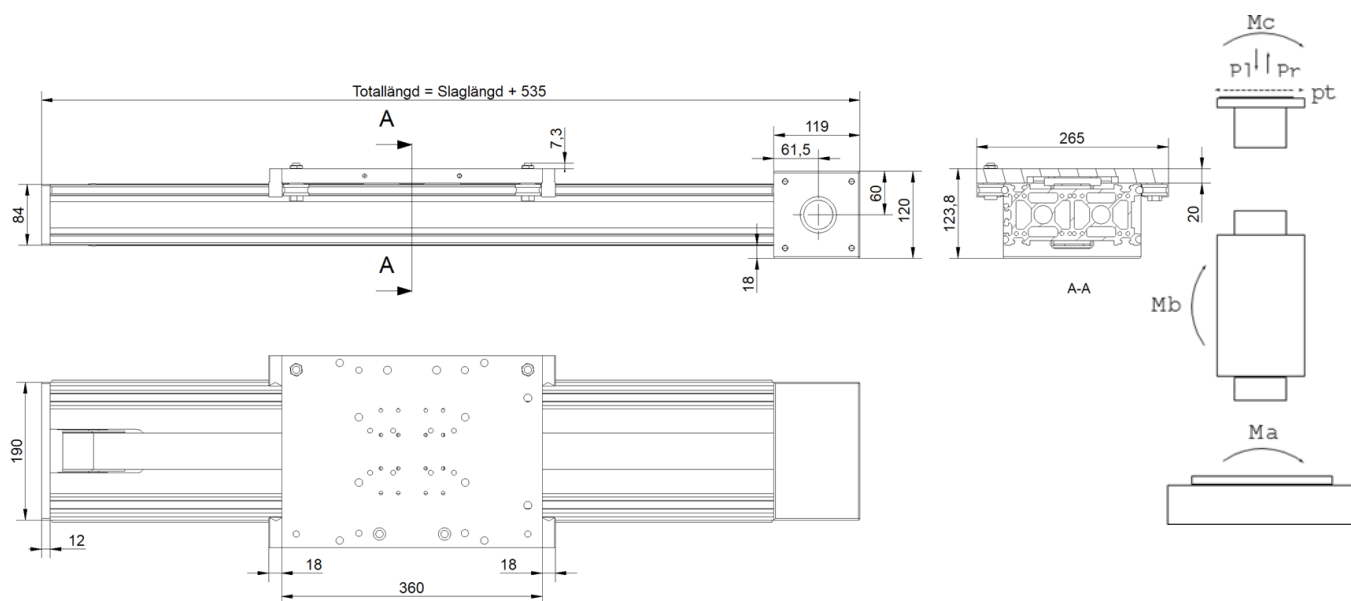
ALR56-J right – left running



ALR56-G extra carriage on opposite side

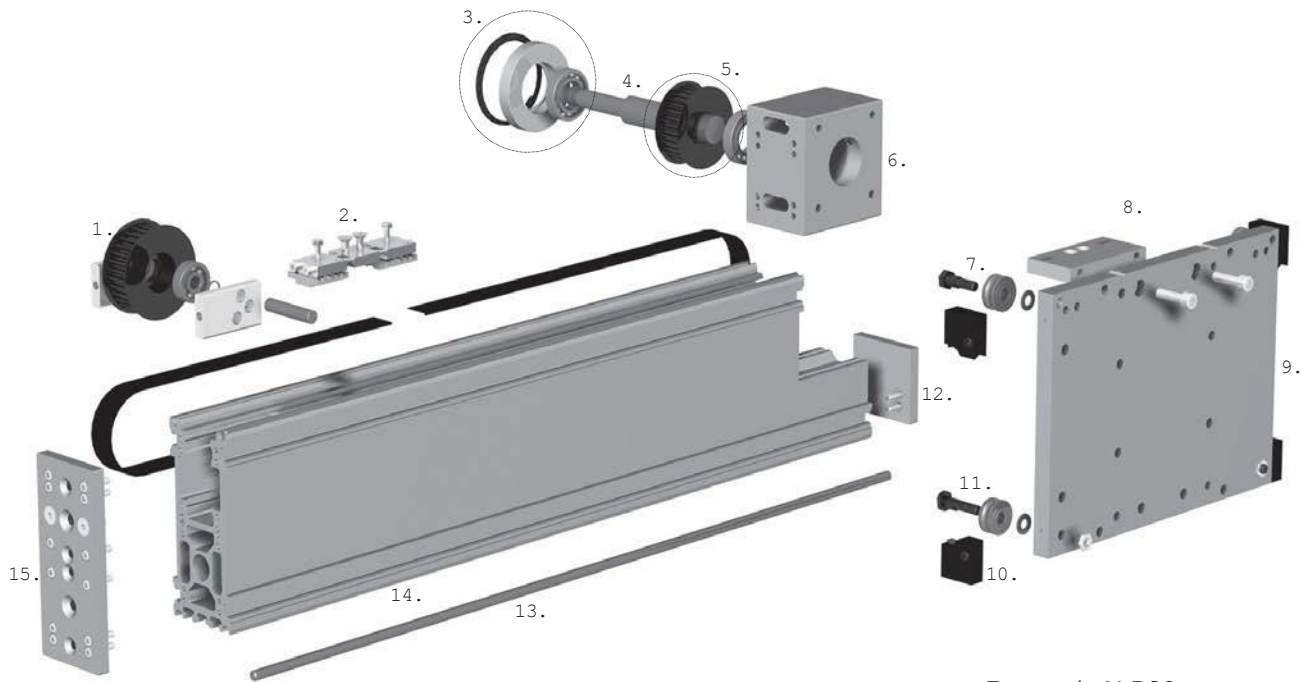
Technical data			Load data	
Max travel speed.	8 m/s		load	
Drive	ATL10		pt	2500 N
Max pulling force	4370 N		pr	1500 N
Stroke per rev	260 mm		pl	1500 N
Profile length, max	7570 mm			
Weight			Moment	
Total length 1000 mm	29,5 kg		Ma	272 Nm
per additional 100 mm	1,7 kg		Mb	432 Nm
Additinal carriage	5,6 kg		Mc	145 Nm

Aratron CAD linjarenhet alr56



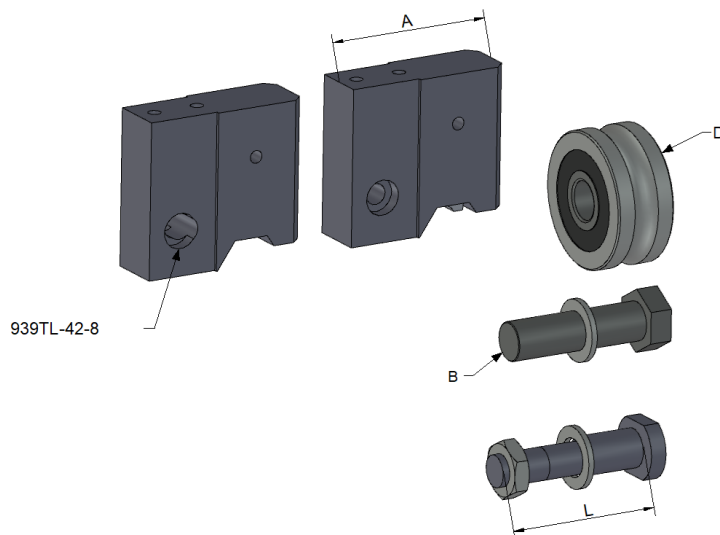
For gear adaptation type AH see pg 66
For carriage dim's TL1 1NA contact
Aratron

Exploded view ALR units



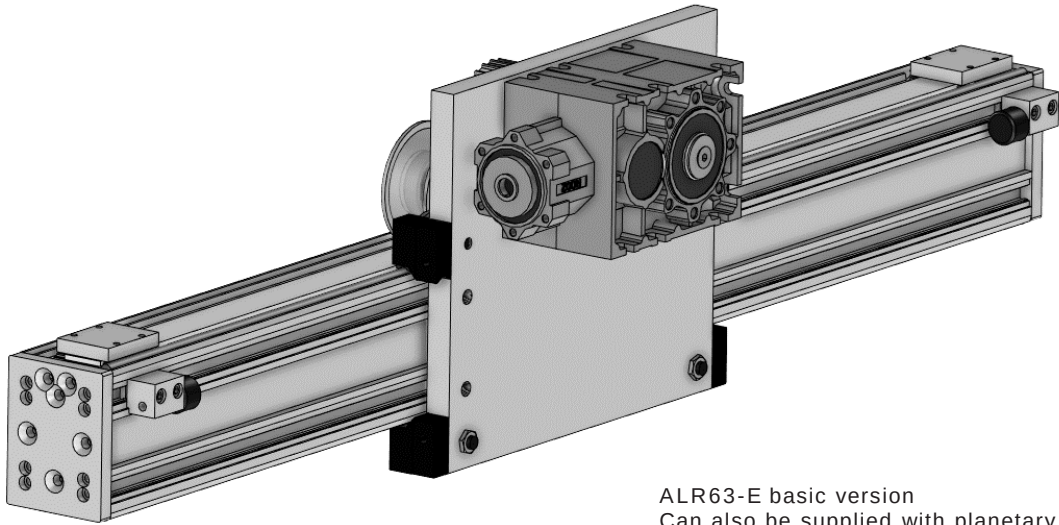
Exampel: ALR26

Pos	Description		Pos	
1	Return wheel, kit		9	Carriage
2	Belt tensioning, kit		10	Wiper
3	Support bearing kit, option		11	Excentric roller
4	Drive shaft		12	End plate
5	Pulley wheel		13	Shaft
6	Pulley box		14	Profile
7	Centric roller		15	End plate
8	Bracket for belt tensioning assy			



Pos	Part	Ref	Dim	
7 & 11	SQ10-RULLE	D	Ø 35	Roller
7 & 11	SQ10-42 RULLE	D	Ø 42	Roller
7	CS	B	M10	Centric bolt
7	CS M12	B	M12	Centric bolt
11	XCS-12/10	L	L=45	Excentric bolt
11	XCS-12/10-48	L	L=48	Excentric bolt (for size 42 roller)
10	939 TL	A	39	Wiper / lubricator
10	939 TL-42	A	52	Wiper / lubricator (for size 42 roller)
10	939 TL-42-8	A	52	Wiper / lubricator oval mtg hole

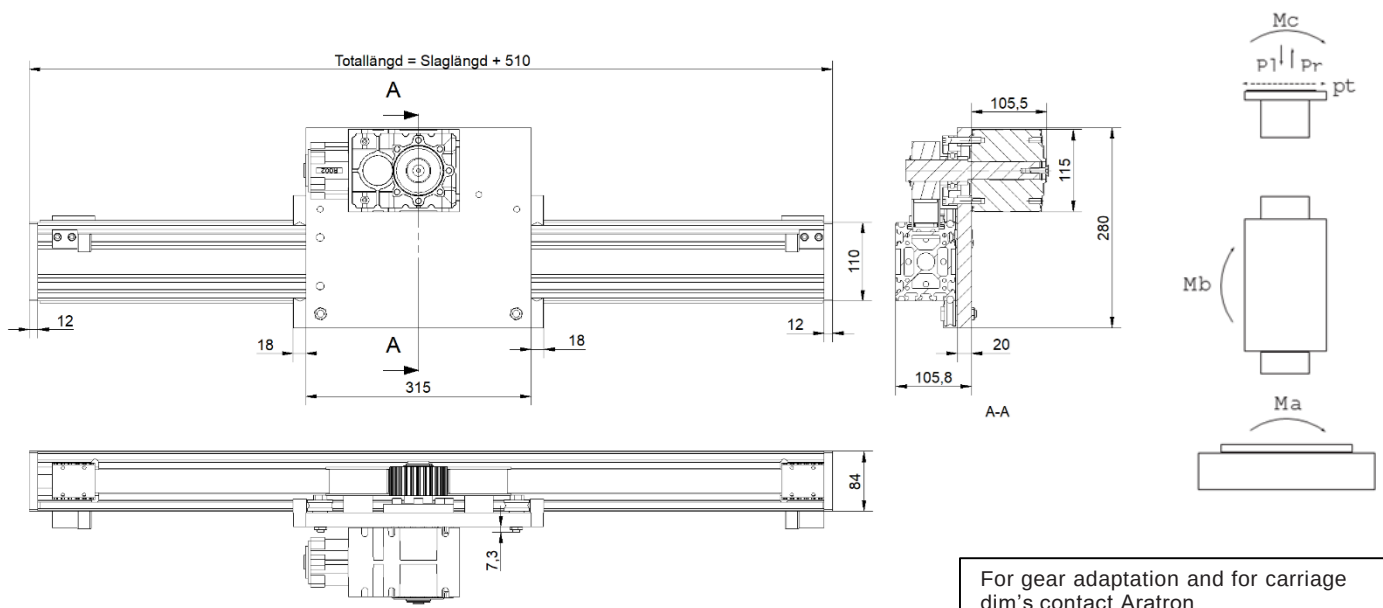
ALR63



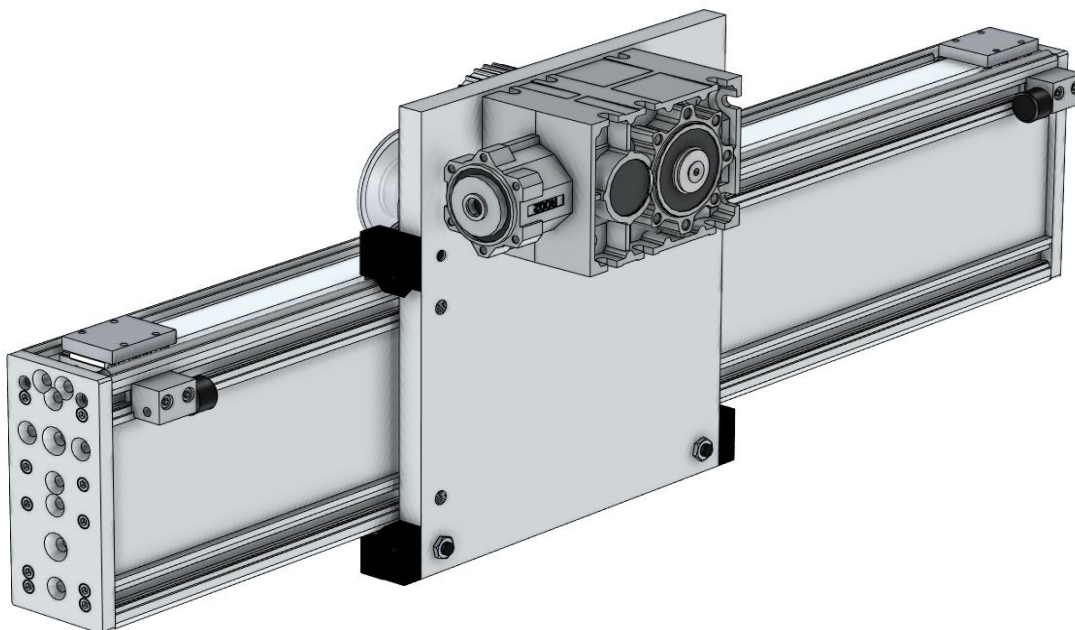
ALR63-E basic version
Can also be supplied with planetary gearbox

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	1600 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	18,8 kg	Ma	234 Nm
per additional 100 mm	1,1 kg	Mb	370 Nm
		Mc	82 Nm

[Aratron CAD linjarenhet_alr63](#)



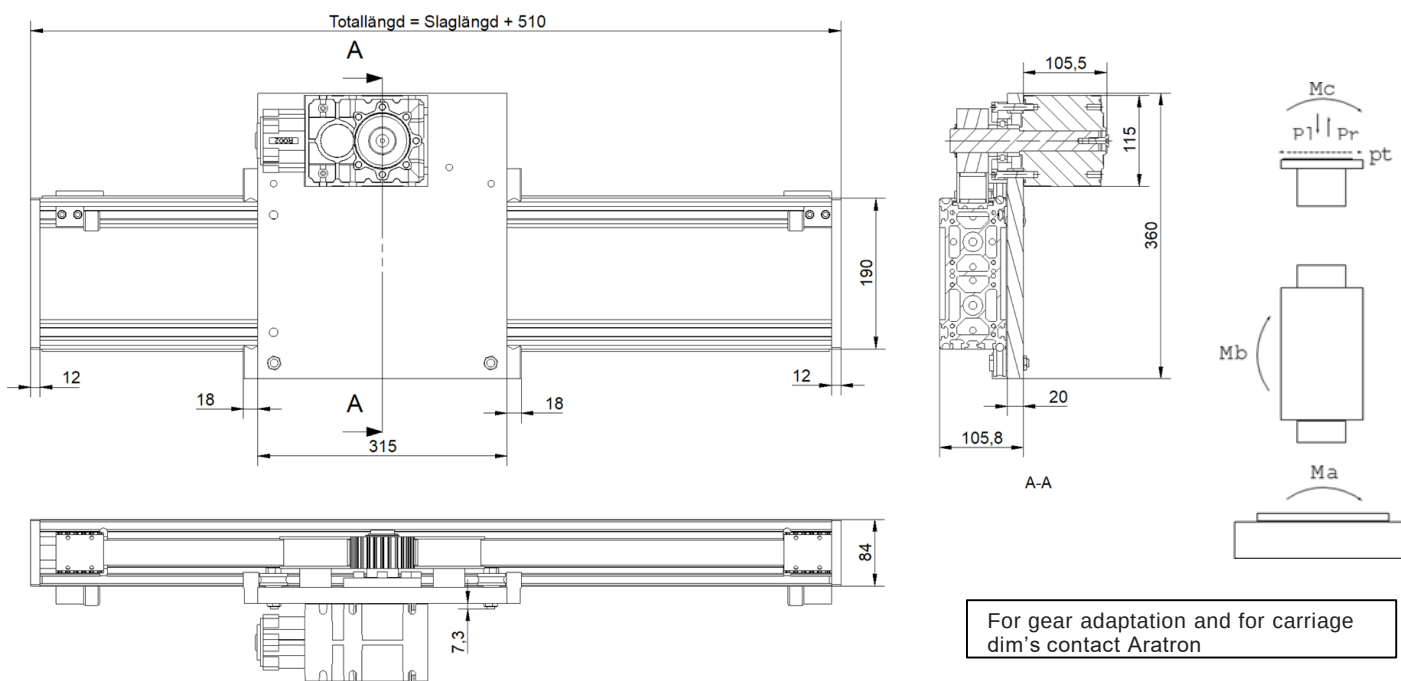
ALR66



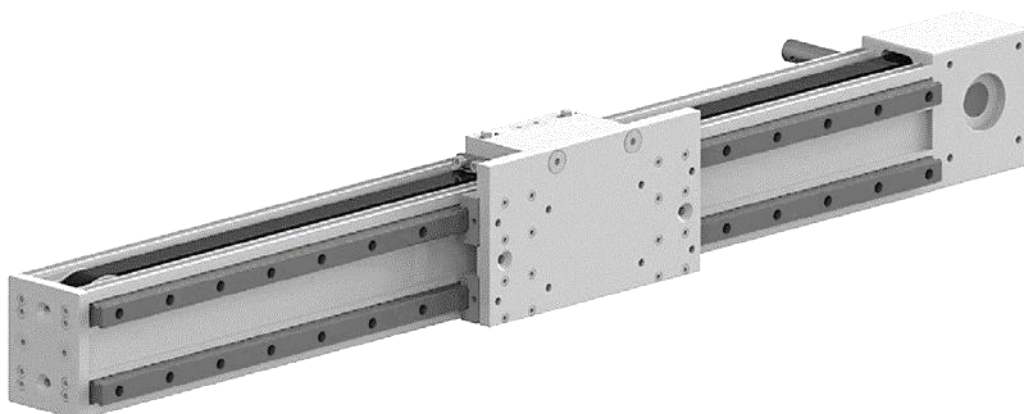
ALR66-E basic version
Can also be supplied with planetary gearbox

Technical data		Load data	
Max travel speed.	8 m/s	load	
Drive	ATL10	pt	2500 N
Max pulling force	1600 N	pr	1500 N
Stroke per rev	260 mm	pl	1500 N
Profile length, max	7550 mm		
Weight		Moment	
Total length 1000 mm	18,8 kg	Ma	272 Nm
per additional 100 mm	1,7 kg	Mb	370 Nm
		Mc	145 Nm

Aratron CAD linjarenhet alr66



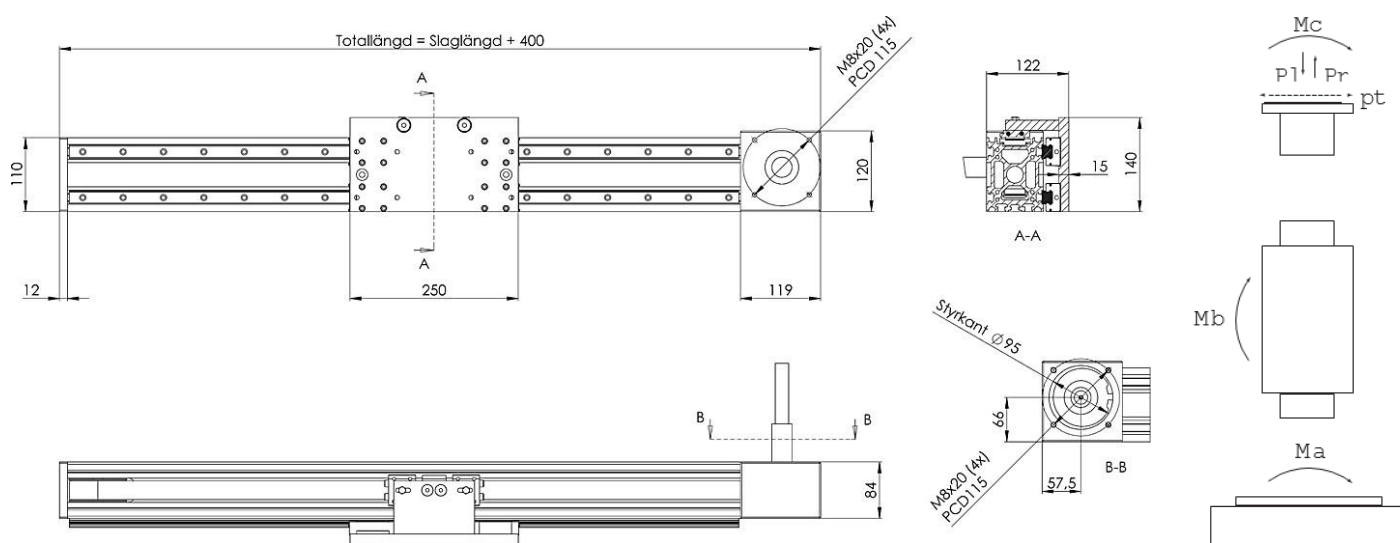
ALS23



ALS23-E basic version

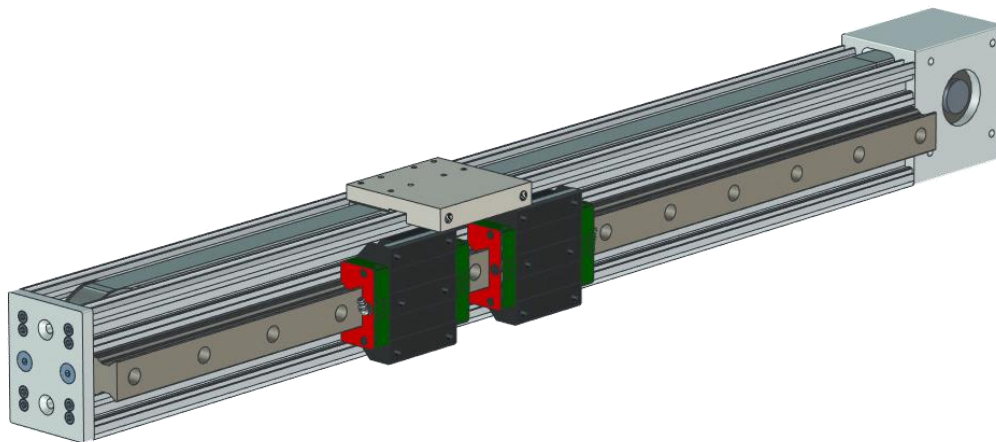
Technical data		Load data	
Max travel speed.	5 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	2400 N	pr	5000 N
Stroke per rev	260 mm	pl	8000 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	20,4 kg	Ma	700 Nm
per additional 100 mm	1,4 kg	Mb	400 Nm
		Mc	250 Nm

Aratron CAD linjärenhet_als23



For gear adaptation type AD see pg 63
For carriage dim's TL1 1TA see pg 57

ALS23-35

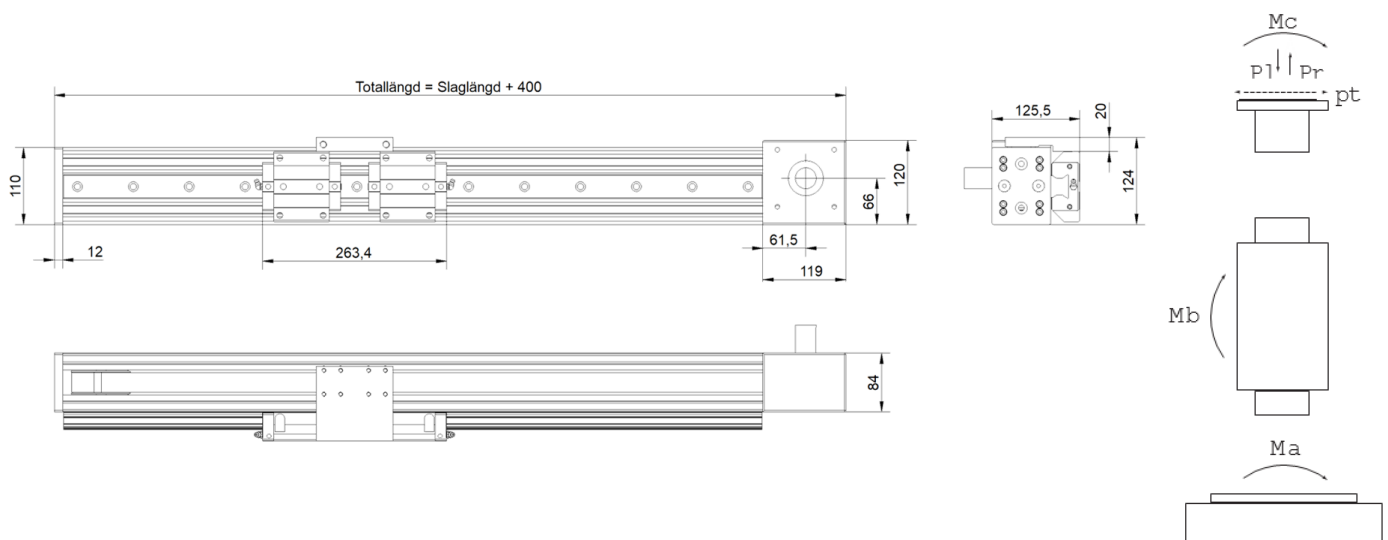


ALS23-35-E basic version

The load data for the guide rails are very high therefore load and moment values comes down to the fastening of the profile.

Technical data		Load data	
Max travel speed.	3 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	2400 N	pr	5000 N
Stroke per rev	260 mm	pl	8000 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	23 kg	Ma	700 Nm
per additional 100 mm	2 kg	Mb	400 Nm
		Mc	300 Nm

[Aratron CAD linjarenhet als23-35](#)



For gear adaptation type AD see pg 63
For carriage dim's contact Aratron

ALS23-35 RB

robot track

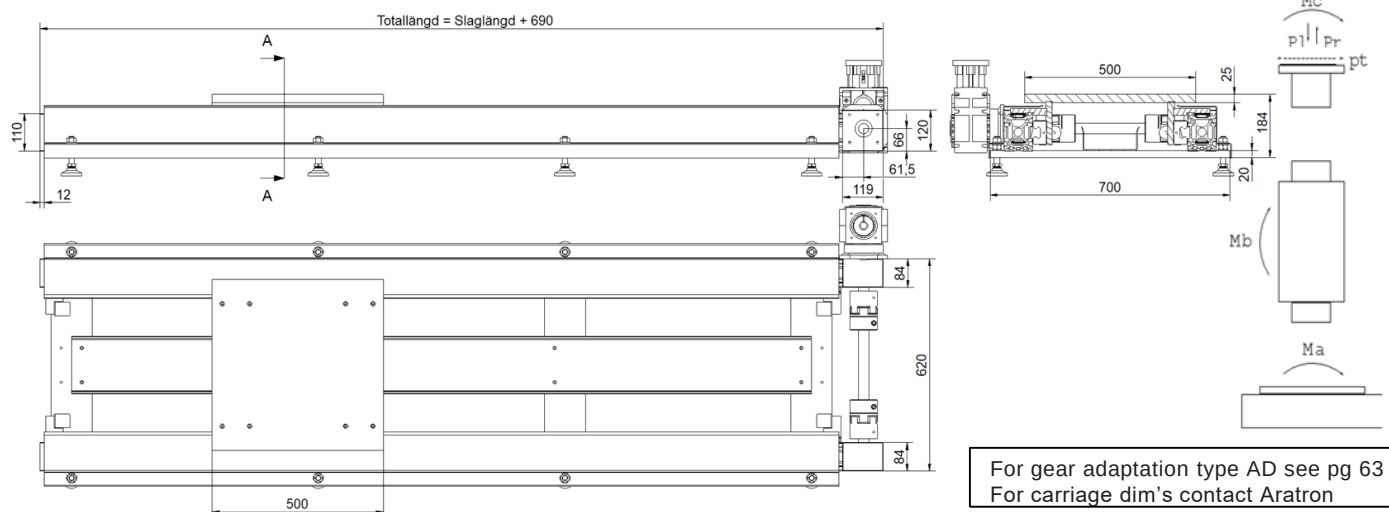


ALS23-35-RB basic version

The load data for the guide rails are very high therefore load and moment values comes down to the fastening of the profile and the complete track.

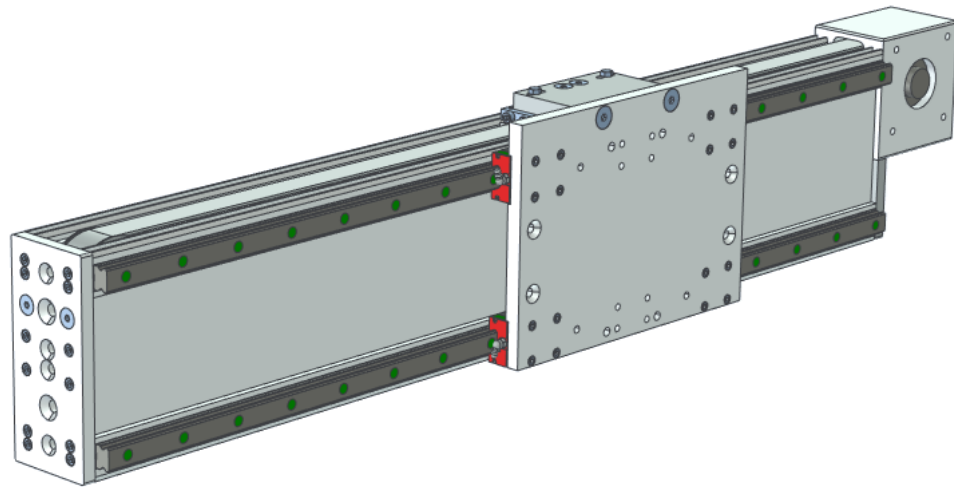
Technical data		Load data, dependant on fastening	
Max travel speed.	3 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	4000 N	pr	5000 N
Stroke per rev	260 mm	pl	8000 N
Profile length, max	7000 mm		
Weight		Moment, dependant on fastening	
Total length 1000 mm	100 kg	Ma	1000 Nm
per additional 100 mm	5 kg	Mb	1000 Nm
Carriage	25 kg	Mc	1000 Nm

Contact Aratron for cad model



For gear adaptation type AD see pg 63
For carriage dim's contact Aratron

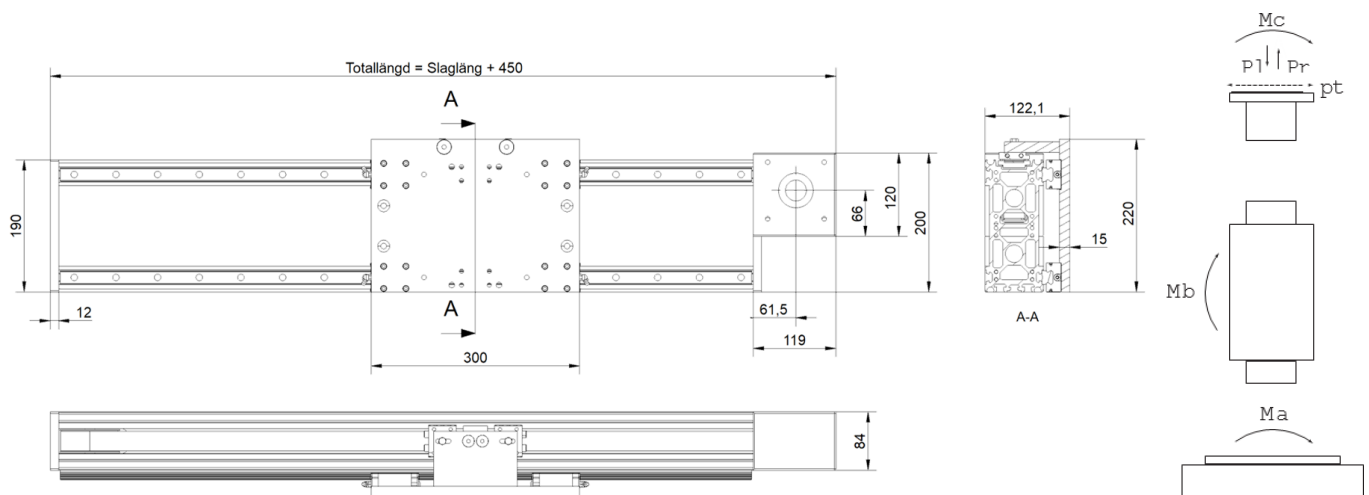
ALS26U



ALS26U-E basic version

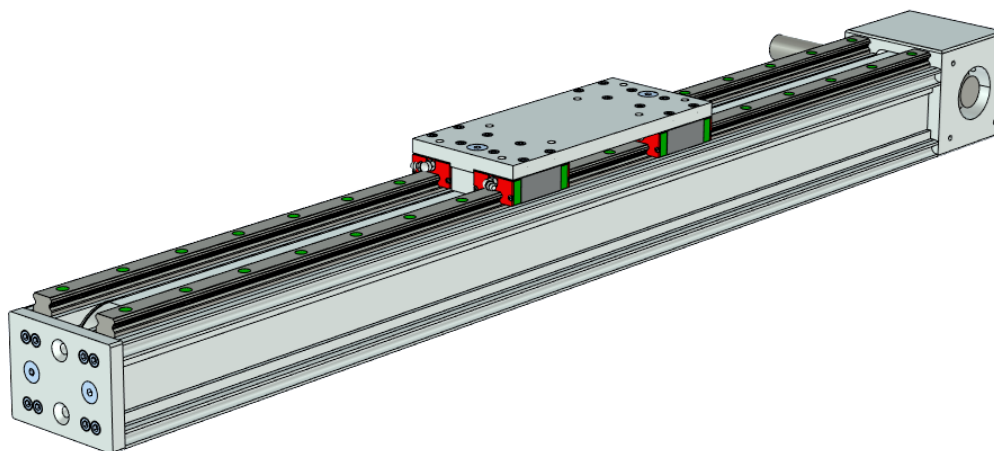
Technical data		Load data	
Max travel speed.	5 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	2450 N	pr	5000 N
Stroke per rev	260 mm	pl	8000 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	30,5 kg	Ma	900 Nm
per additional 100 mm	2,1 kg	Mb	600 Nm
Additinal carriage	3,1 kg	Mc	600 Nm

[Aratron CAD linjarenhet als26U](#)



For gear adaptation type AD see pg 63
For carriage dim's TL1 1VA see pg 59

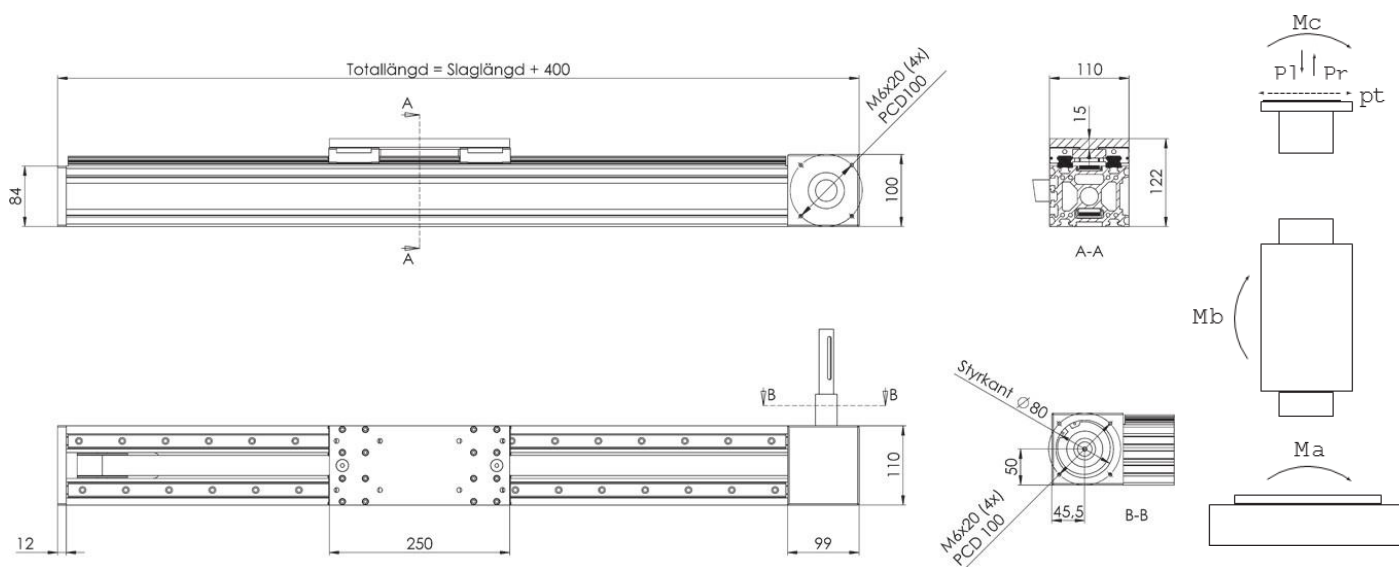
ALS33



ALS33E basic version

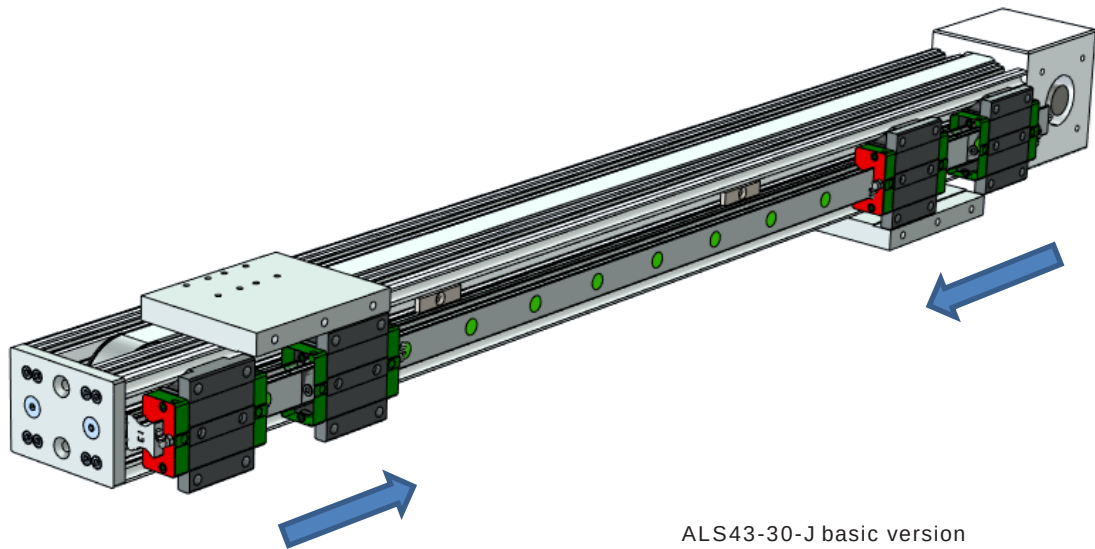
Technical data		Load data	
Max travel speed.	5 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	2000 N	pr	5000 N
Stroke per rev	210 mm	pl	8000 N
Profile length, max	7000 mm		
Weight		Moment	
Total length 1000 mm	19,7 kg	Ma	700 Nm
per additional 100 mm	1,4 kg	Mb	400 Nm
Additional carriage	3 kg	Mc	250 Nm

Aratron CAD linjarenhet als33



For gear adaptation type AE see pg 64
For carriage dim's TL1 1UA see pg 58

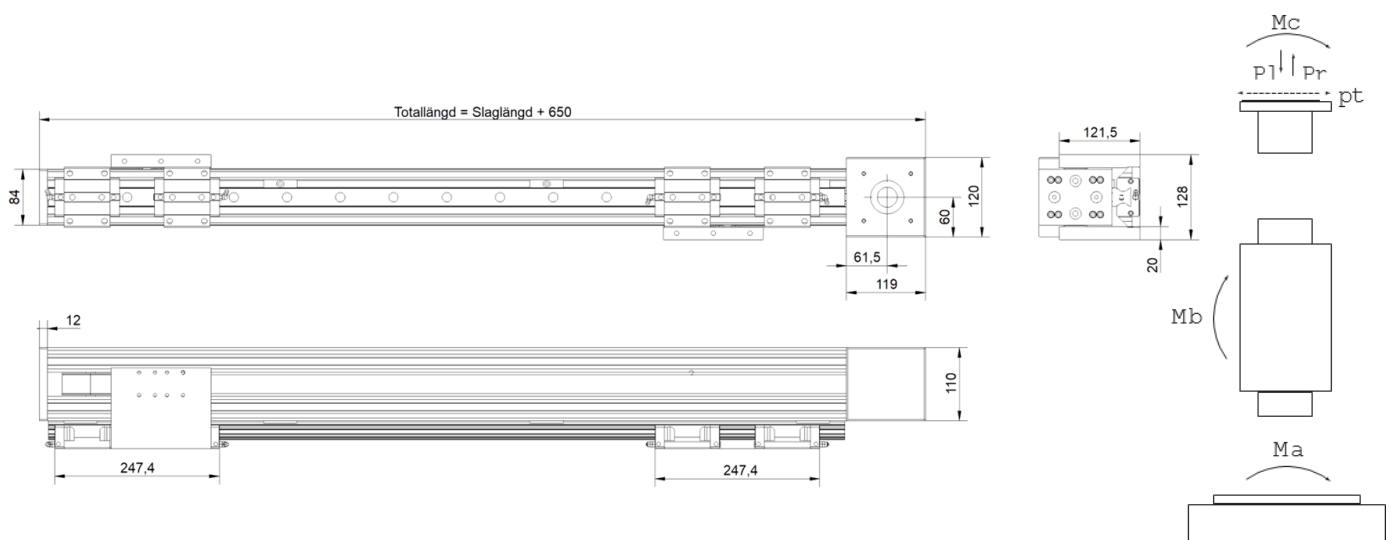
right – left running



The load data for the guide rails are very high therefore load and moment values comes down to the fastening of the profile.

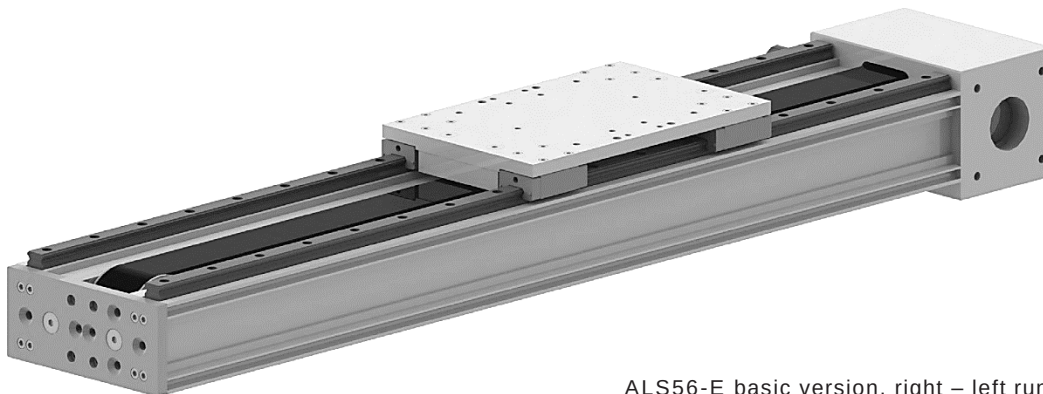
Technical data			Load data	
Max travel speed.	3 m/s		load	
Drive	ATL10		pt	5000 N
Max pulling force	2400 N		pr	5000 N
Stroke per rev	260 mm		pl	8000 N
Profile length, max	7000 mm			
Weight			Moment	
Total length 1000 mm	19,7 kg		Ma	700 Nm
per additional 100 mm	1,4 kg		Mb	400 Nm
			Mc	300 Nm

Aratron CAD linjarenhet als43-30



For gear adaptation type AF see pg 65
For carriage dim's contact Aratron

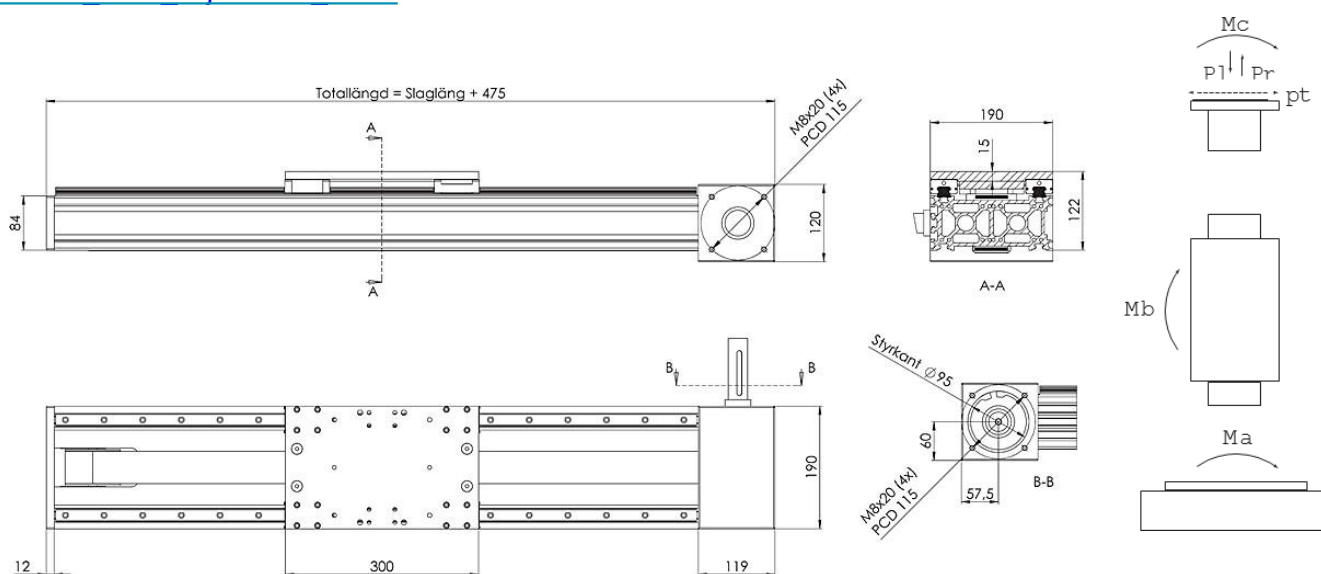
ALS56



ALS56-E basic version, right – left running
version can be supplied, see example ALR56

Technical data			Load data	
Max travel speed.	5 m/s		load	
Drive	ATL10		pt	5000 N
Max pulling force	4370 N		pr	5000 N
Stroke per rev	260 mm		pl	8000 N
Profile length, max	7570 mm			
Weight			Moment	
Total length 1000 mm	30,5 kg		Ma	900 Nm
per additional 100 mm	2,1 kg		Mb	600 Nm
Extra slider	3.1 kg		Mc	600 Nm

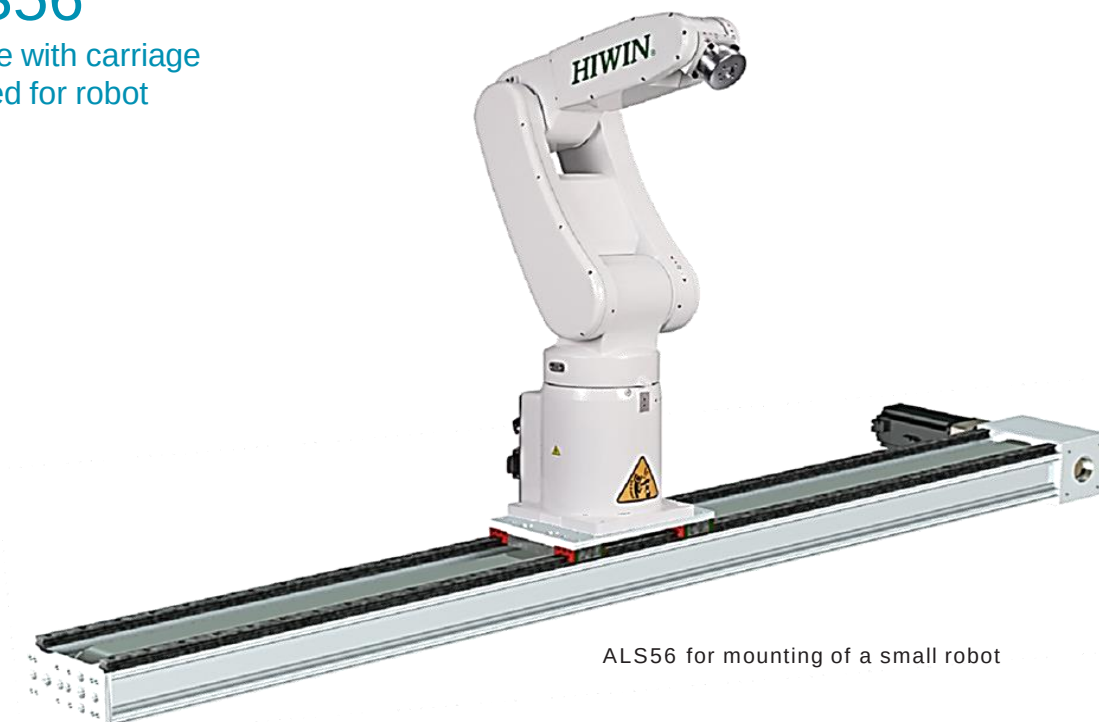
Aratron CAD linjarenhet als56



For gear adaptation type AH see pg 66
For carriage dim's TL1 1XA see pg 60

ALS56

example with carriage
designed for robot

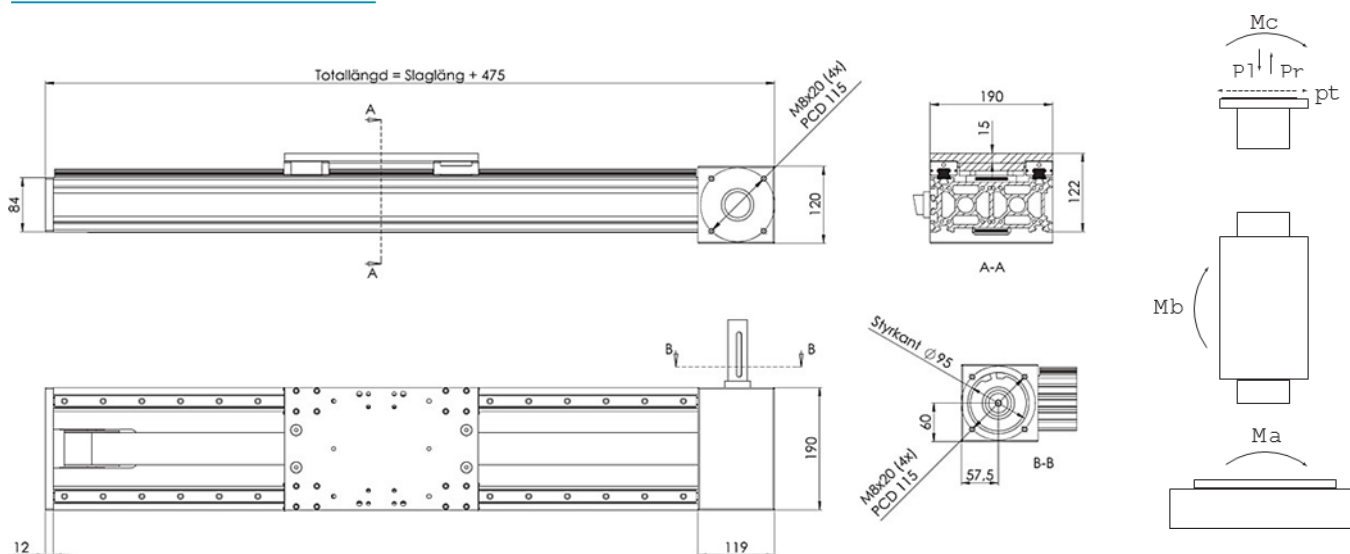


ALS56 for mounting of a small robot

Additional info, see ALS56

Technical data		Load data	
Max travel speed.	5 m/s	load	
Drive	ATL10	pt	5000 N
Max pulling force	4370 N	pr	5000 N
Stroke per rev	260 mm	pl	8000 N
Profile length, max	7570 mm		
Weight		Moment	
Total length 1000 mm	30,5 kg	Ma	900 Nm
per additional 100 mm	2,1 kg	Mb	600 Nm
Extra slider	3,1 kg	Mc	600 Nm

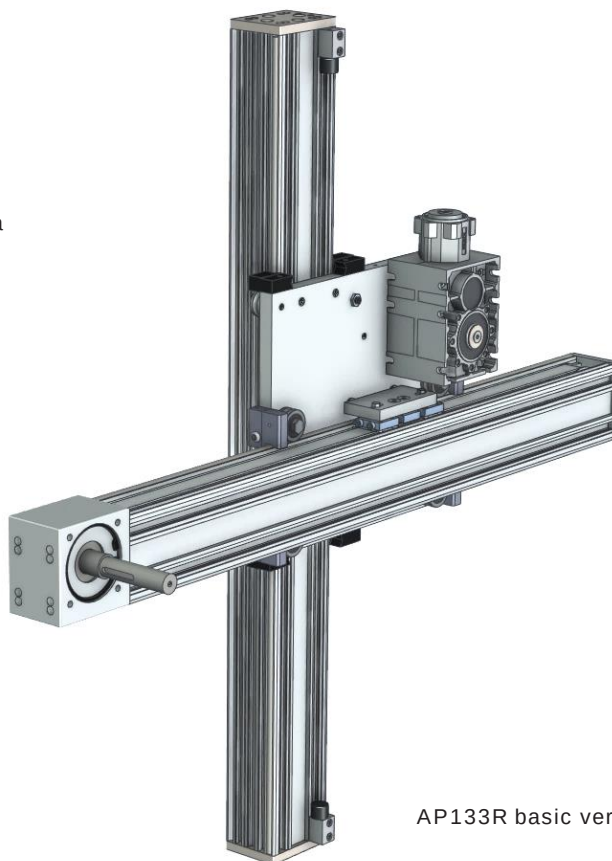
[Contact Aratron for CAD model](#)



For gear adaptation type AH see pg 66
For carriage dim's contact Aratron

AP133R

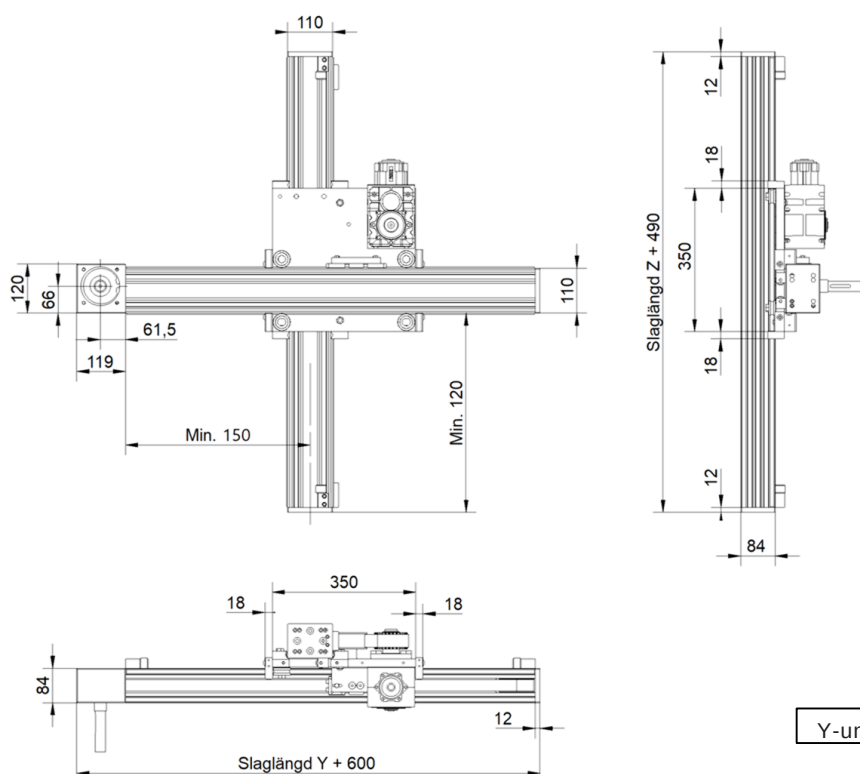
- Single Y-beam for lighter loads
- Y and Z rollers are mounted directly in a common plate for best performance
- Gear comes as std for Z-drive
- Gear for Y-motion ref to ALR23



AP133R basic version

Technical data		Y	Z
Profiles.		110	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	2000N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6500 mm	1500 mm (recommended)
Load data			50 kg
Load data and stroke length are higly dependant on dynamics in the actual application, consult Aratron for further info			

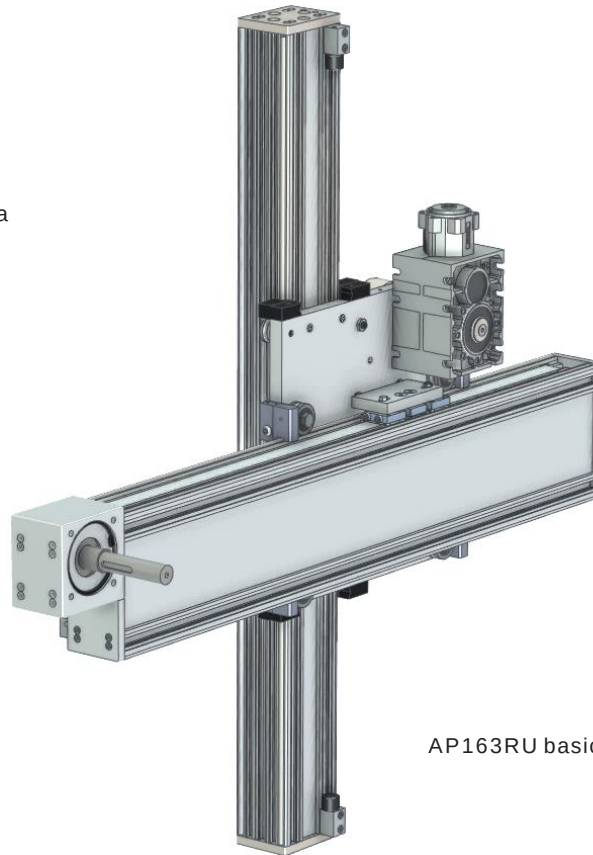
[Aratron_CAD_linjarportal_AP133R](#)



Y-unit, see further info ALR23

AP163RU

- Single Y-beam for lighter loads
- Y and Z rollers are mounted directly in a common plate for best performance
- Gear comes as std for Z-drive
- Gear for Y-motion ref to ALR23

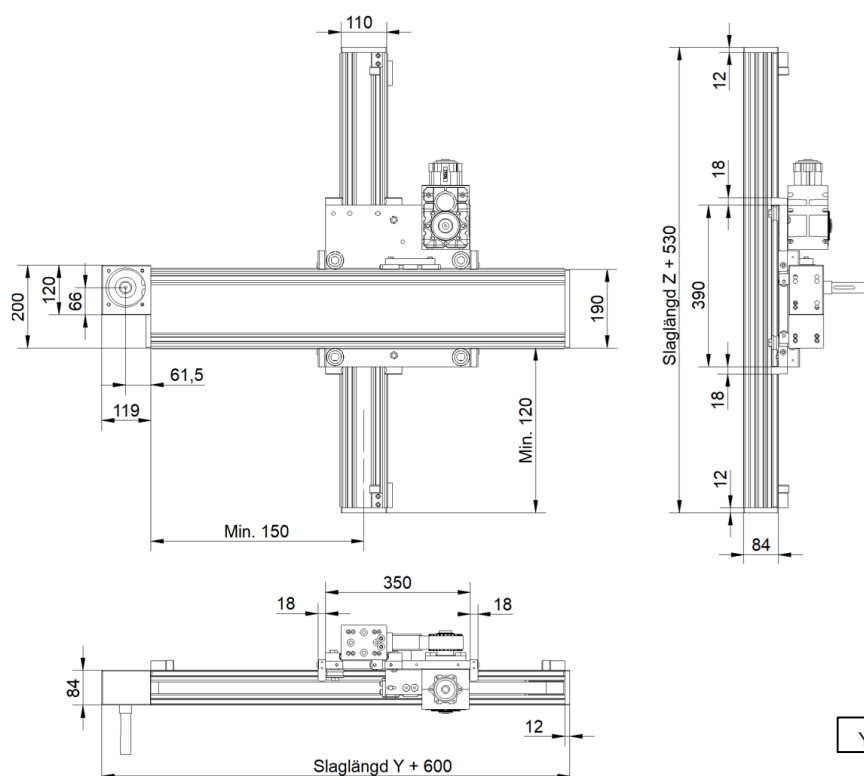


AP163RU basic version

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	2000N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6900 mm	1500 mm (recommended)
Load data			70 kg

Load data and stroke length are higly dependant on dynamics in the actual application, consult Aratron for further info

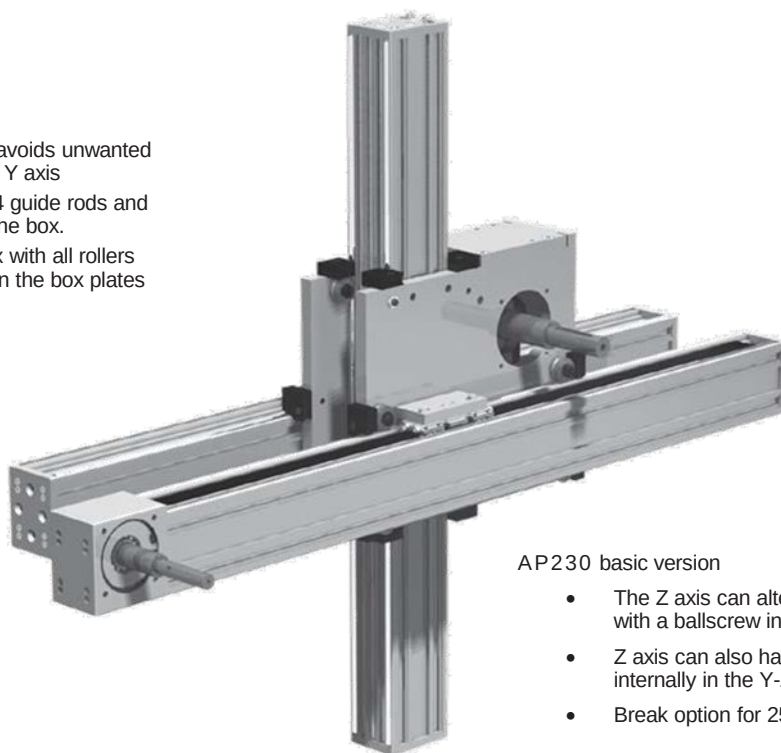
[Aratron CAD linjarportal AP163RU](#)



Y-unit, see further info ALR26RU

AP230

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



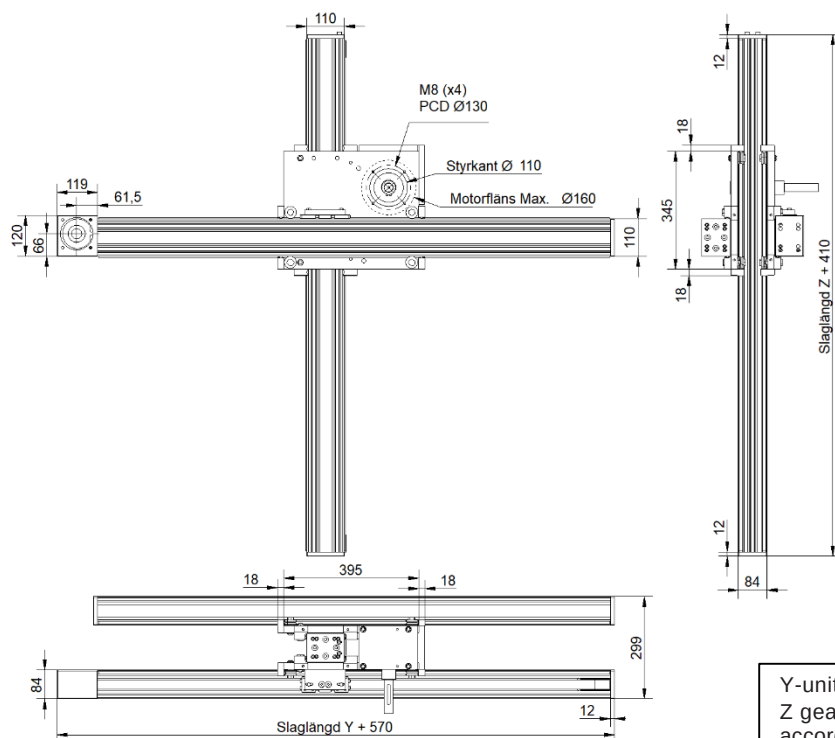
AP230 basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		110	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	4370N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6500 mm	2000 mm (recommended)
Load data			100 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

Aratron CAD linjarportal AP230

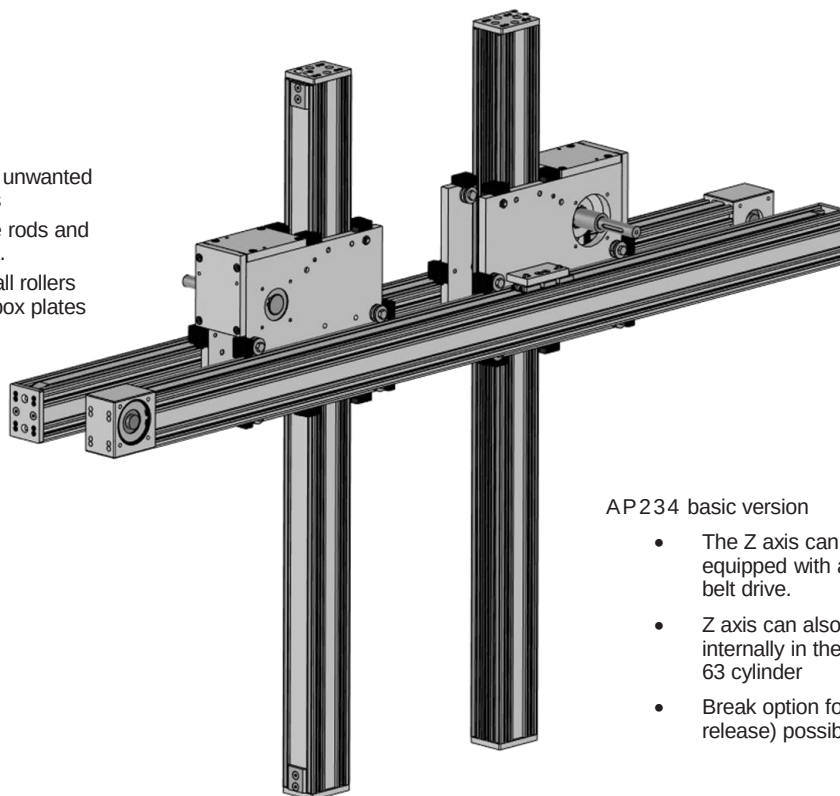


Y-units, see further info ALR13 & 23
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP234

double Z-units

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



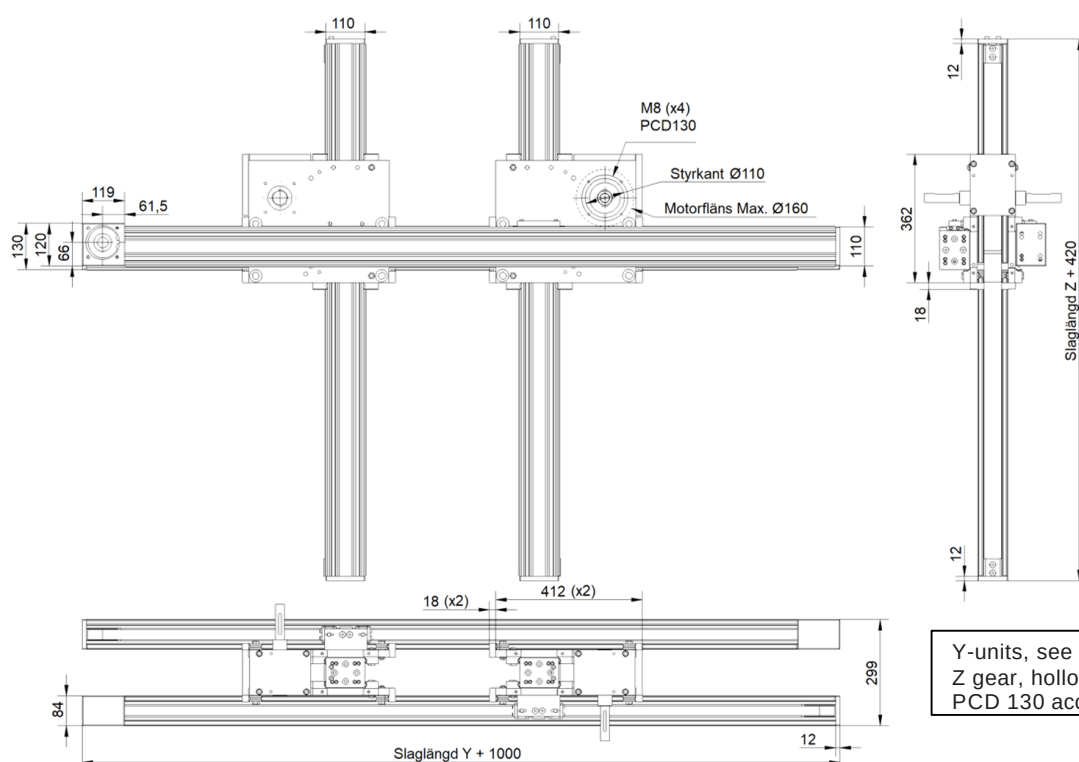
AP234 basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		110	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	4370N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6500 mm	2000 mm (recommended)
Load data			50 kg
Load data and stroke length are hiql dependent on dynamics in the actual application. consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

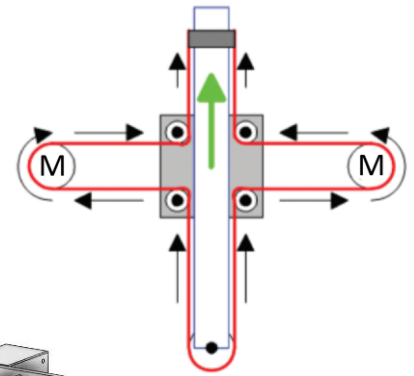
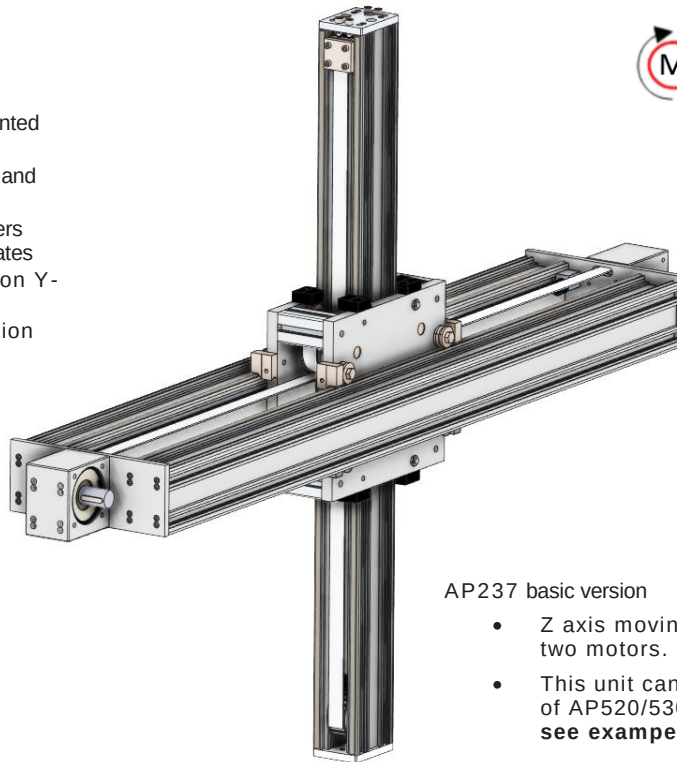
Aratron CAD linjarportal AP234



Y-units, see further info ALR23
Z gear, hollow shaft pilot dia 110 /
PCD 130 according to IEC norm.

AP237

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Gears are mounted fixed on Y-axis
- Reduced weight on Z motion

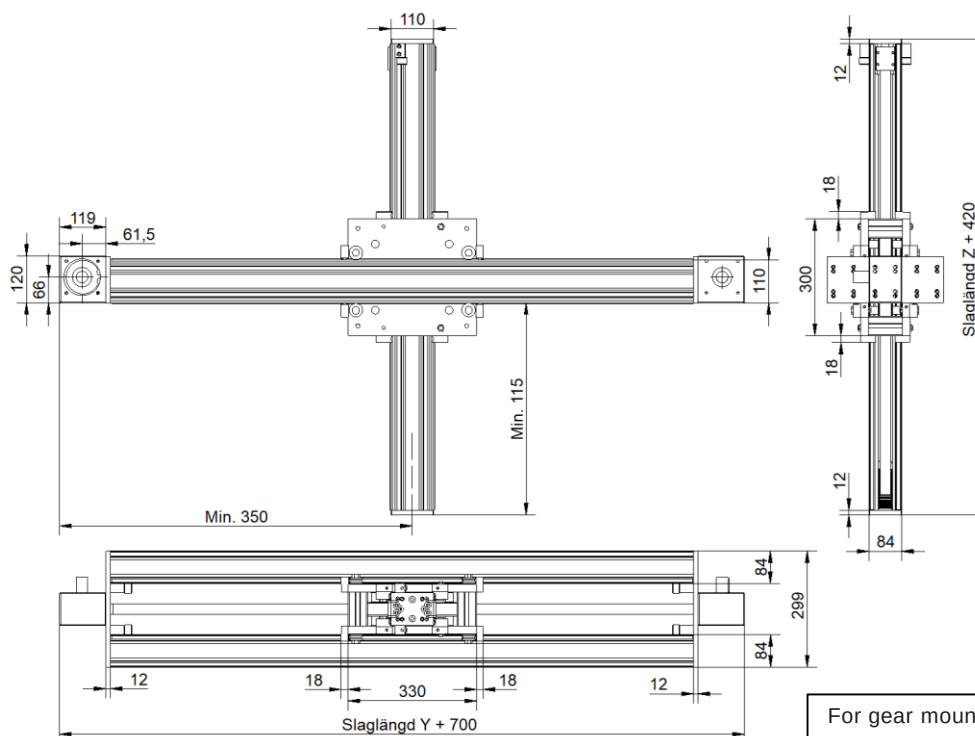


AP237 basic version

- Z axis moving weight are divided on two motors.
- This unit can replace the Y-Z section of AP520/530 (AP527 resp 537) **see example AP537**

Technical data		Y	Z
Profiles.		110	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	2450N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6500 mm (simultaneously drive of motors)	2000 mm (simultaneously drive of motors)
Load data			100 kg
Load data and stroke length are higly dependant on dynamics in the actual application, consult Aratron for further info			

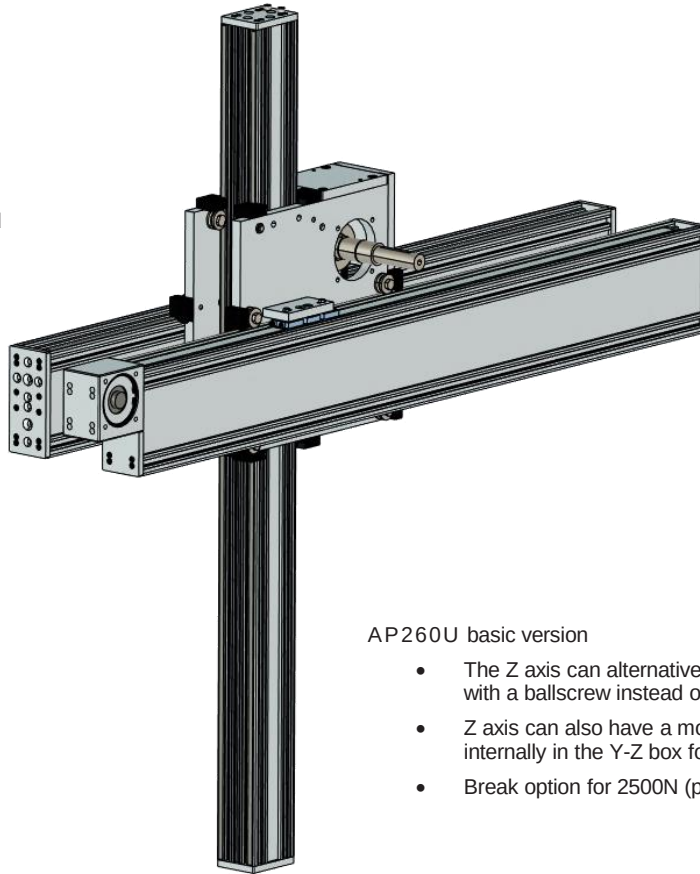
Aratron CAD linjarportal AP237



For gear mounting see pulleybox type AD pg 63

AP260U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



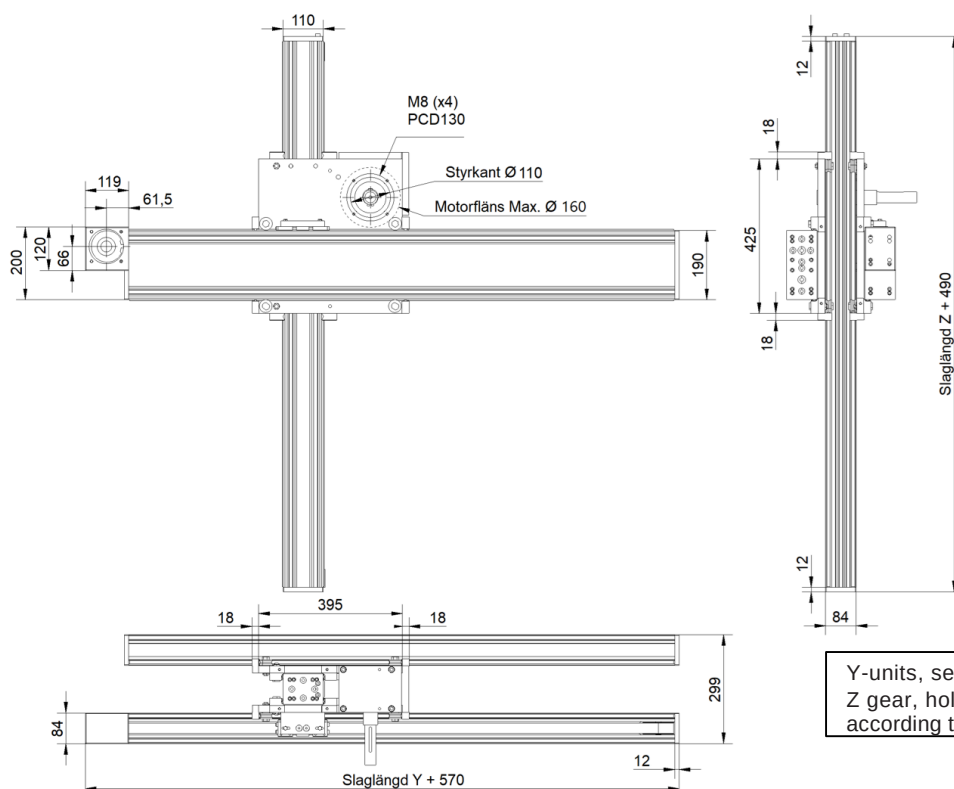
AP260U basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	4370N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6900 mm	2000 mm (recommended)
Load data			150 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

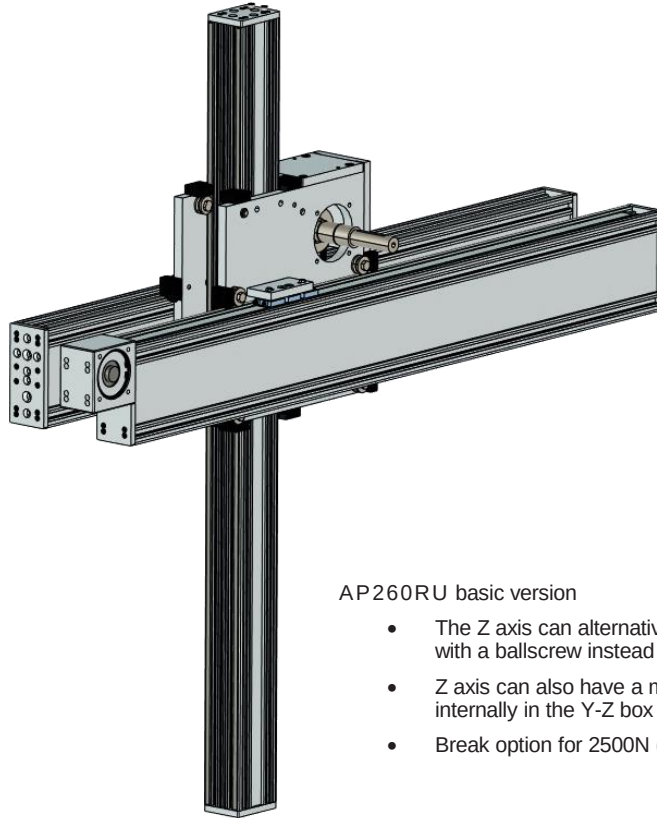
[Aratron_CAD_linjarportal_AP260U](#)



Y-units, see further info ALR16 & 26U
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP260RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on Y-axis



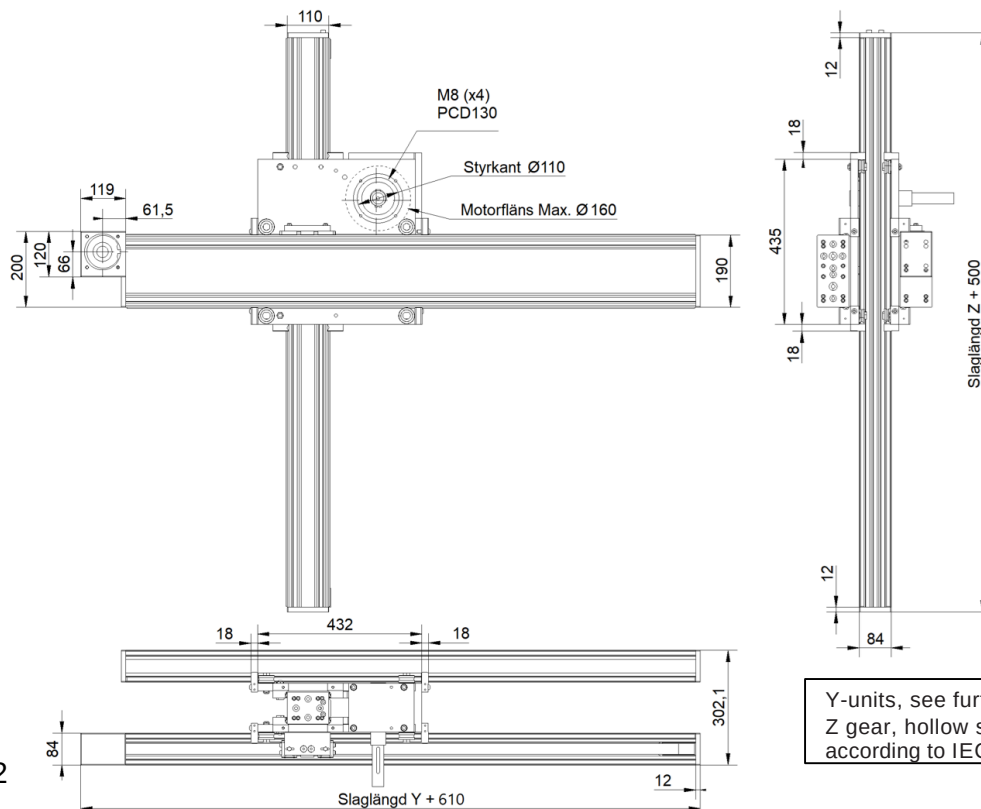
AP260RU basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data	Y	Z
Profiles.	190	110
Speed max	8 m/s	8 m/s
Belt drive	ATL10	ATL10
Pulling force max	2450 N	4370N
Stroke per rev	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	2500 mm (recommended)
Load data		150 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

Aratron CAD linjarportal AP260RU

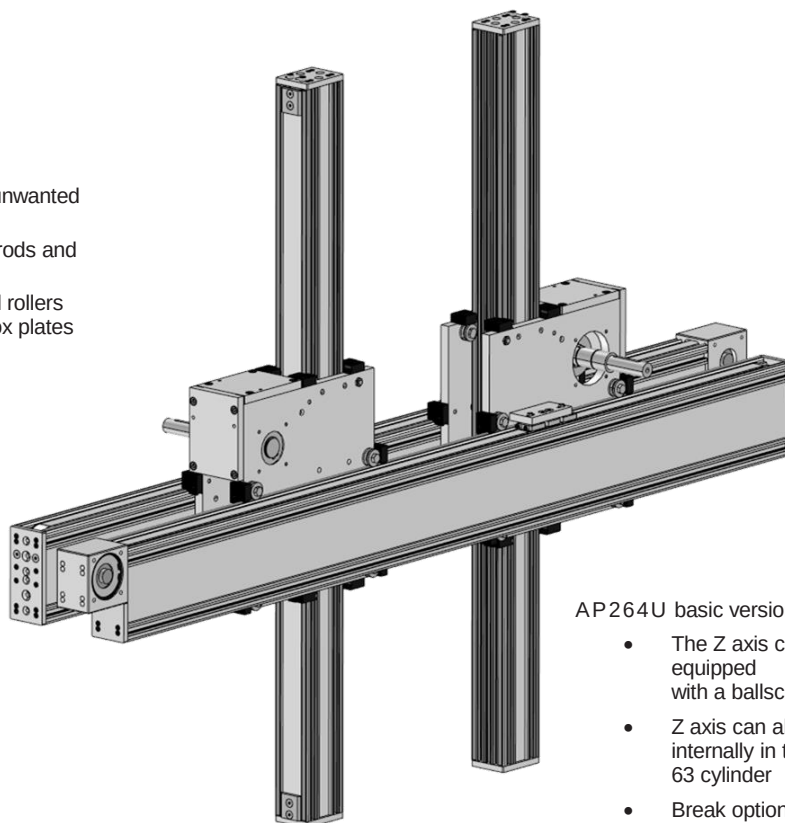


Y-units, see further info ALR16R & 26RU
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP264U

double Z-units

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



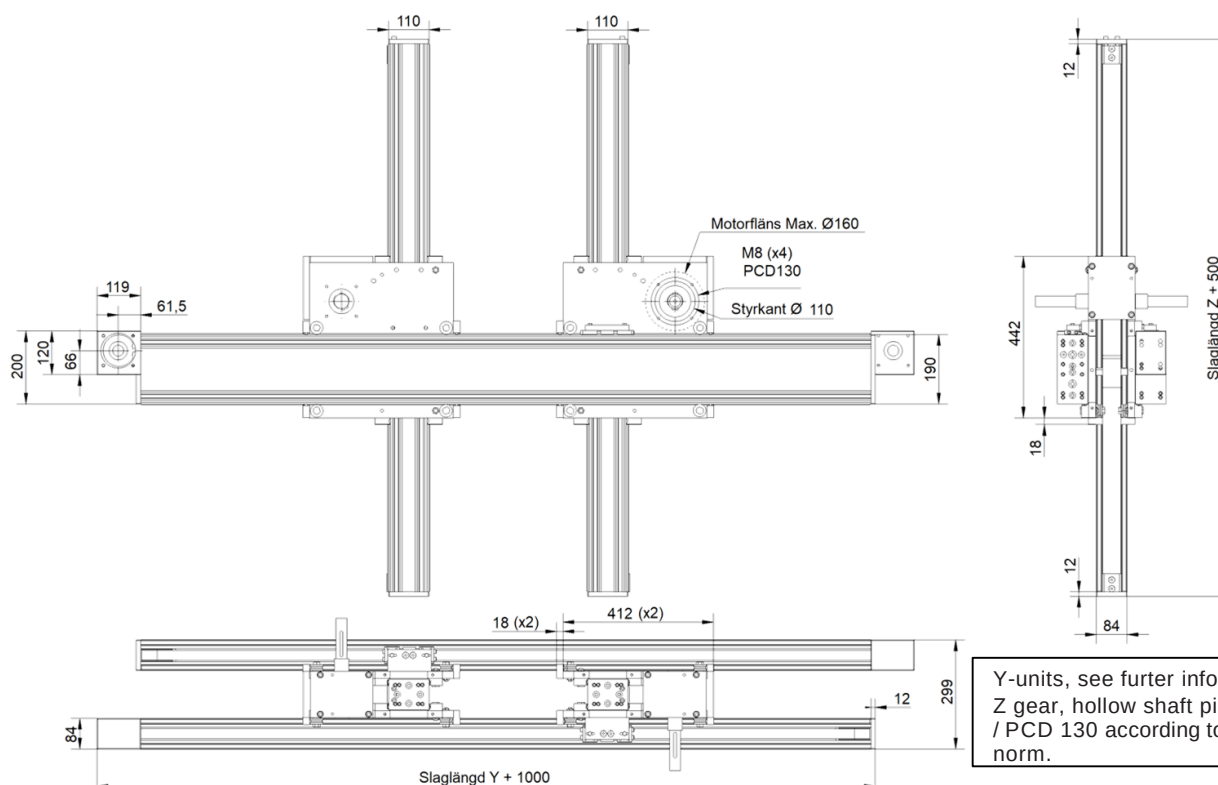
AP264U basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	4370N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6400 mm (each Z unit)	2000 mm (recommended)
Load data			150 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

Aratron CAD linjarportal AP264U

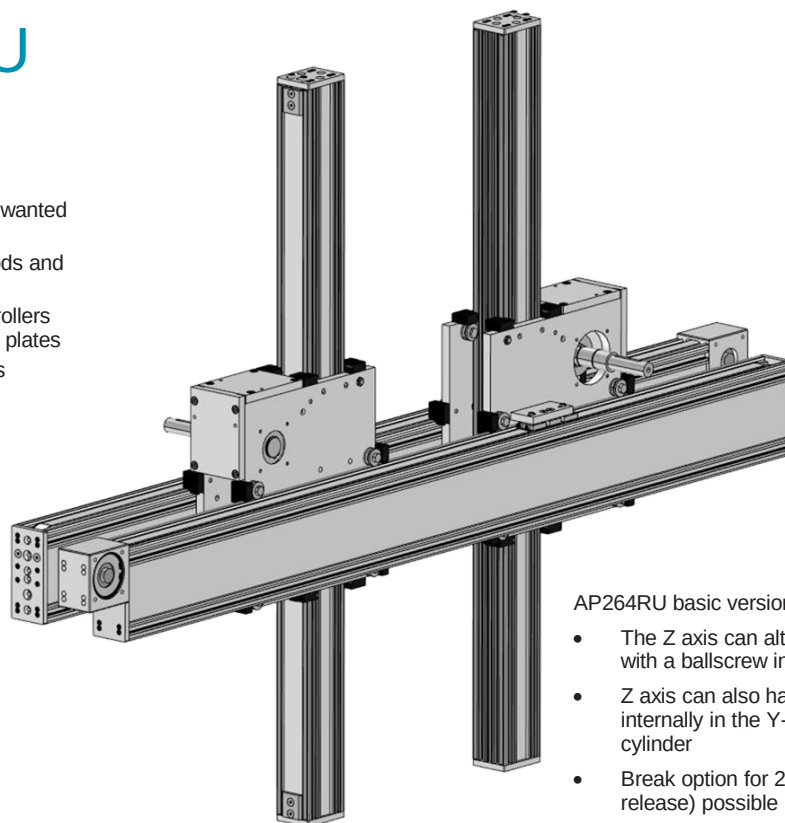


Y-units, see further info ALR26U
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP264RU

double Z-units

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on Y-axis



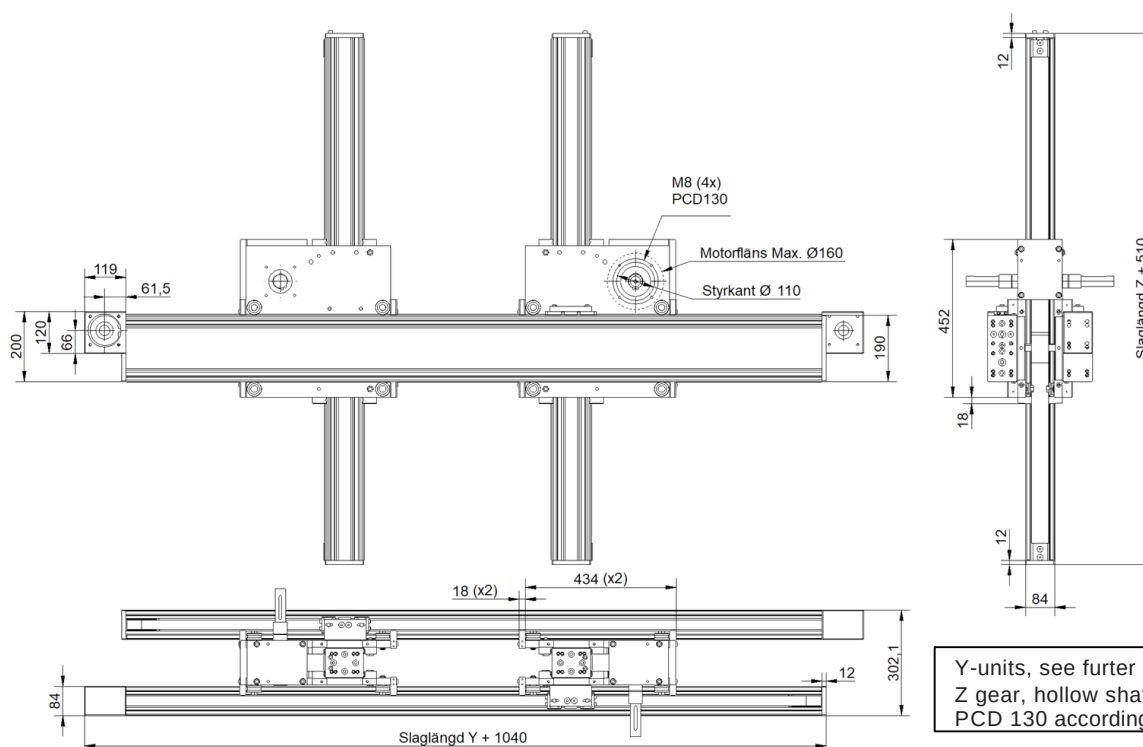
AP264RU basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	4370N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6400 mm (each Z unit)	2000 mm (recommended)
Load data			150 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

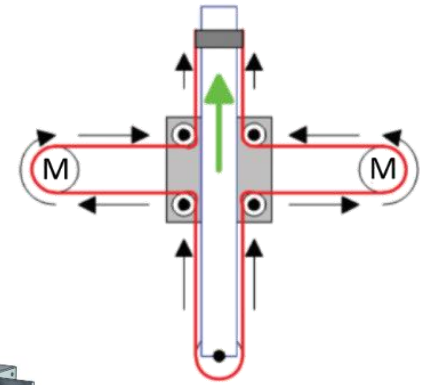
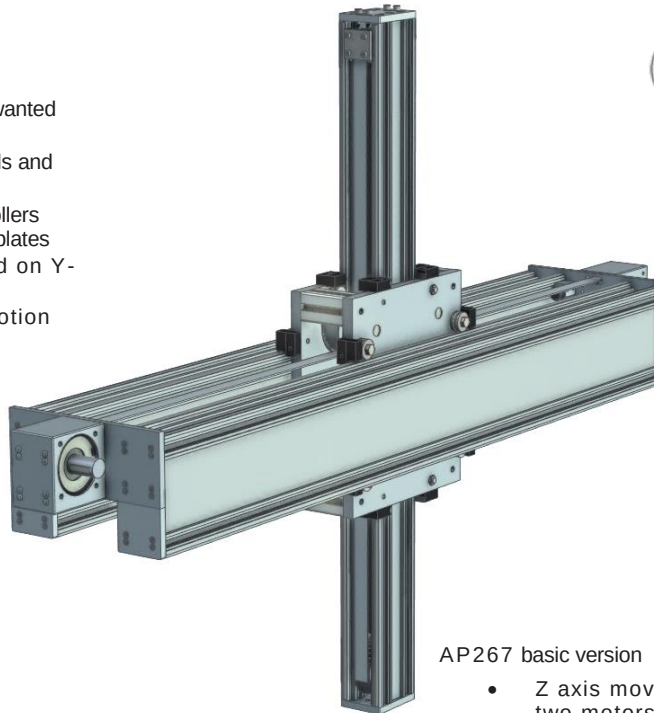
[Aratron CAD linjarportal AP264RU](#)



Y-units, see further info ALR26RU
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP267

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Gears are mounted fixed on Y-axis
- Reduced weight on Z motion



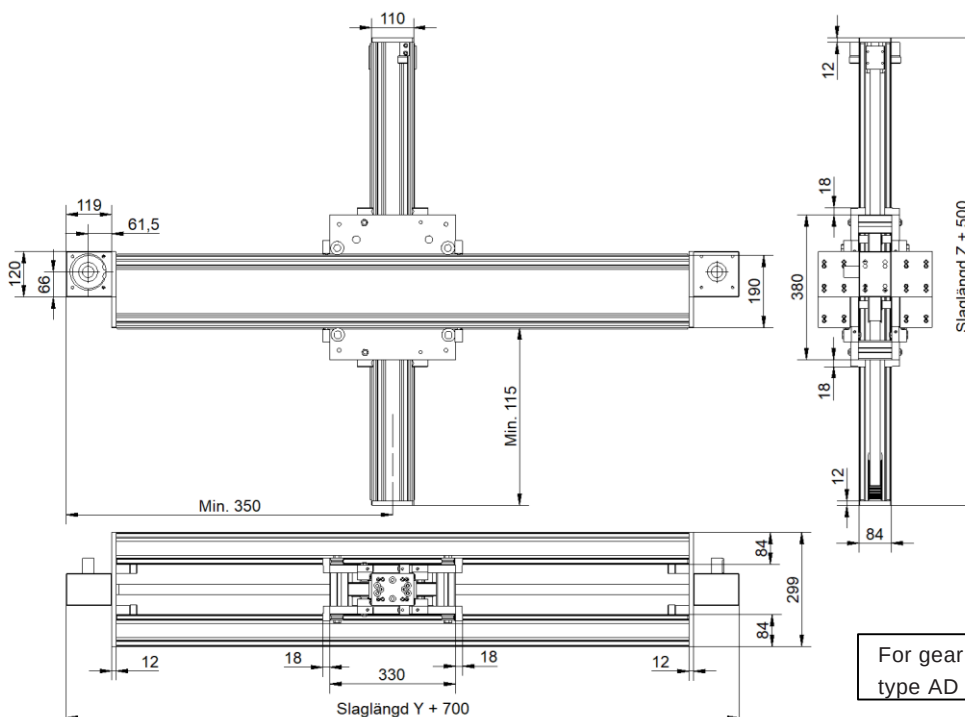
AP267 basic version

- Z axis moving weight are divided on two motors.
- This unit can replace the Y-Z section of AP560 (AP567)
see **example AP567**

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		2450 N	2450N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		7100 mm (simultaneously drive of motors)	2000 mm (simultaneously drive of motors)
Load data			100 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

Aratron_CAD_linjarportal_AP267



For gear mounting see pulleybox
type AD pg 63

AP330

- Telescopic design of Z section
- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates

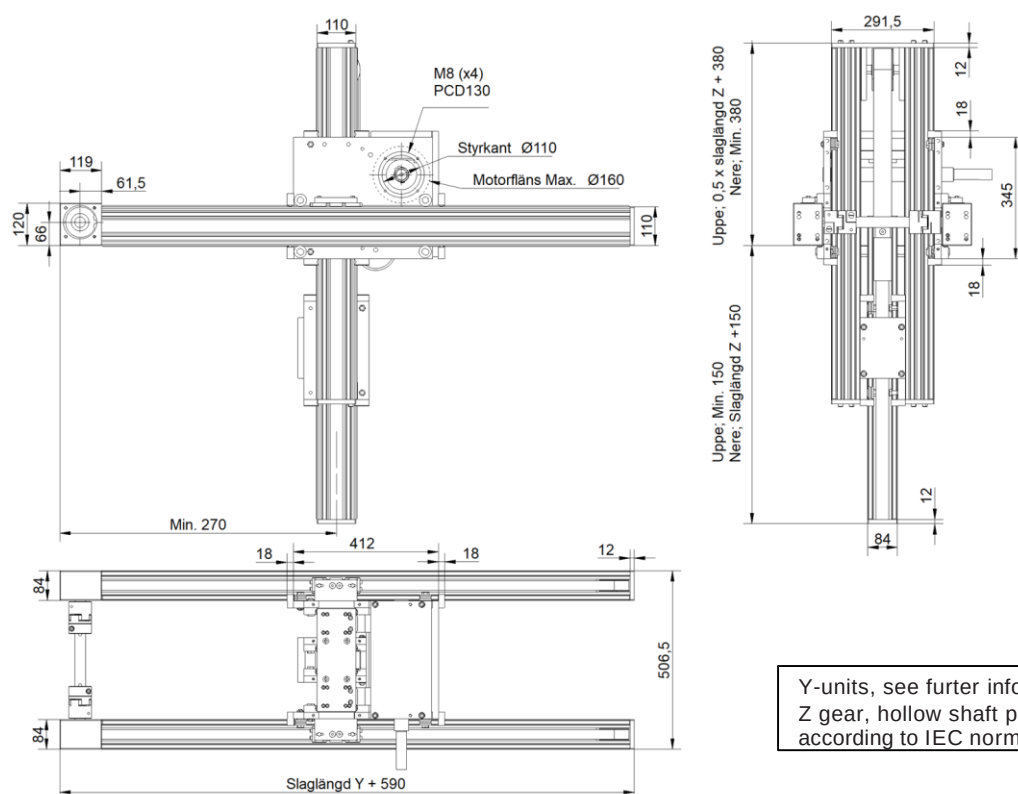


AP330 basic version

Technical data		Y	Z
Profiles.		110	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		3675 N	3280N
Stroke per rev		260 mm	520 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6400 mm	2000 mm (recommended)
Load data			100 kg
Load data and stroke length are highy dependant on dynamics in the actual application. consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

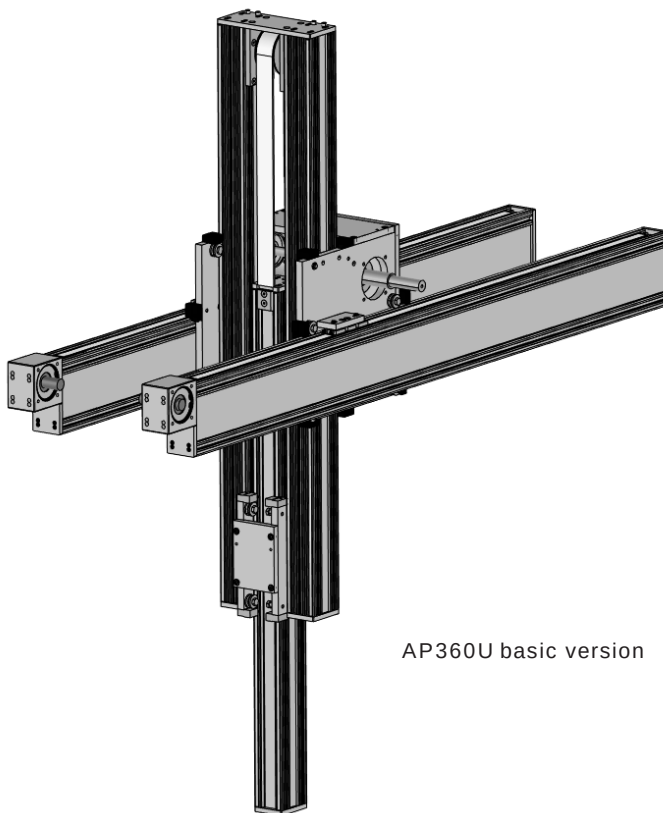
[Aratron CAD linjarportal AP330](#)



Y-units, see further info ALR23
Z gear, hollow shaft pilot dia 110 / PCD 130
according to IEC norm.

AP360U

- Telescopic design of Z section
- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates

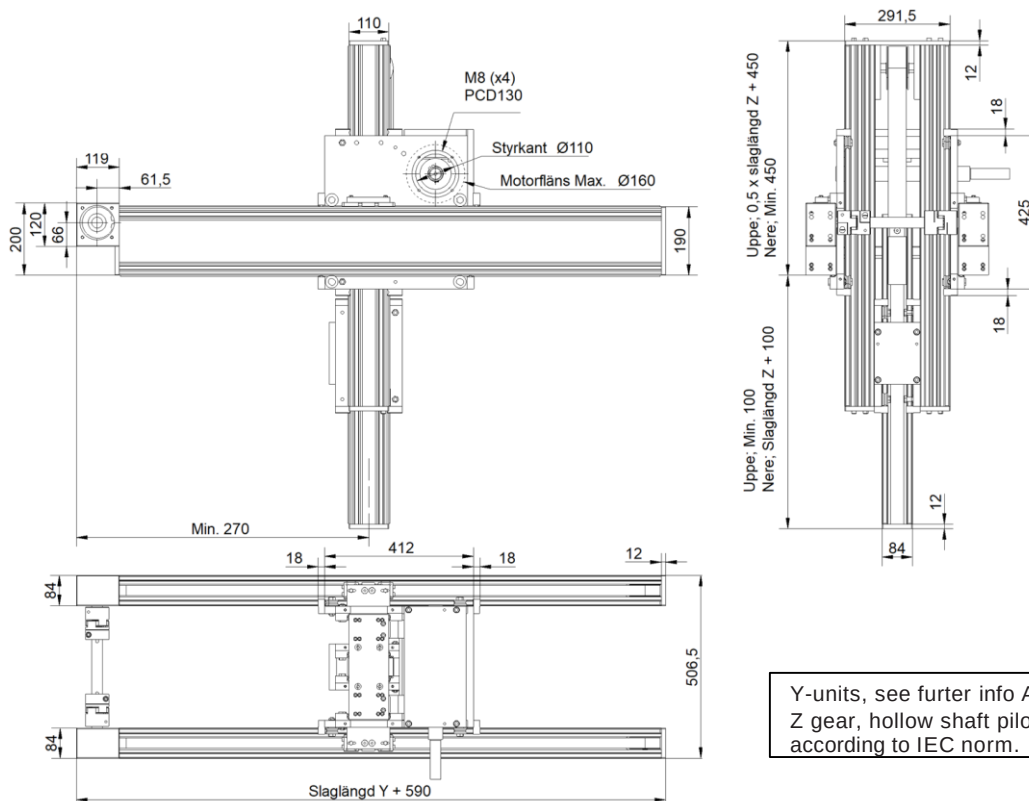


AP360U basic version

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		3675 N	3280N
Stroke per rev		260 mm	520 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6900 mm	2500 mm (recommended)
Load data			100 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

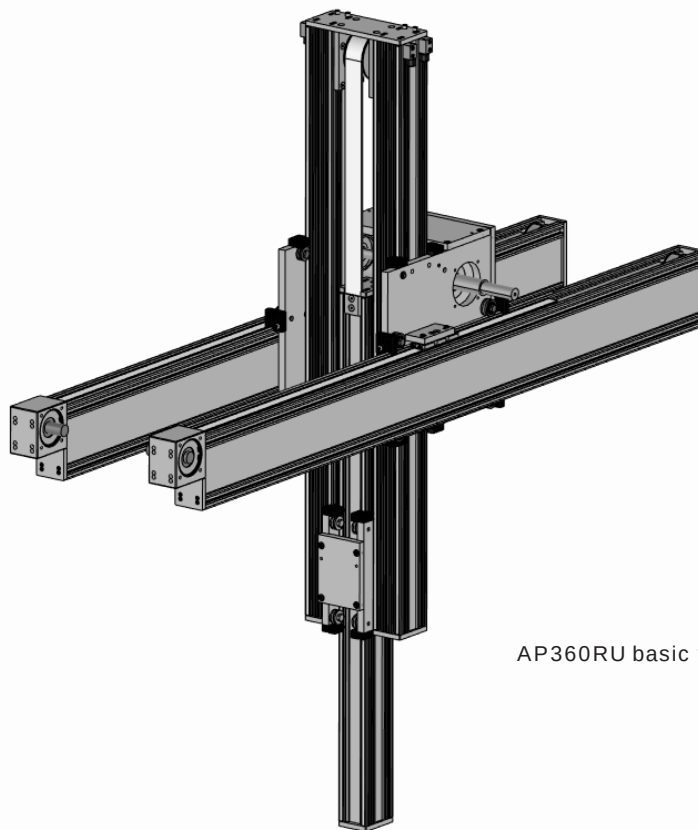
[Aratron CAD linjarportal AP360U](#)



Y-units, see further info ALR26U
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP360RU

- Telescopic design of Z section
- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced roller on Y-axis

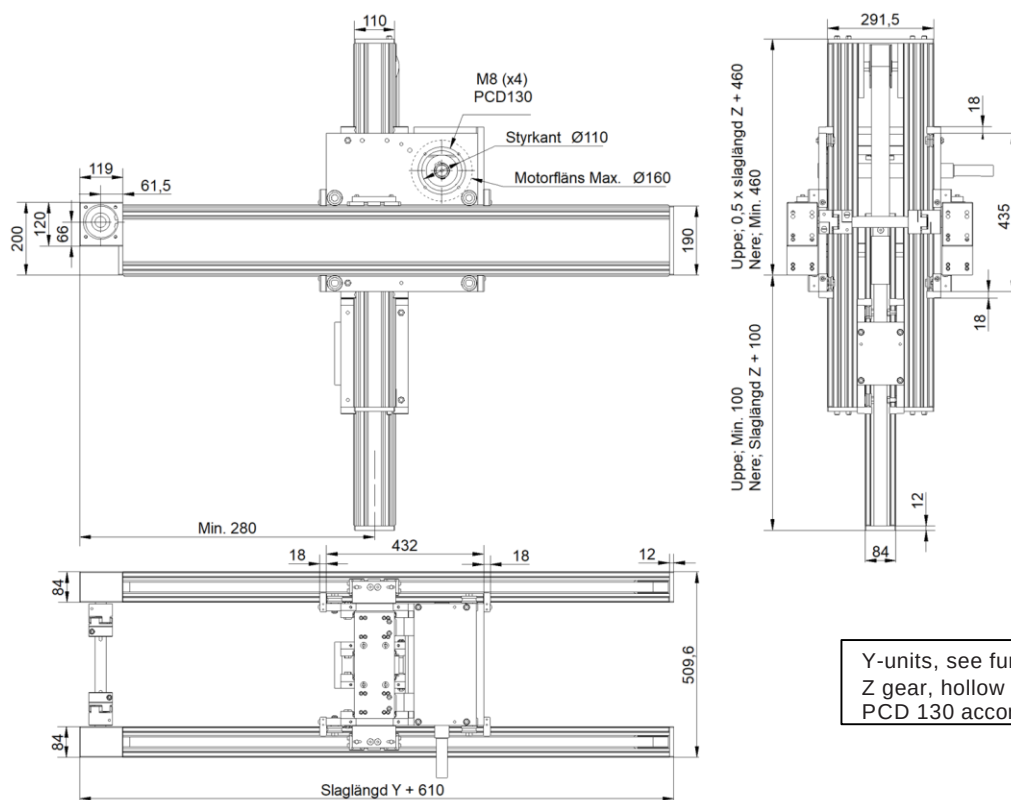


AP360RU basic version

Technical data	Y	Z
Profiles.	190	110
Speed max	8 m/s	8 m/s
Belt drive	ATL10	ATL10
Pulling force max	3675 N	3280N
Stroke per rev	260 mm	520 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	2500 mm (recommended)
Load data		100 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

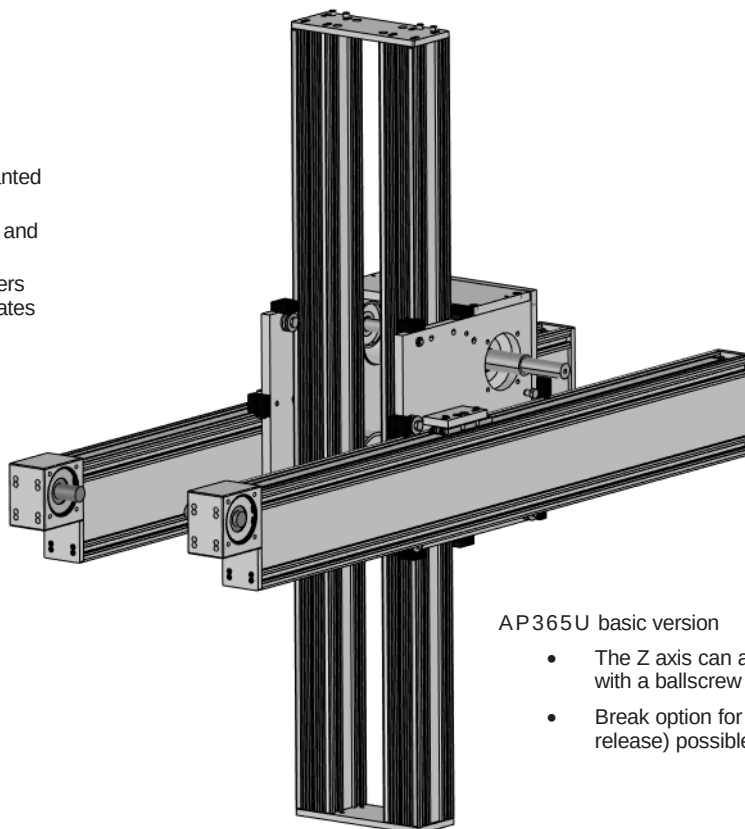
[Aratron CAD linjarportal AP360RU](#)



Y-units, see further info ALR26RU
Z gear, hollow shaft pilot dia 110 /
PCD 130 according to IEC norm.

AP365U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



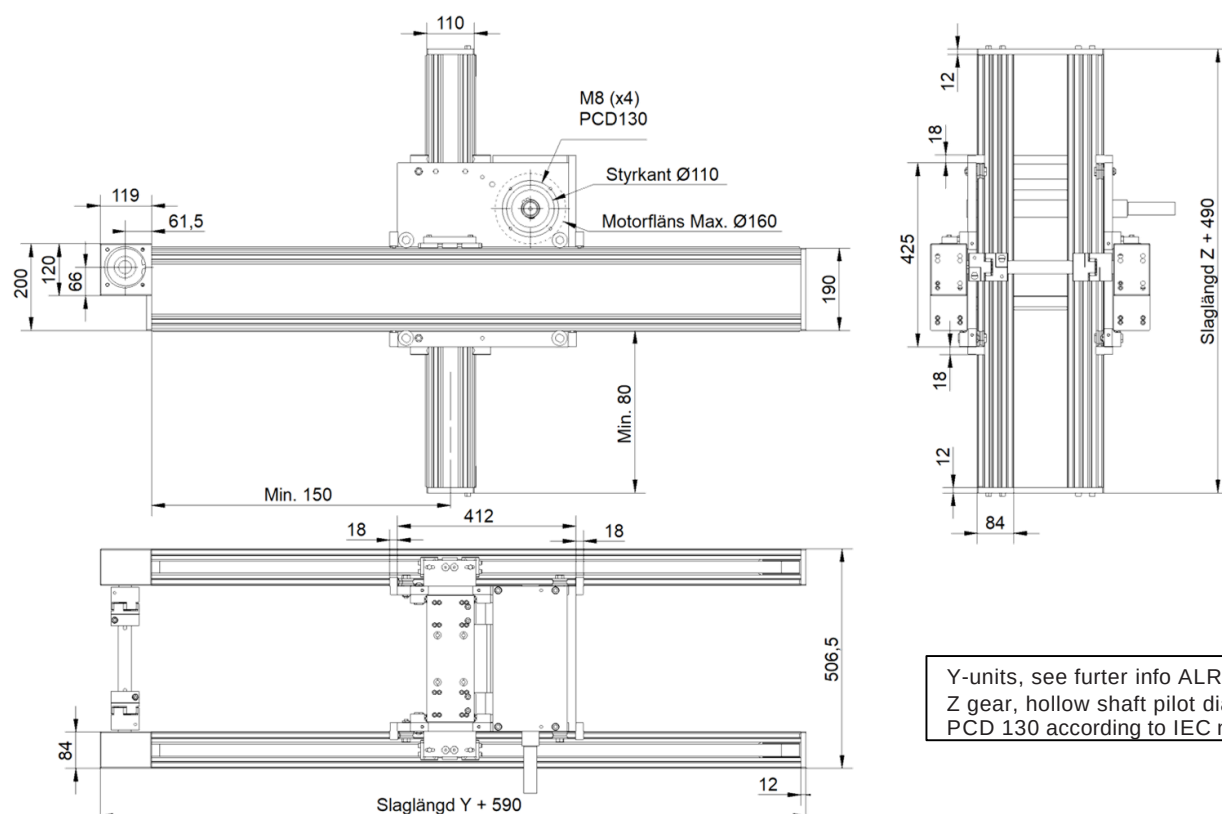
AP365U basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		3675 N	6550N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6900 mm	2500 mm (recommended)
Load data			200 kg

Load data and stroke length are higly dependant on dynamics in the actual application, consult Aratron for further info

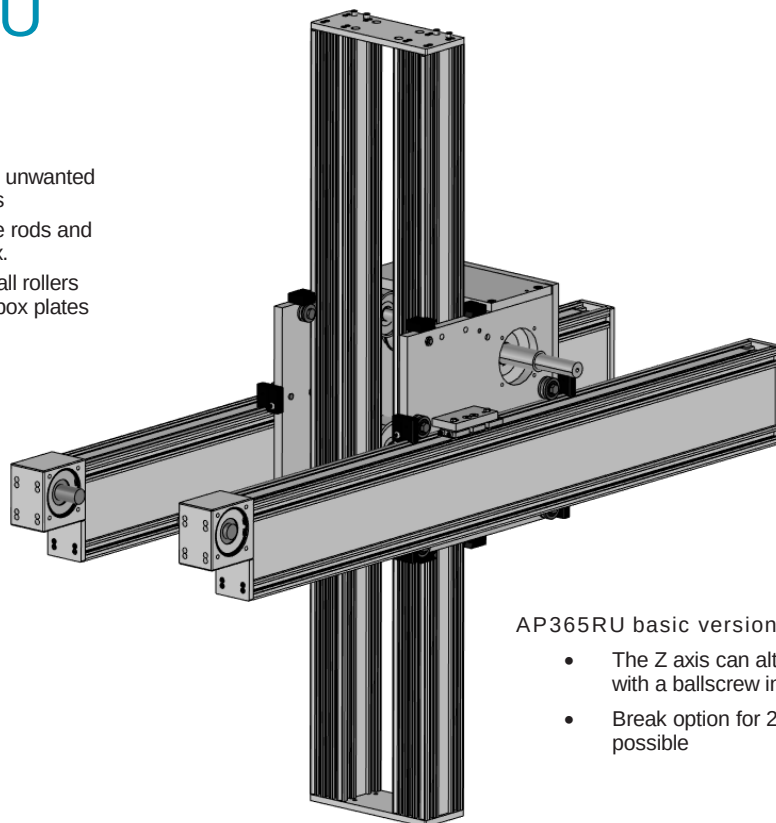
Aratron CAD linjarportal AP365U



Y-units, see furter info ALR26U
Z gear, hollow shaft pilot dia 110 / PCD 130 according to IEC norm.

AP365RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



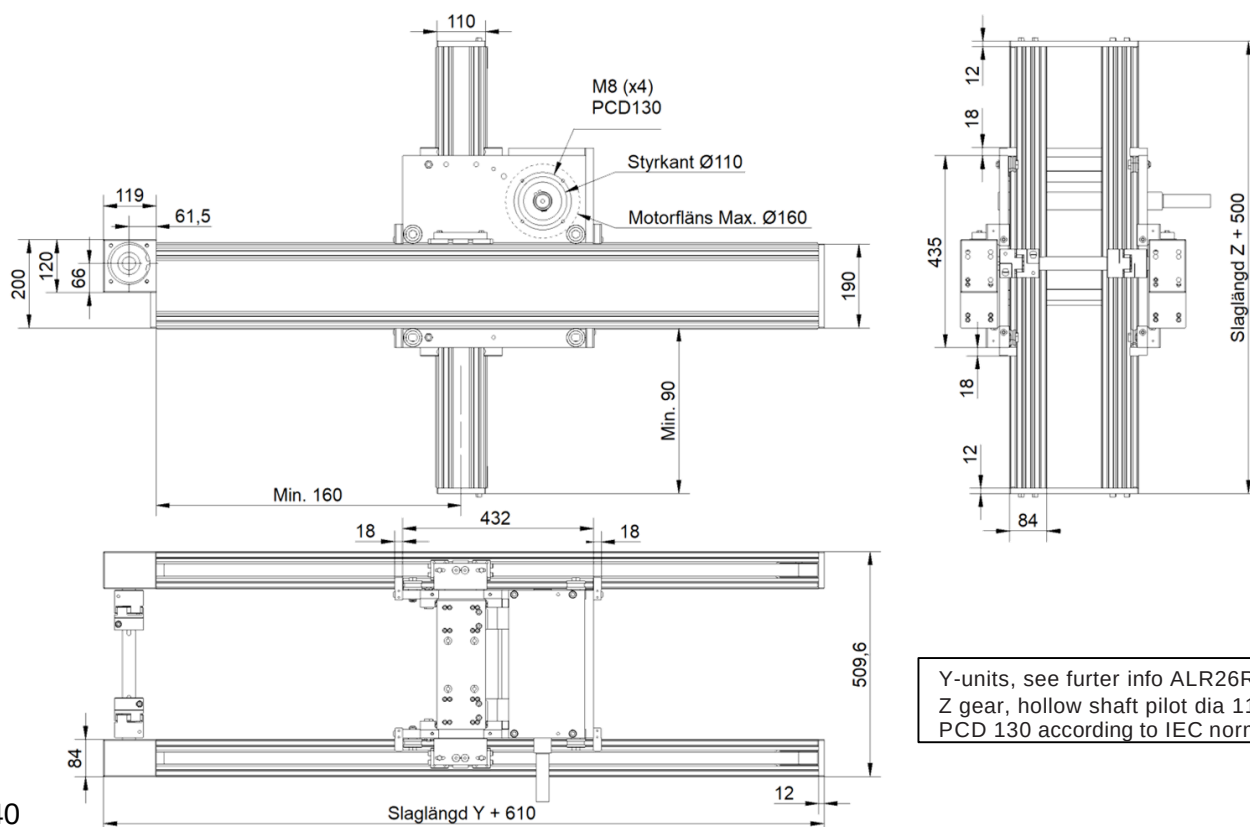
AP365RU basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Break option for 2500N (pneumatic release) possible

Technical data		Y	Z
Profiles.		190	110
Speed max		8 m/s	8 m/s
Belt drive		ATL10	ATL10
Pulling force max		3675 N	6550N
Stroke per rev		260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)		6900 mm	2500 mm (recommended)
Load data			200 kg

Load data and stroke length are higly dependant on dynamics in the actual application, consult Aratron for further info

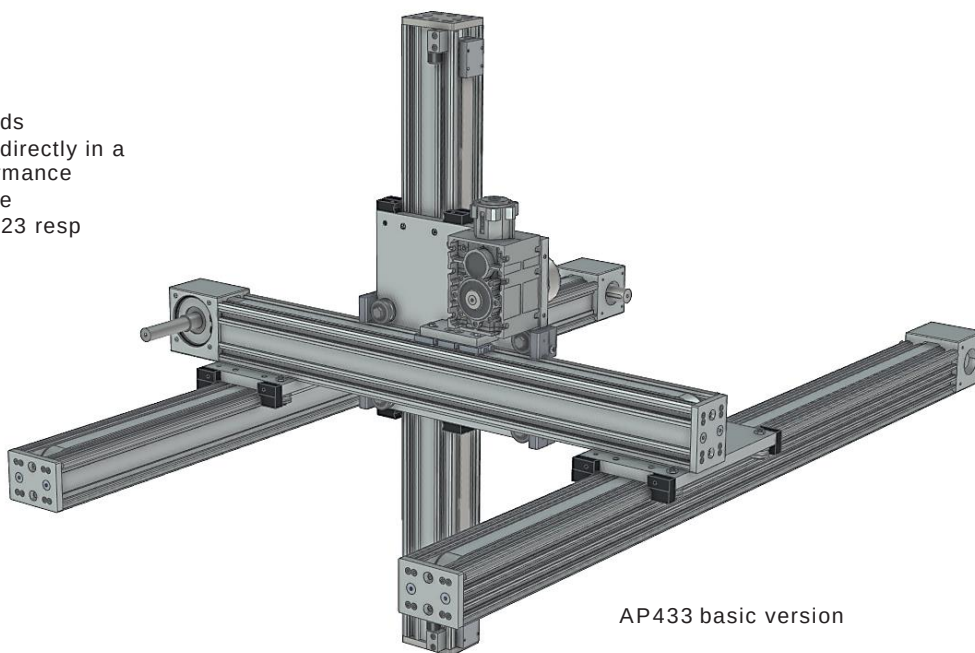
[Aratron CAD linjarportal AP365RU](#)



Y-units, see furter info ALR26RU
Z gear, hollow shaft pilot dia 110 /
PCD 130 according to IEC norm.

AP433

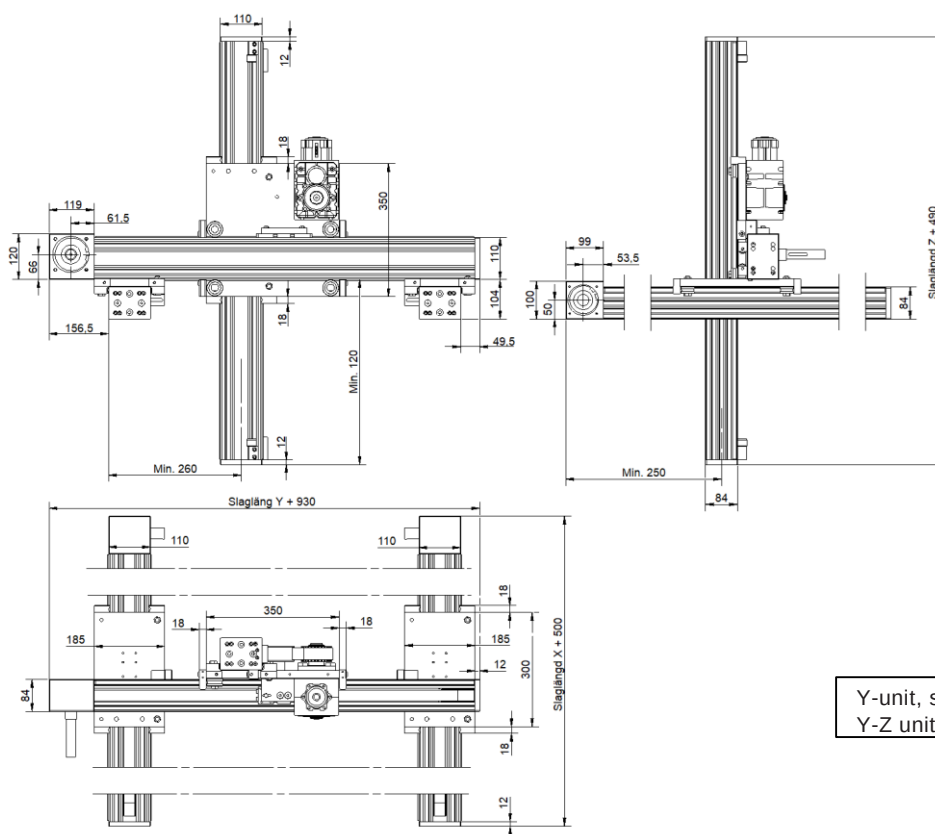
- Single Y-beam for lighter loads
- Y and Z rollers are mounted directly in a common plate for best performance
- Gear comes as std for Z-drive
- Gear for Y-motion ref to ALR23 resp ALR33



AP433 basic version

Technical data	X	Y	Z
Profiles.	110	110	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3000 N	2450 N	2000N
Stroke per rev	210 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6500 mm	2500 mm	1400 mm (recommended)
Load data			40 kg
<i>Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info</i>			

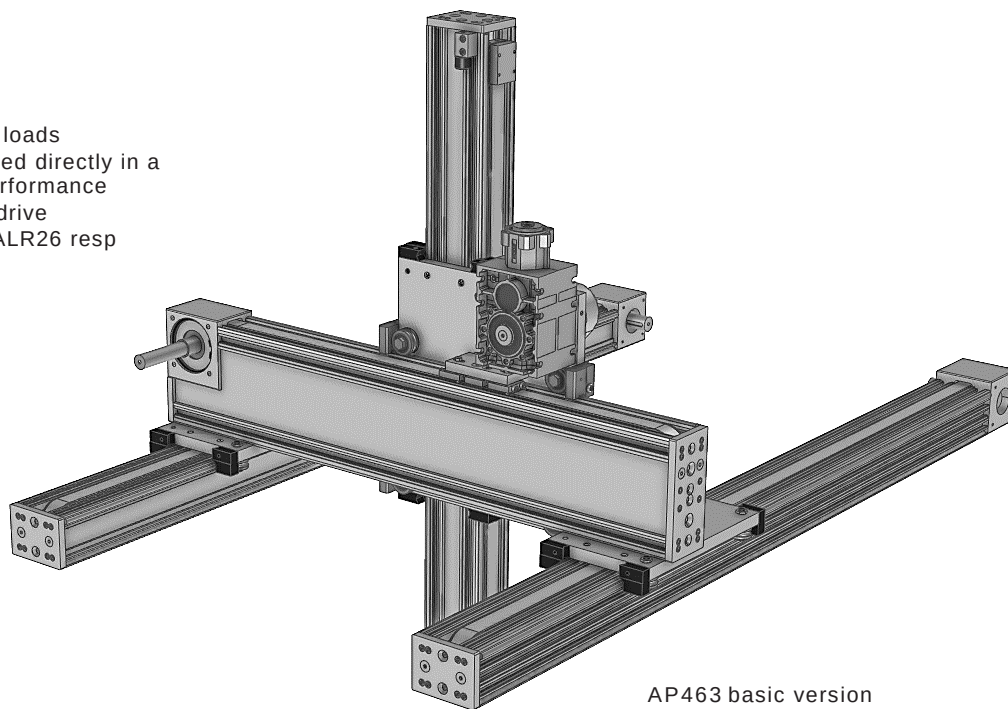
[Aratron CAD ytportal AP433](#)



Y-unit, see further info ALR33.
Y-Z unit, see further info AP133R.

AP463

- Single Y-beam for lighter loads
- Y and Z rollers are mounted directly in a common plate for best performance
- Gear comes as std for Z-drive
- Gear for Y-motion ref to ALR26 resp ALR33

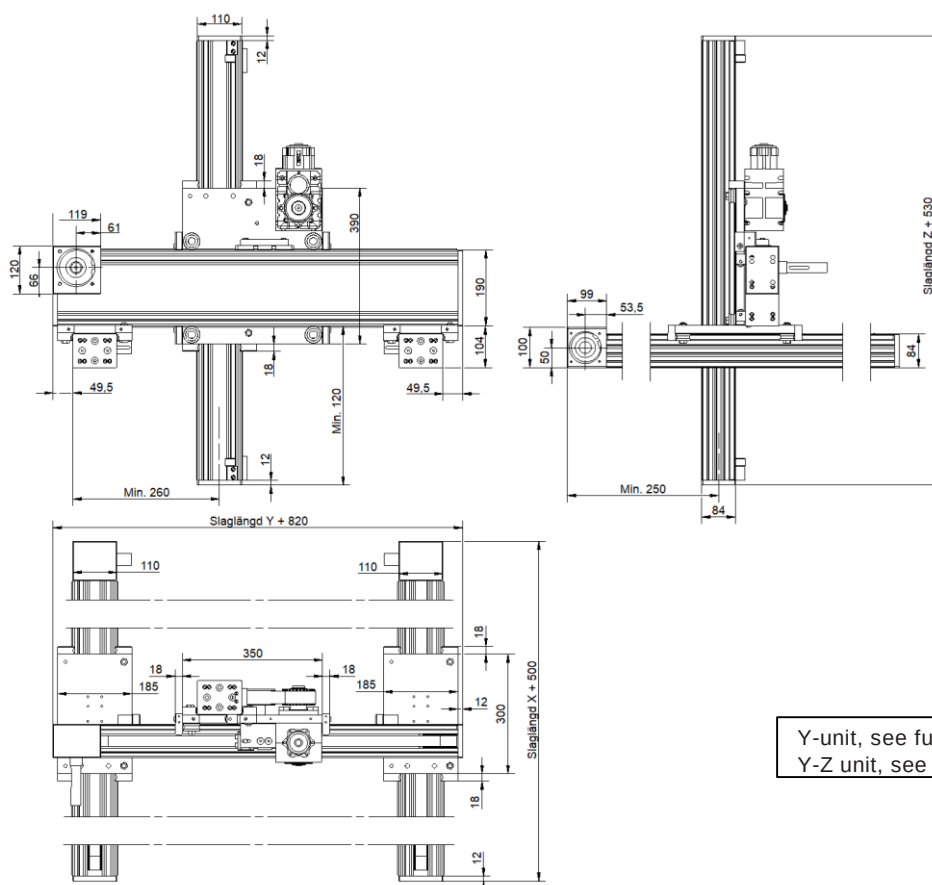


AP463 basic version

Technical data	X	Y	Z
Profiles.	110	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3000 N	2450 N	2000N
Stroke per rev	210 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6500 mm	2500 mm	1400 mm (recommended)
Load data			70 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

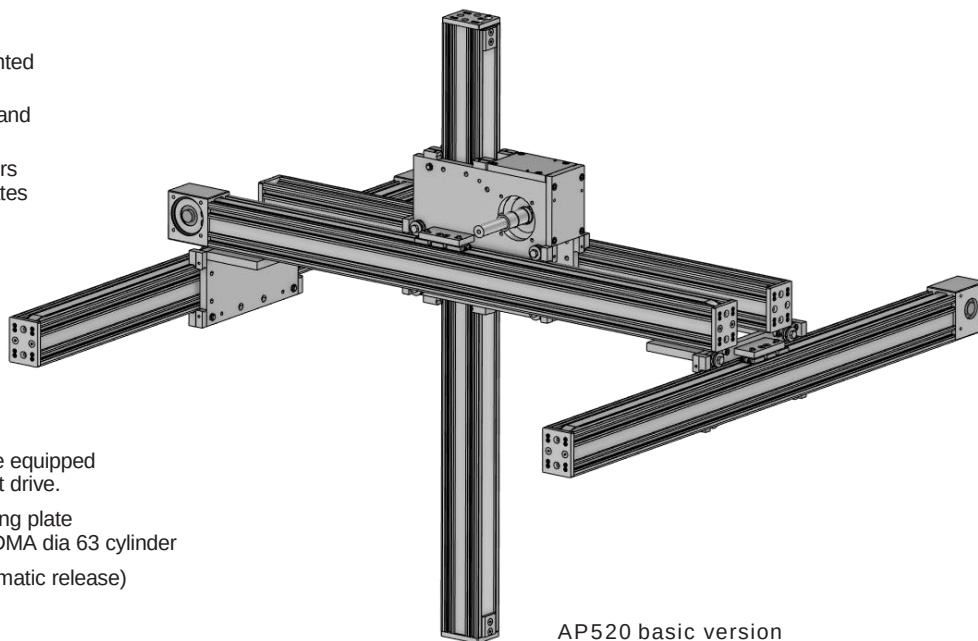
[Aratron CAD ytportal AP463](#)



Y-unit, see further info ALR33.
Y-Z unit, see further info AP163RU.

AP520

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



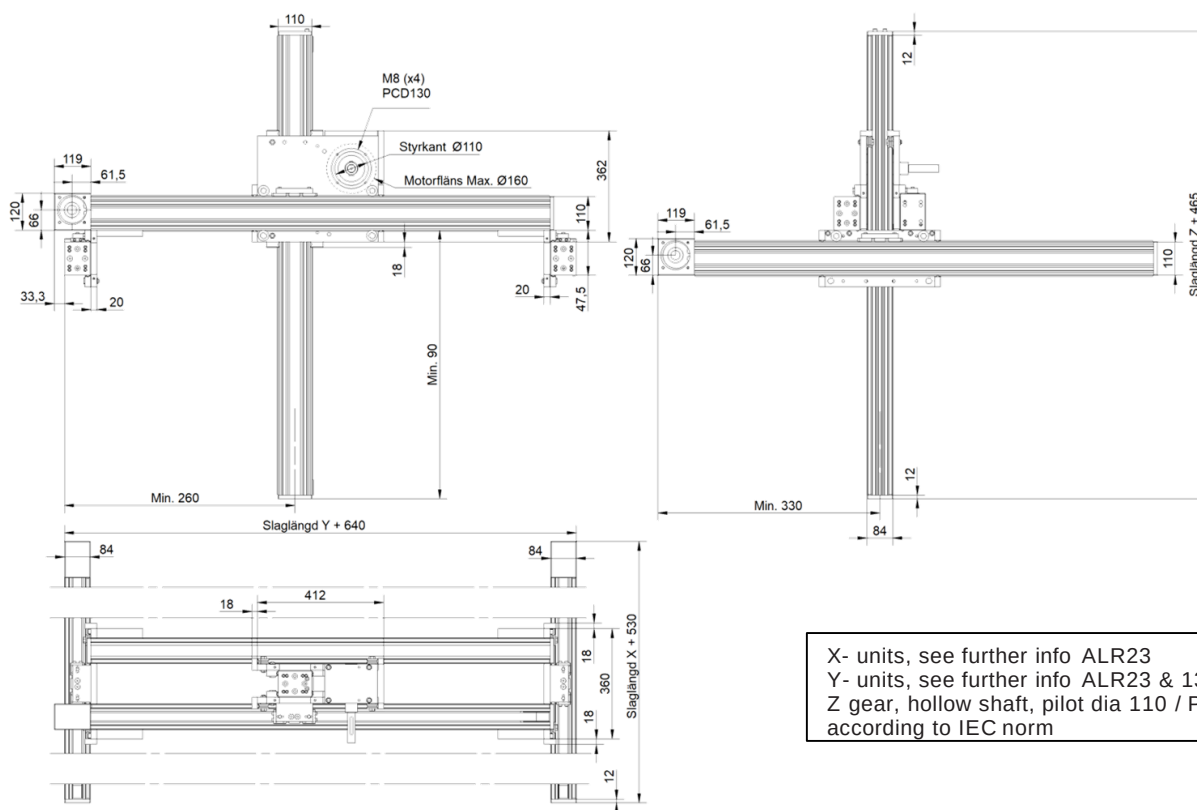
AP520 basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data	X	Y	Z
Profiles.	110	110	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	4370N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6500 mm	2500 mm	2000 mm (recommended)
Load data			100 kg
Load data and stroke length are hiyl dependant on dynamics in the actual application. consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

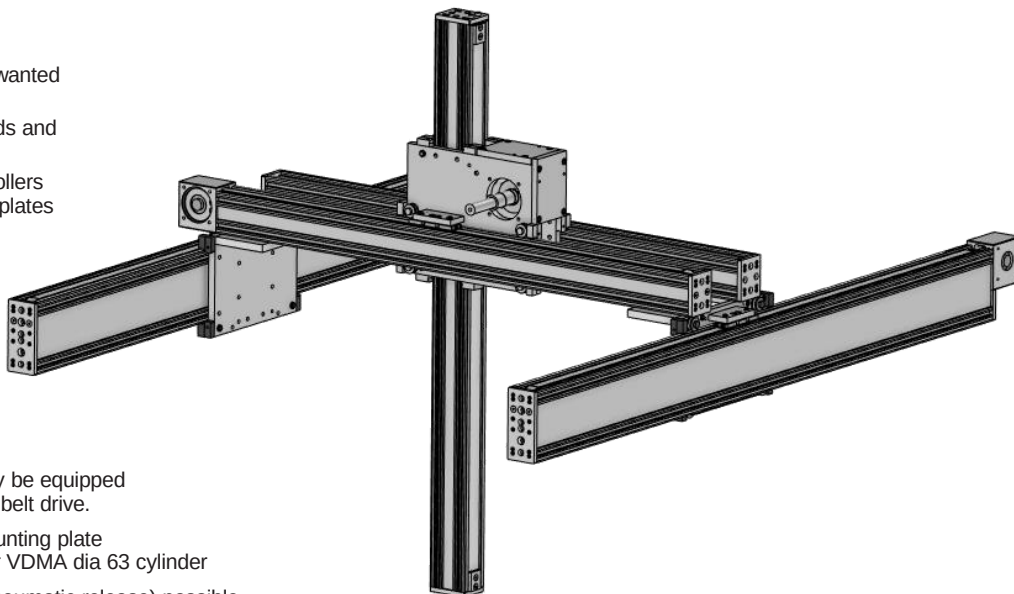
[Aratron CAD ytportal AP520](#)



X- units, see further info ALR23
Y- units, see further info ALR23 & 13
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

AP530U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



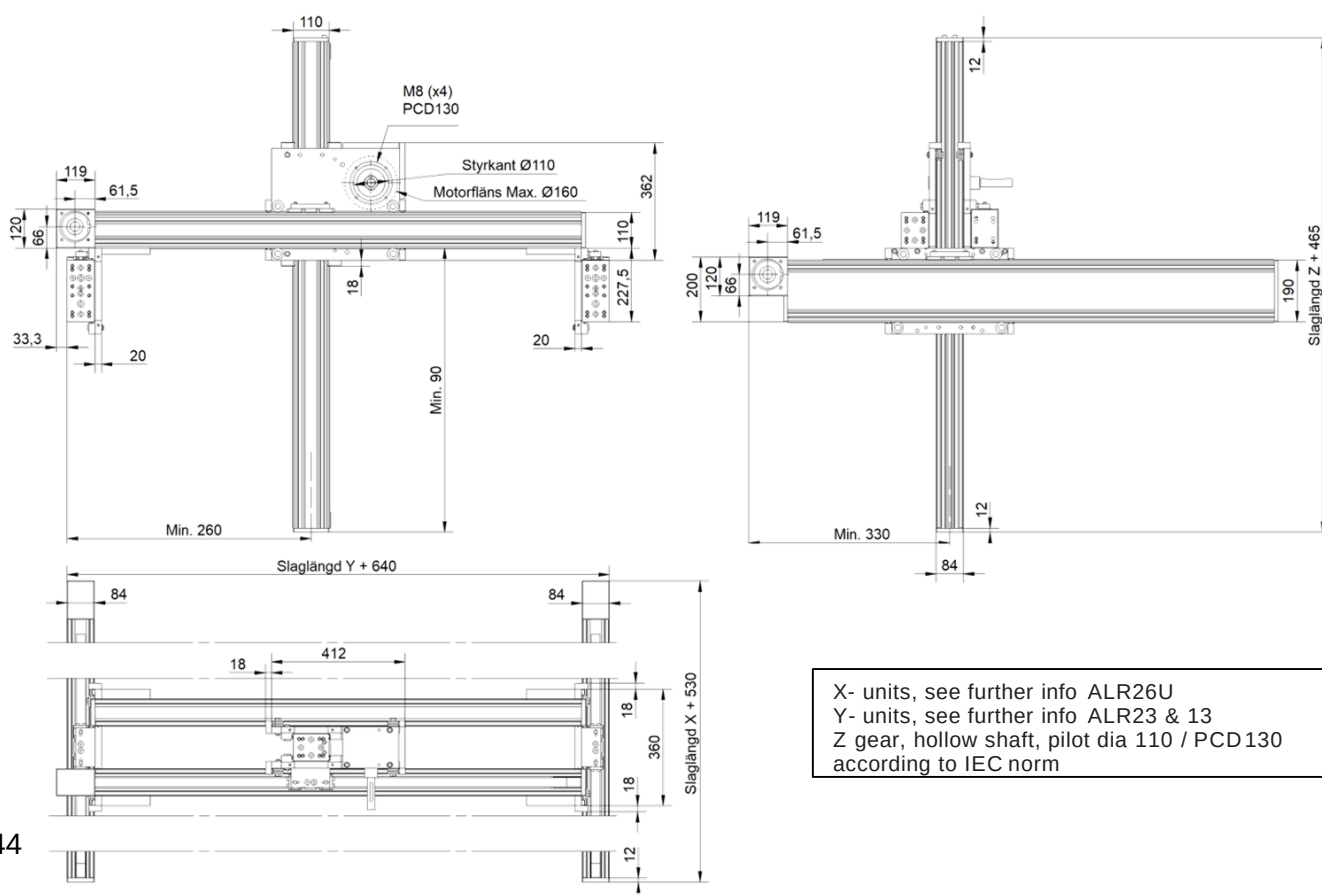
- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

AP530U basic version

Technical data	X	Y	Z
Profiles.	190	110	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	4370N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	2500 mm	2000 mm (recommended)
Load data			150 kg
Load data and stroke length are hiyl dependant on dynamics in the actual application. consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

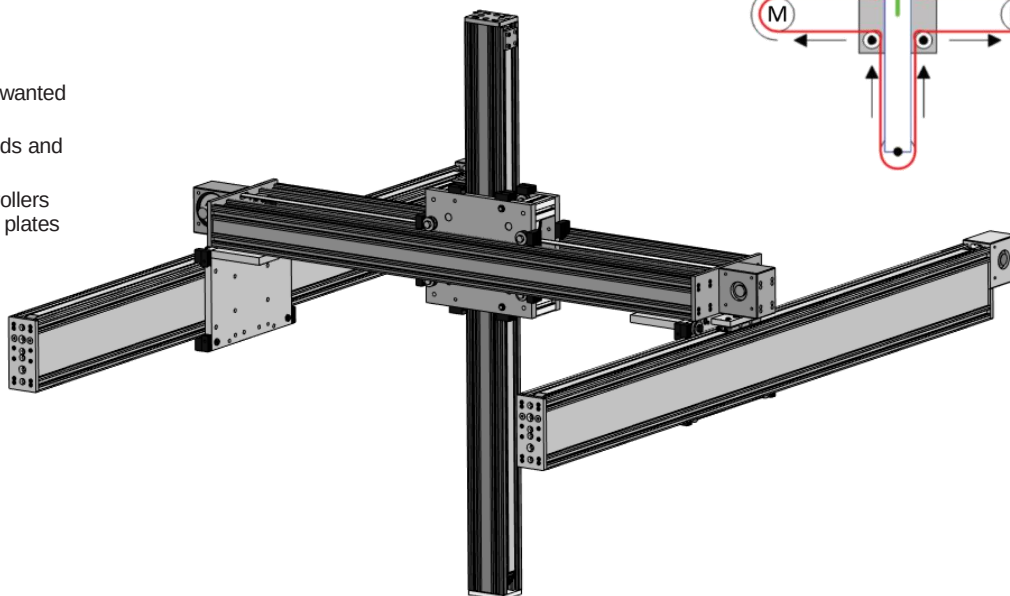
[Aratron CAD ytportal AP530U](#)



X- units, see further info ALR26U
Y- units, see further info ALR23 & 13
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

AP537U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates

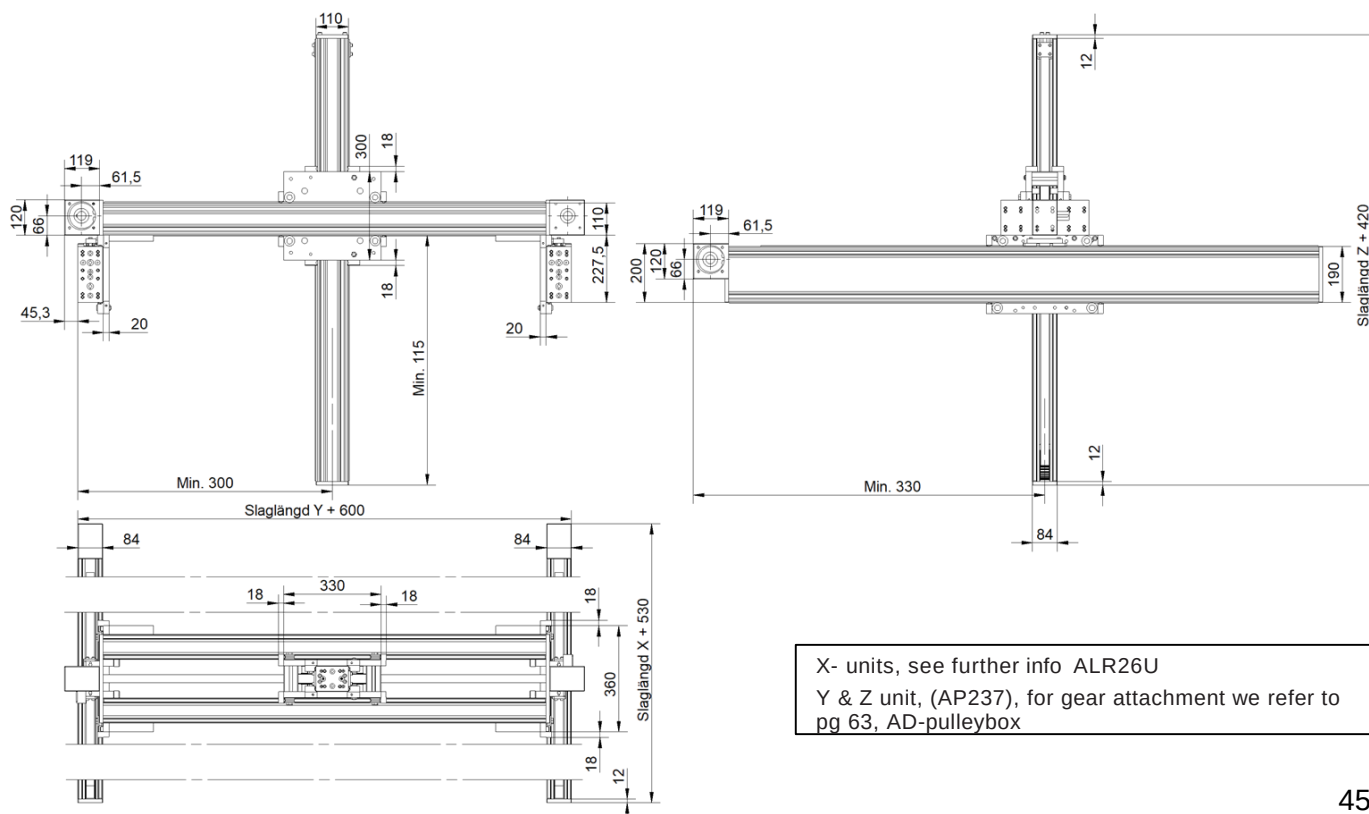


AP537U basic version

Technical data	X	Y	Z
Profiles.	190	110	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	2450N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	2500 mm (simultaneously drive of motors)	2000 mm (simultaneously drive of motors)
Load data			100 kg

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

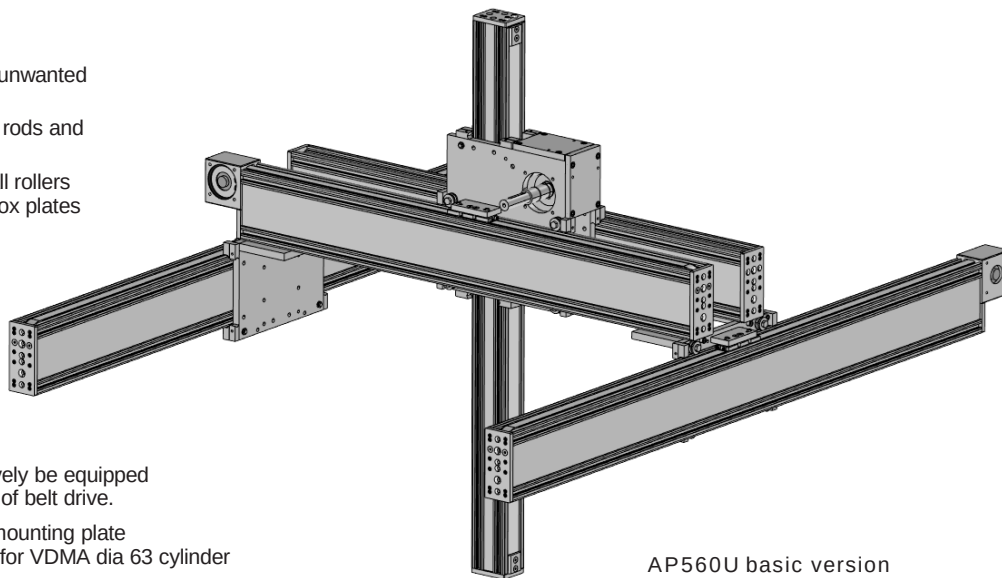
[Aratron CAD ytportal AP537U](#)



X- units, see further info ALR26U
Y & Z unit, (AP237), for gear attachment we refer to pg 63, AD-pulleybox

AP560U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates



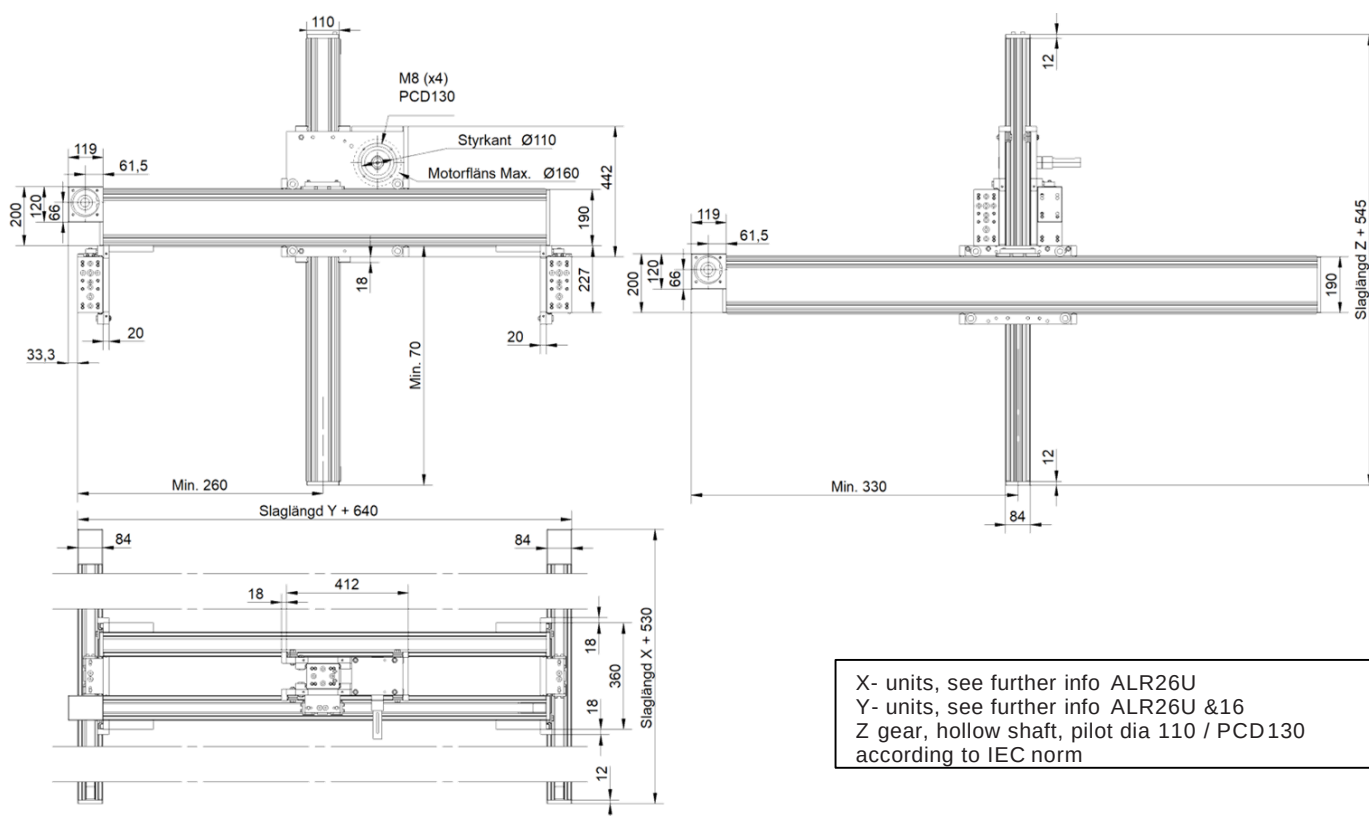
AP560U basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data	X	Y	Z
Profiles.	190	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	4370N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	4400 mm	2500 mm
Load data			150 kg
Load data and stroke length are hialy dependant on dynamics in the actual application. consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

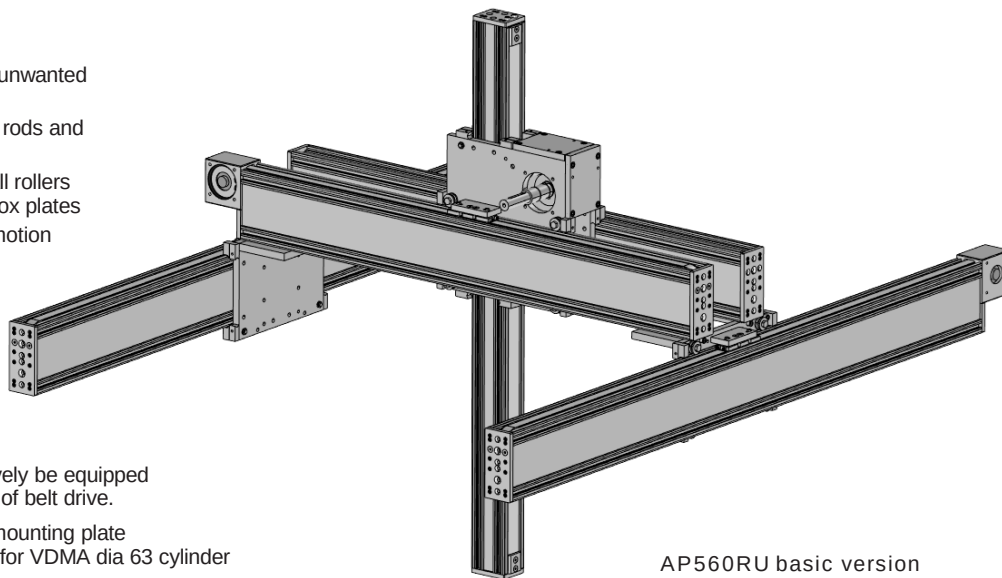
Aratron CAD ytportal AP560U



X- units, see further info ALR26U
Y- units, see further info ALR26U &16
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

AP560RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on X-motion



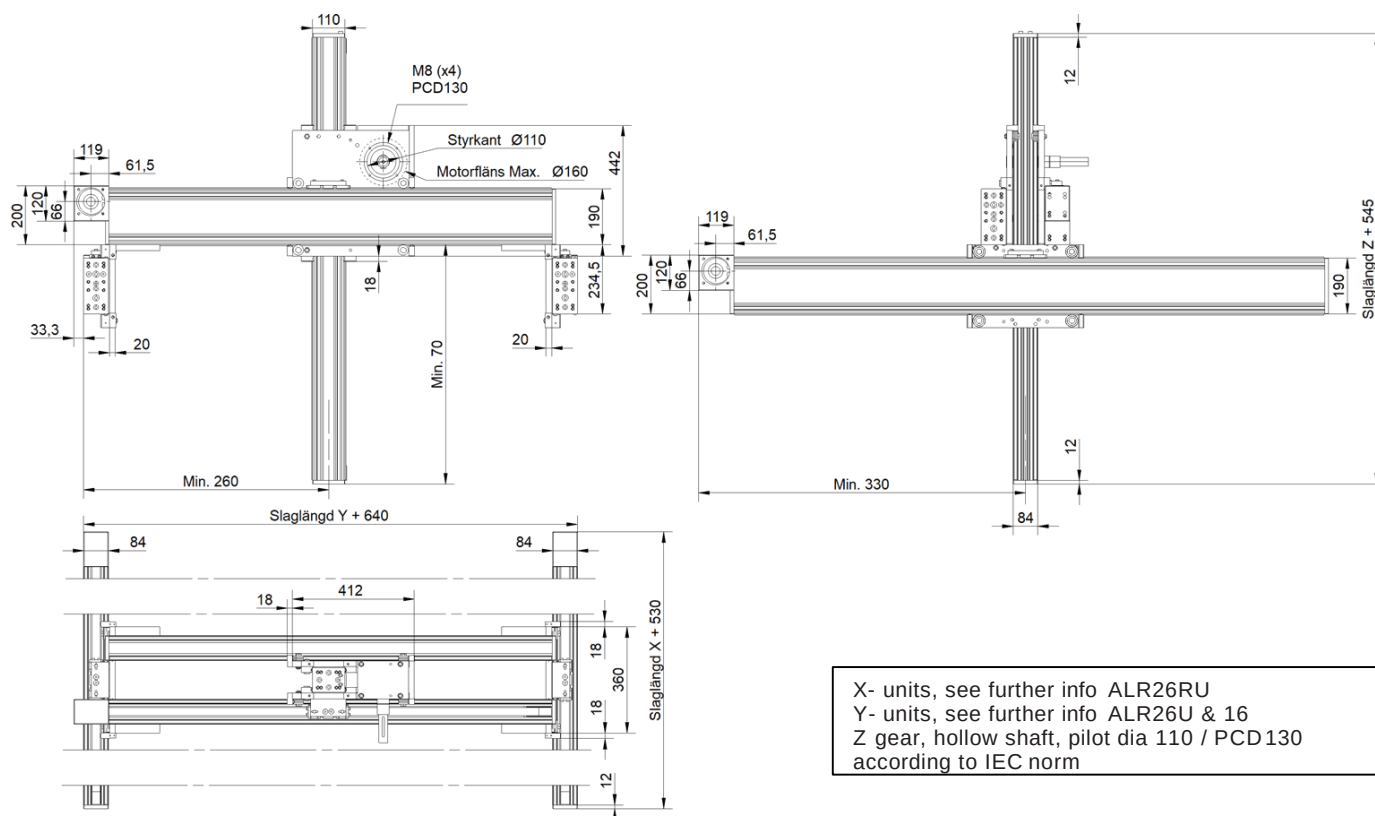
AP560RU basic version

- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Z axis can also have a mounting plate internally in the Y-Z box for VDMA dia 63 cylinder
- Break option for 2500N (pneumatic release) possible

Technical data	X	Y	Z
Profiles.	190	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	4370N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	4400 mm	2500 mm
Load data			150 kg
Load data and stroke length are hightly dependant on dynamics in the actual application, consult Aratron for further info			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

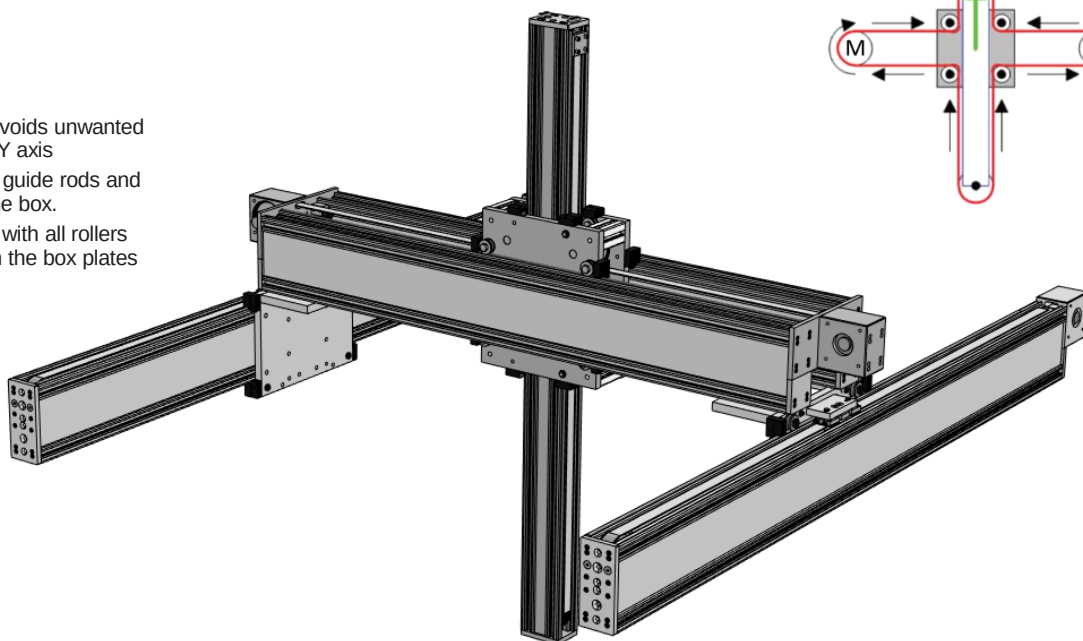
[Aratron CAD ytportal AP560RU](#)



X- units, see further info ALR26RU
Y- units, see further info ALR26U & 16
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

AP567U

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates

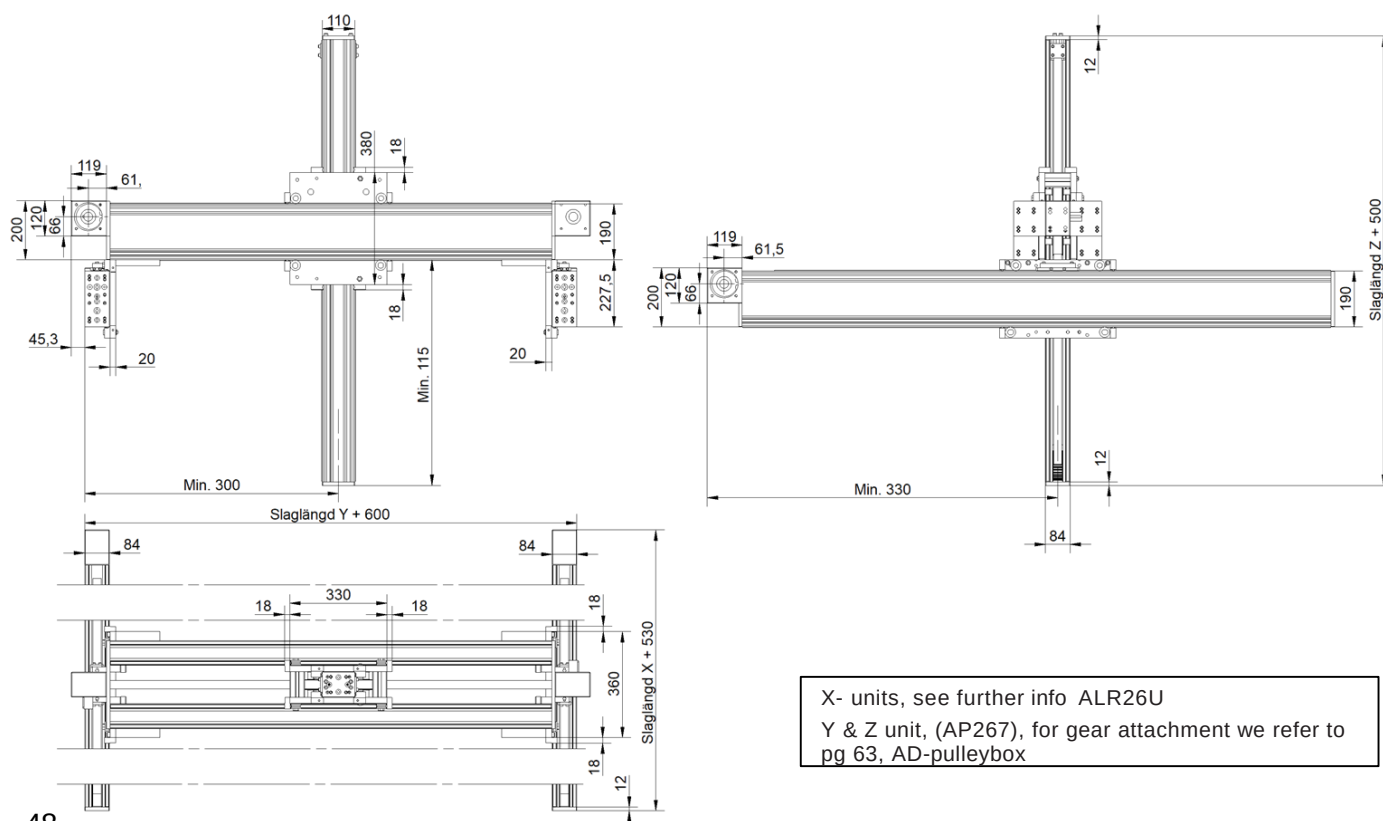


AP567U basic version

Technical data	X	Y	Z
Profiles.	190	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	2450 N	2450N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	4400 mm (simultaneously drive of motors)	2000 mm (simultaneously drive of motors)
Load data			100 kg

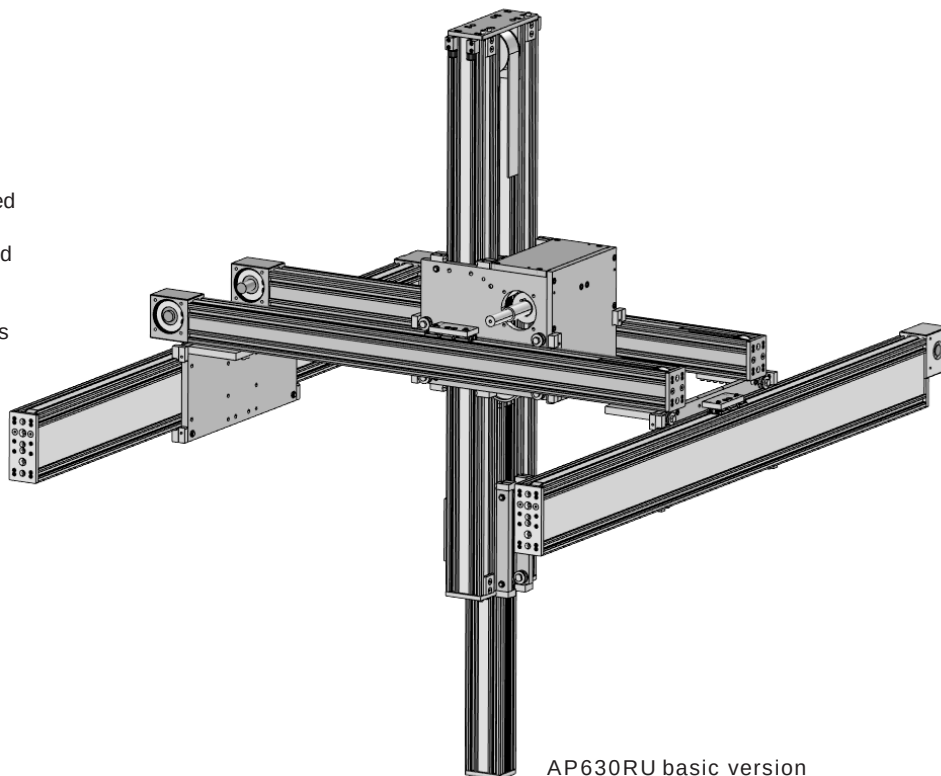
Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

[Aratron CAD ytportal AP567U](#)



AP630RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on X motion

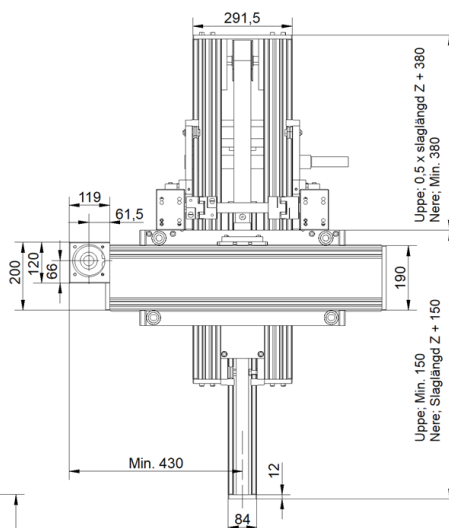
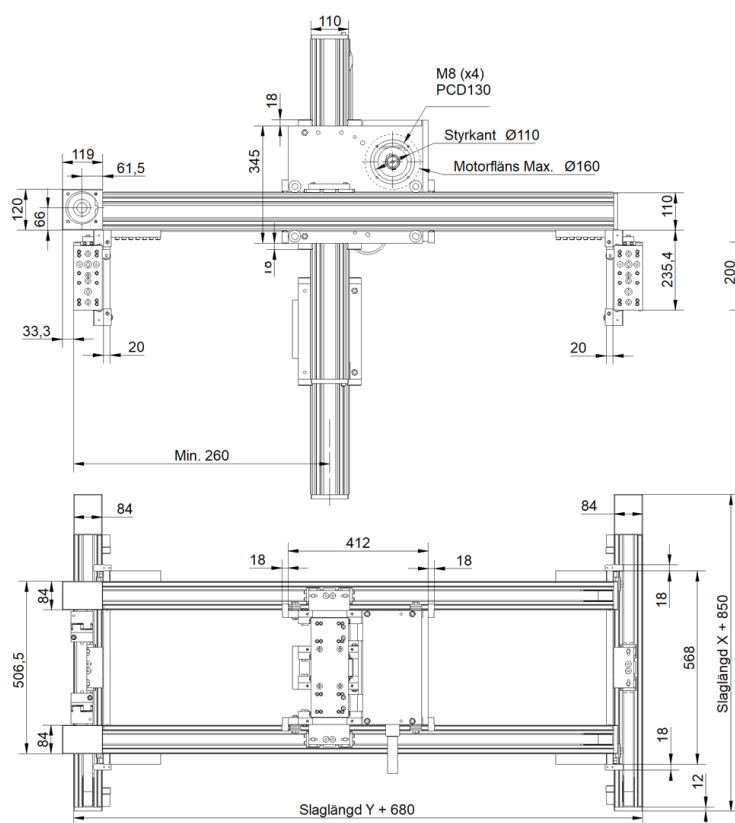


AP630RU basic version

Technical data	X	Y	Z
Profiles.	190	110	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	3675 N	3280N
Stroke per rev	260 mm	260 mm	520 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	2500 mm	2000 mm
Load data			Contact Aratron
<i>Load data and stroke length are hqily dependant on dynamics in the actual application, consult Aratron for further info</i>			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

[Aratron CAD ytportal AP630RU/](#)



X- units, see further info ALR26RU
Y- units, see further info ALR23
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

AP660RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on X motion

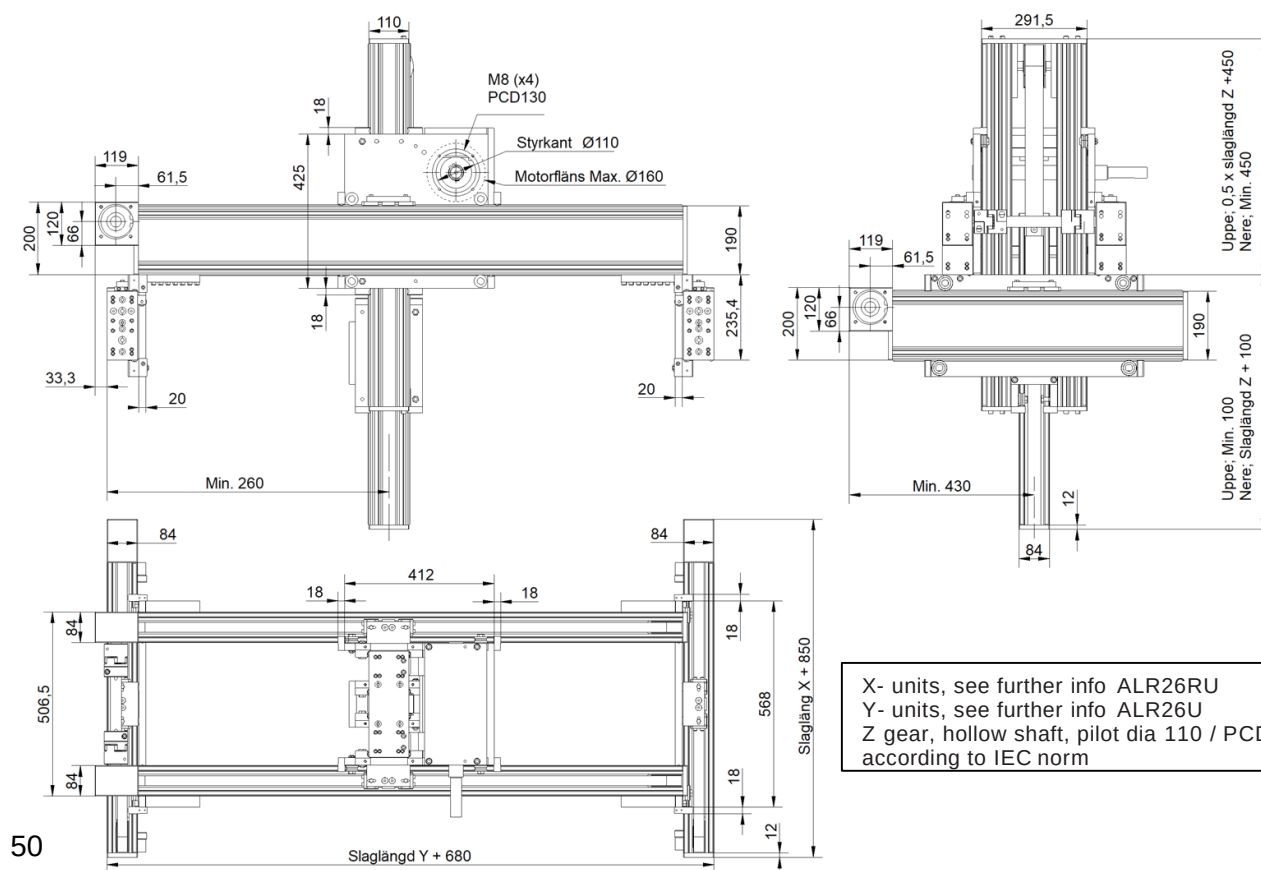


AP660RU basic version

Technical data	X	Y	Z
Profiles.	190	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	3675 N	3280N
Stroke per rev	260 mm	260 mm	520 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	4400 mm	2500 mm
Load data			Contact Aratron

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

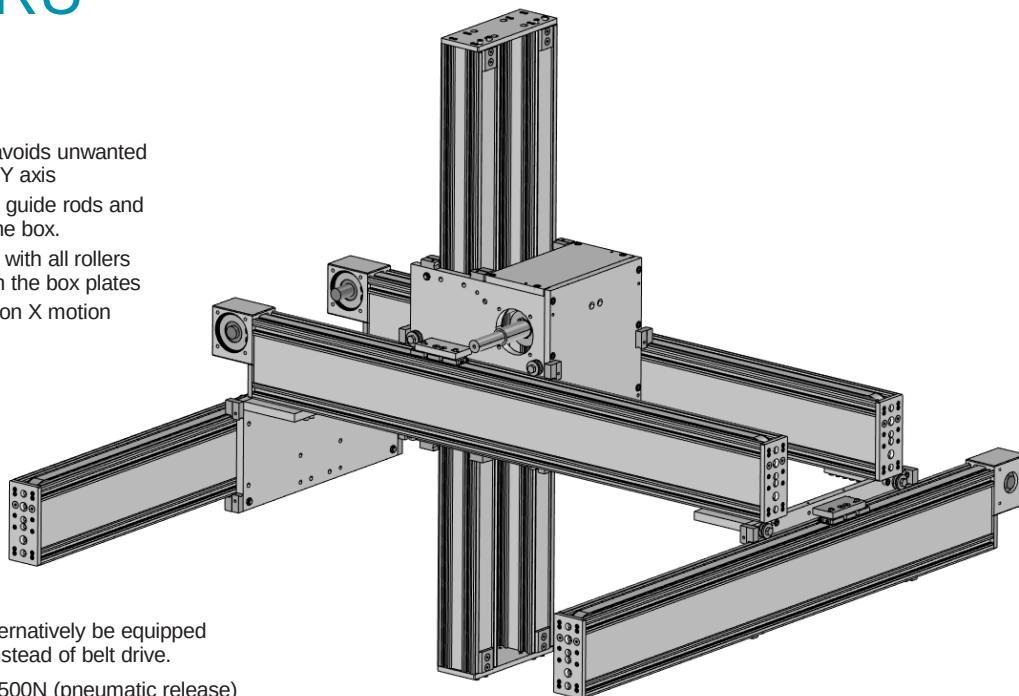
[Aratron CAD yportal AP660RU](#)



X- units, see further info ALR26RU
Y- units, see further info ALR26U
Z gear, hollow shaft, pilot dia 110 / PCD130 according to IEC norm

AP665RU

- Balanced design avoids unwanted torsional loads on Y axis
- Z axis guided by 4 guide rods and 8 rollers through the box.
- Rugged Y – Z box with all rollers directly mounted in the box plates
- Reinforced rollers on X motion



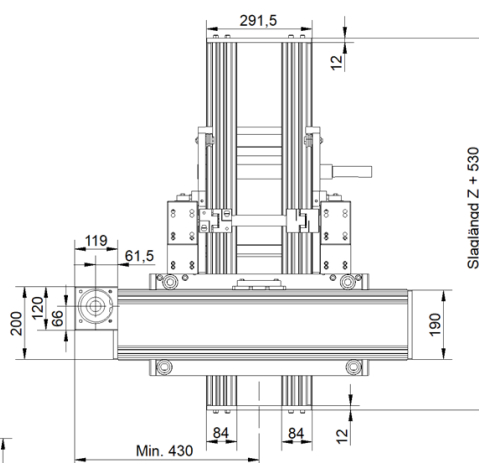
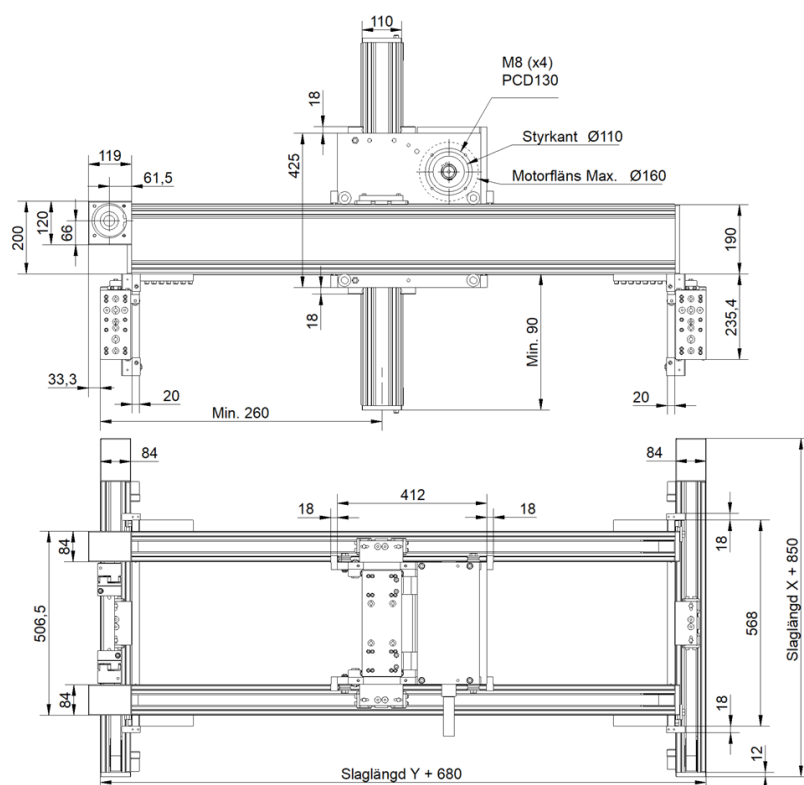
- The Z axis can alternatively be equipped with a ballscrew instead of belt drive.
- Break option for 2500N (pneumatic release) possible

AP665RU basic version

Technical data	X	Y	Z
Profiles.	190	190	110
Speed max	8 m/s	8 m/s	8 m/s
Belt drive	ATL10	ATL10	ATL10
Pulling force max	3675 N	3675 N	5000N
Stroke per rev	260 mm	260 mm	260 mm
Stroke (Y profiles can be jointed for longer strokes, max 18 meters)	6900 mm	4400 mm	2500 mm
Load data			Contact Aratron
<i>Load data and stroke length are higly dependant on dynamics in the actual application. consult Aratron for further info</i>			

Load data and stroke length are highly dependant on dynamics in the actual application, consult Aratron for further info

[Aratron CAD ytportal AP665RU](#)



X- units, see further info ALR26RU
Y- units, see further info ALR26U
Z gear, hollow shaft, pilot dia 110 / PCD130
according to IEC norm

Ordering codes

Linear units

AL R 26 U - A 10 - E - 2650

AL	R	26	U	-	A	10	-	E	-	2650	Profile length
											Carriage, position
											Driveshaft (or per drawing)
											Drive shaft extension
											Pulleybox (U=standard for 190 profile)
											Type / size
											Linear bearing type
											R=rollers
											S=guiderail
											AL= Aratron Linear unit

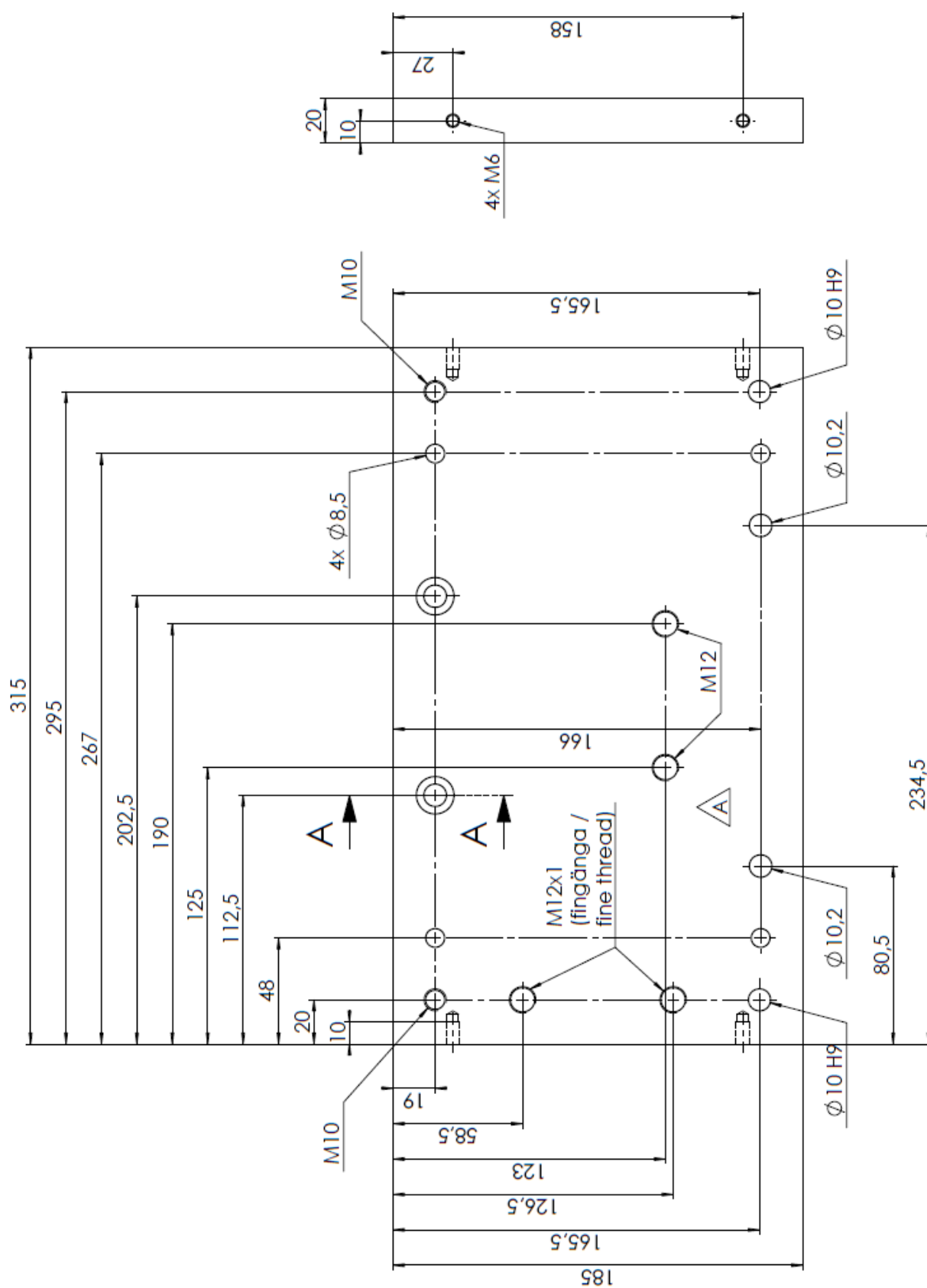
E = basic version
 F = extra slider same side
 G = extra slider opposite side
 H = opposite side to E
 I = opposite side F
 J = right /left hand running

Gantry units

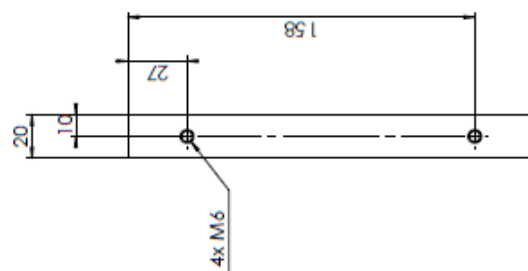
AP 230 - 1 - 1 - 1580 / 0 - 2890 - 6430

AP	230	-	1	-	1	-	1580	/	0	-	2890	-	6430	X profile length (only 3-axis units)
														Y profile length
														Z profile length (outer / inner) for telescopic
														Y drive shaft or per drw
														Z drive shaft or per drw
														Type / size
														AP= Aratron gantry

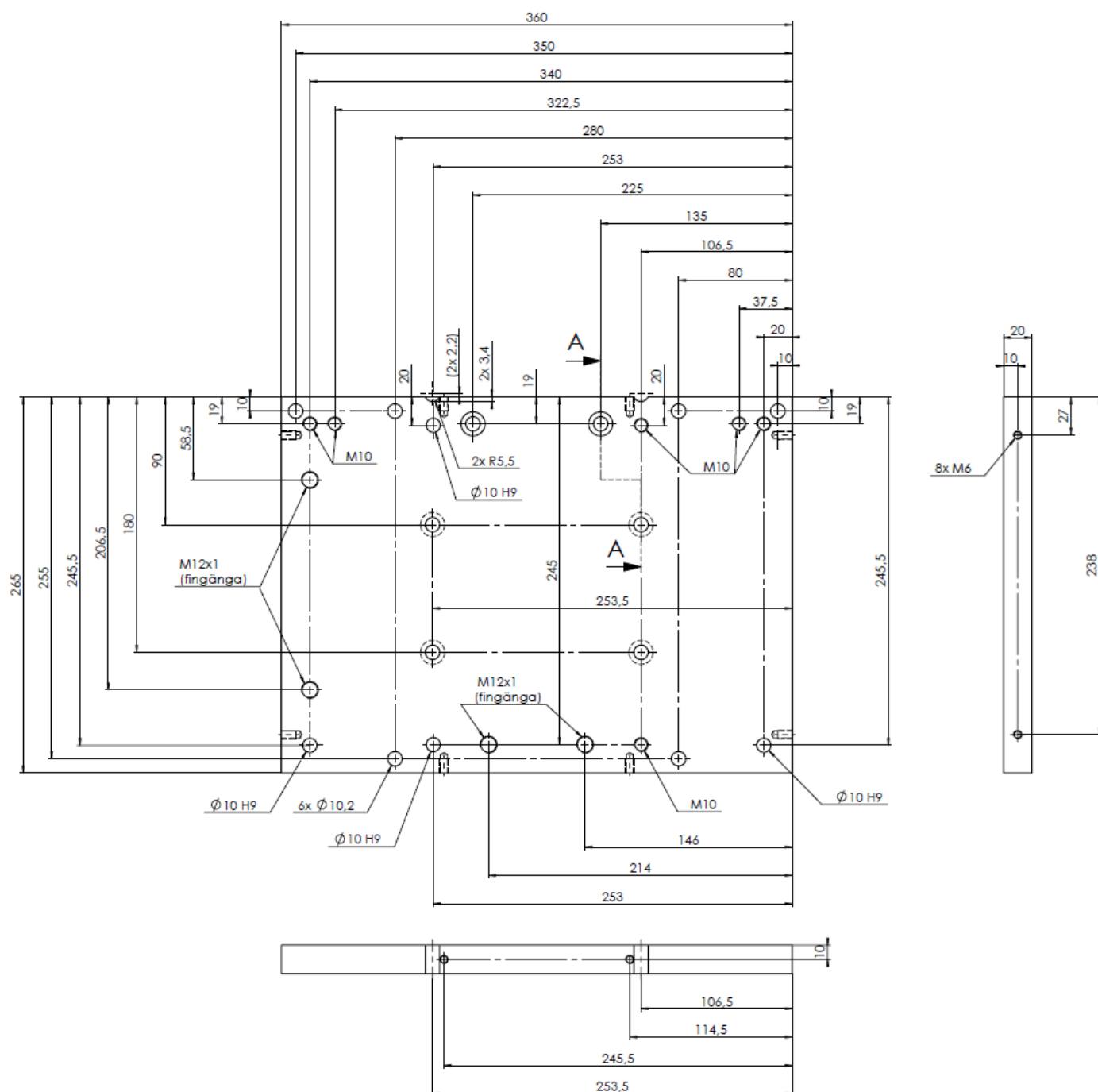
TL1 1KB for ALR23



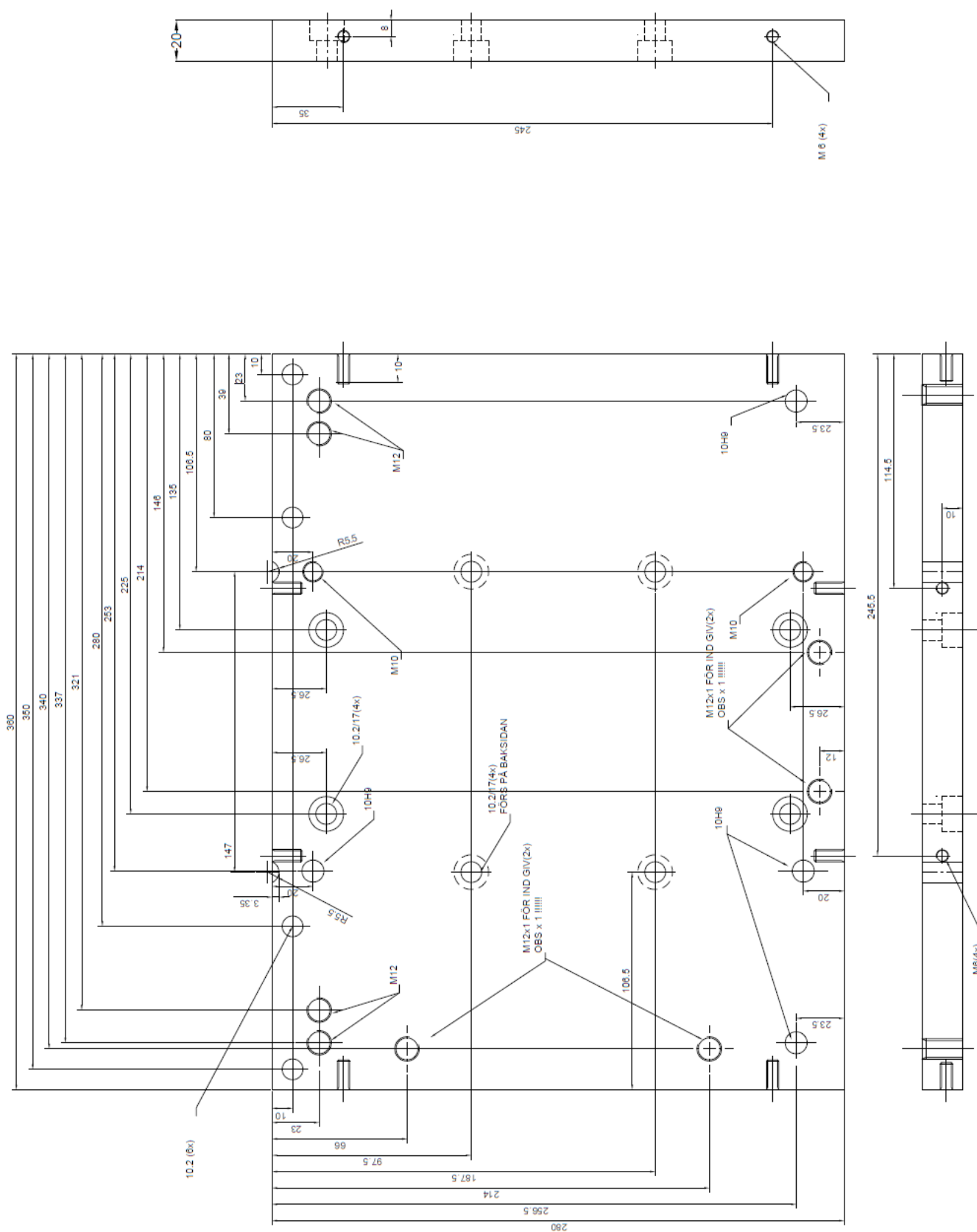
TL1 1LA for ALR33



TL1 1MA for ALR26 and AP5_0

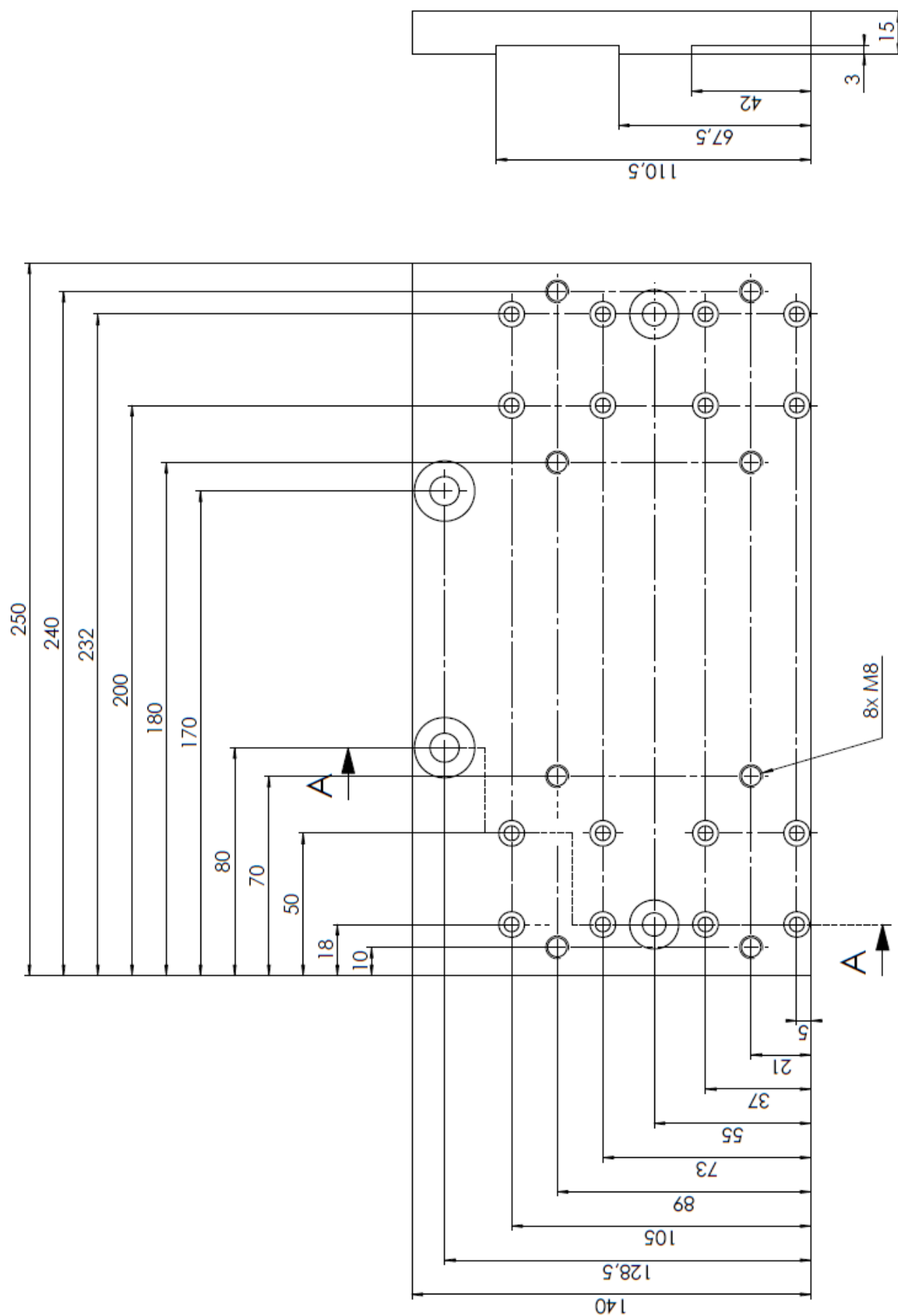


TL1 1MAR for ALR26R and AP560R



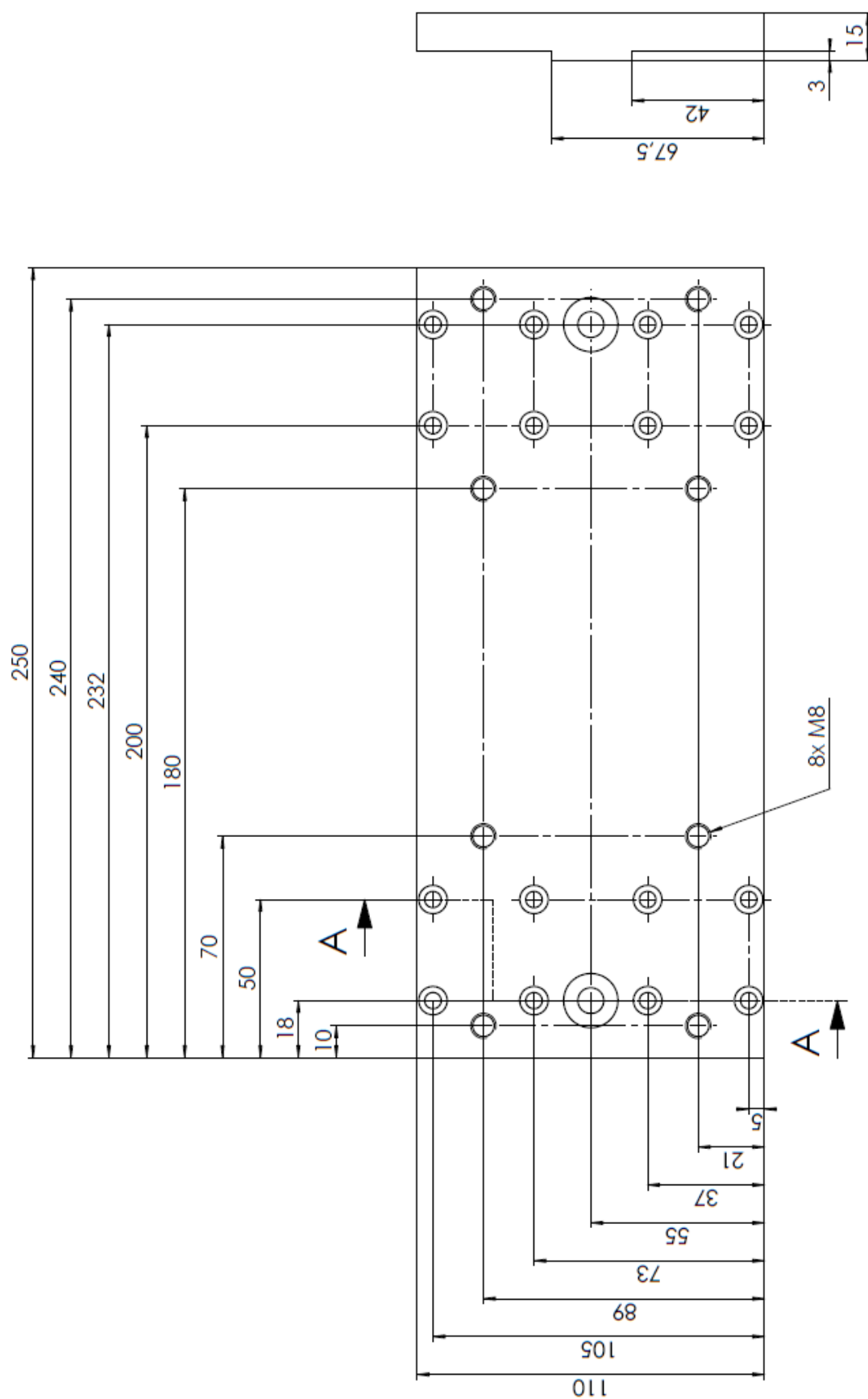
Carriage

TL1 1TA for ALS23



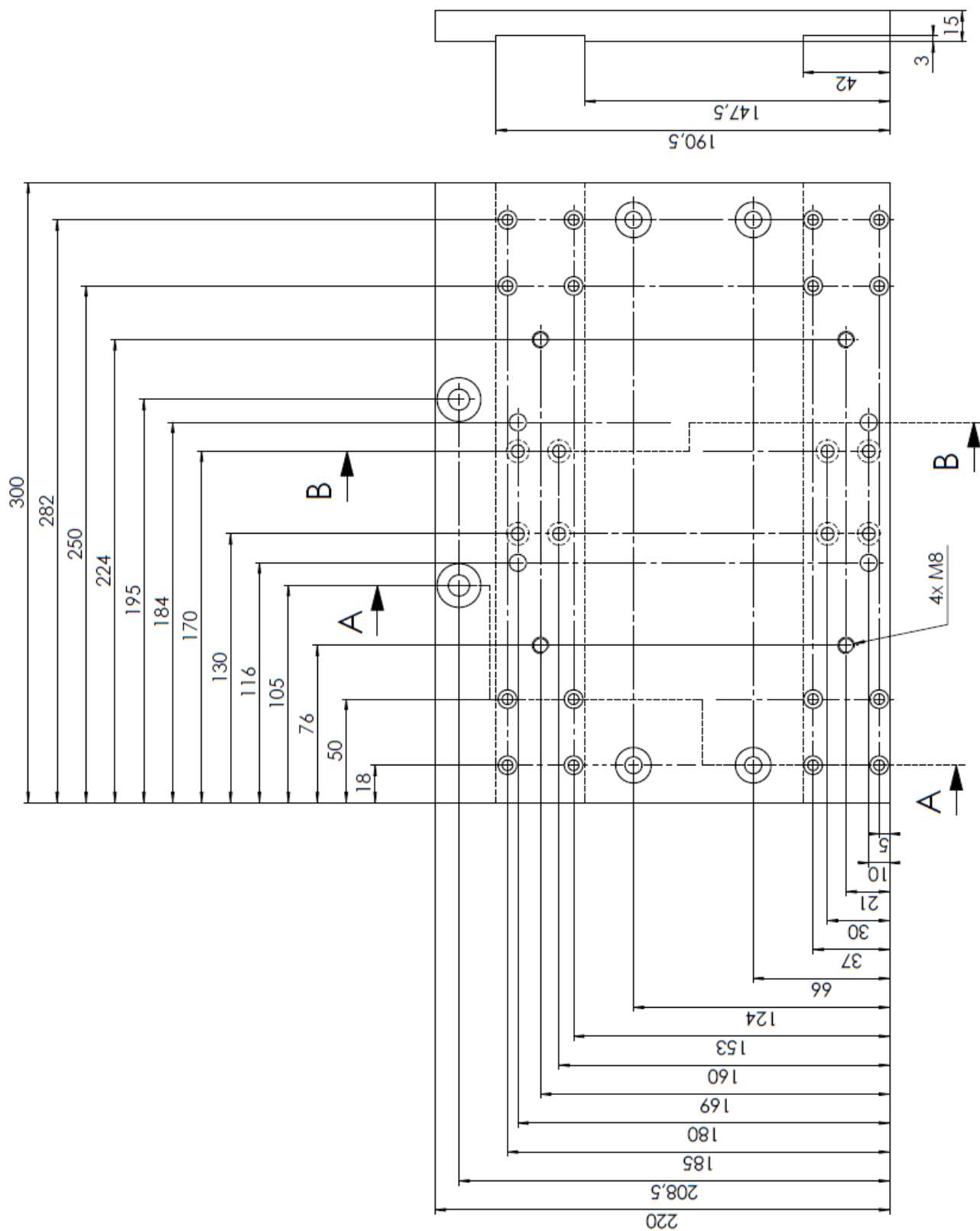
Carriage

TL1 1UA for ALS33



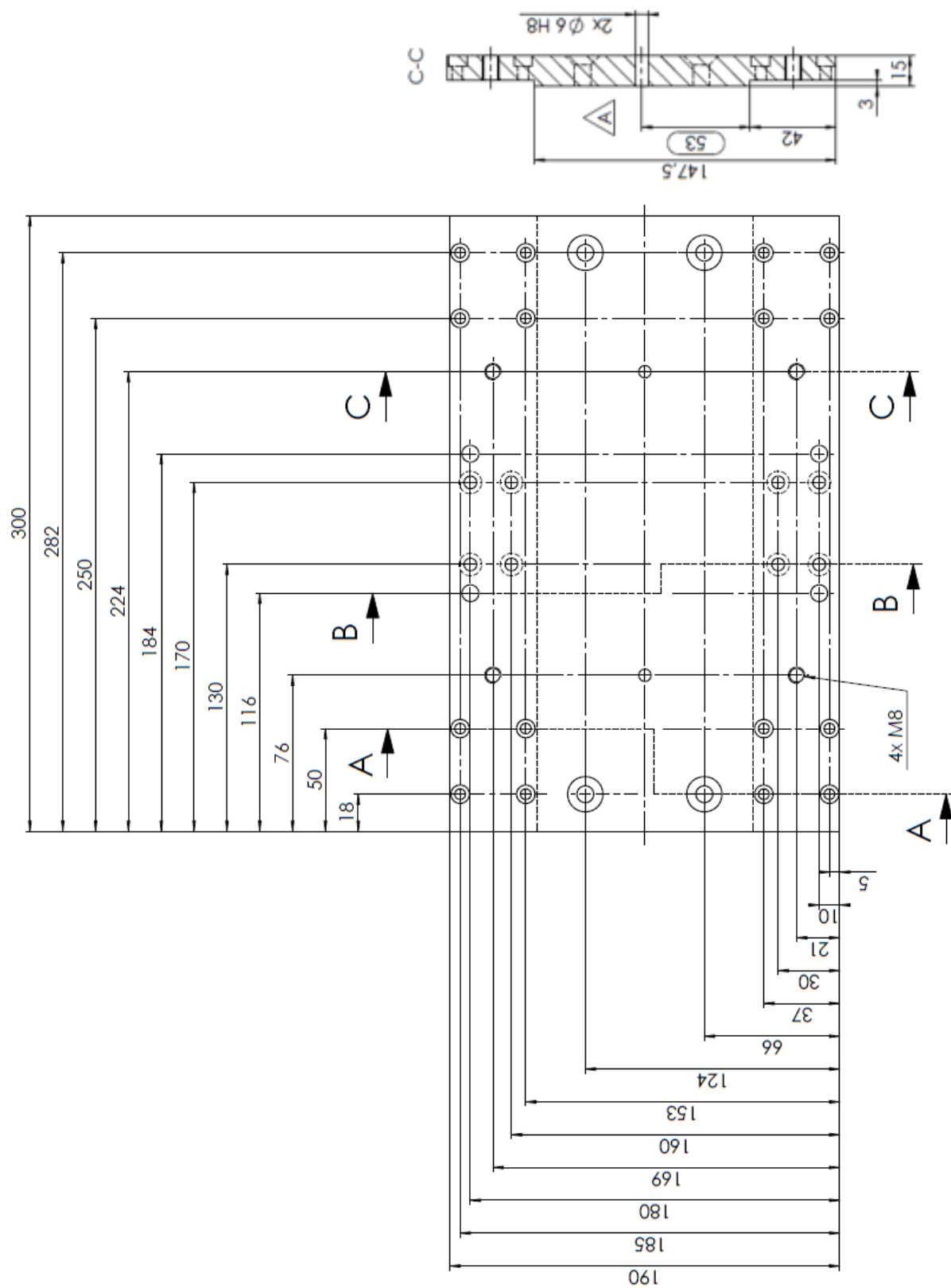
Carriage

TL1 1VA for ALS26



Carriage

TL1 1XA for ALS56



Profiles, data

110

Anodized aluminum

I_x 324 cm⁴

I_y 202 cm⁴

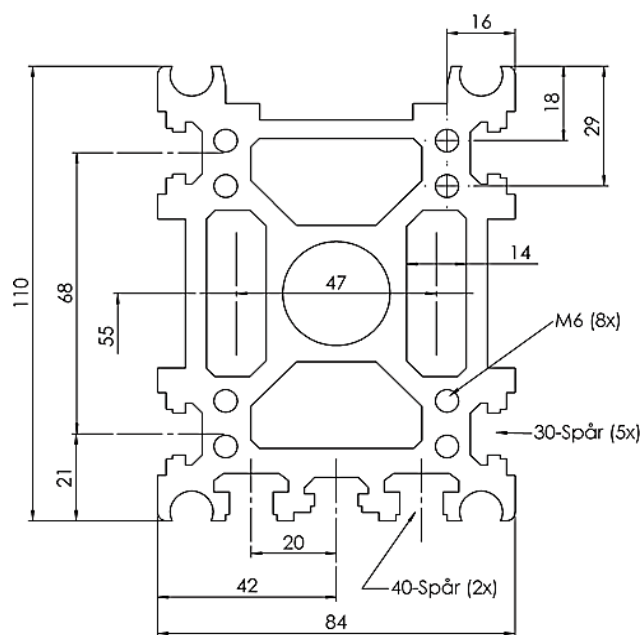
W_x 58 cm⁴

W_y 46 cm⁴

Weight 9,2 kg/m

max length 7000 mm

Longer length, see splicing



190

Anodized aluminum

I_x 1739 cm⁴

I_y 321 cm⁴

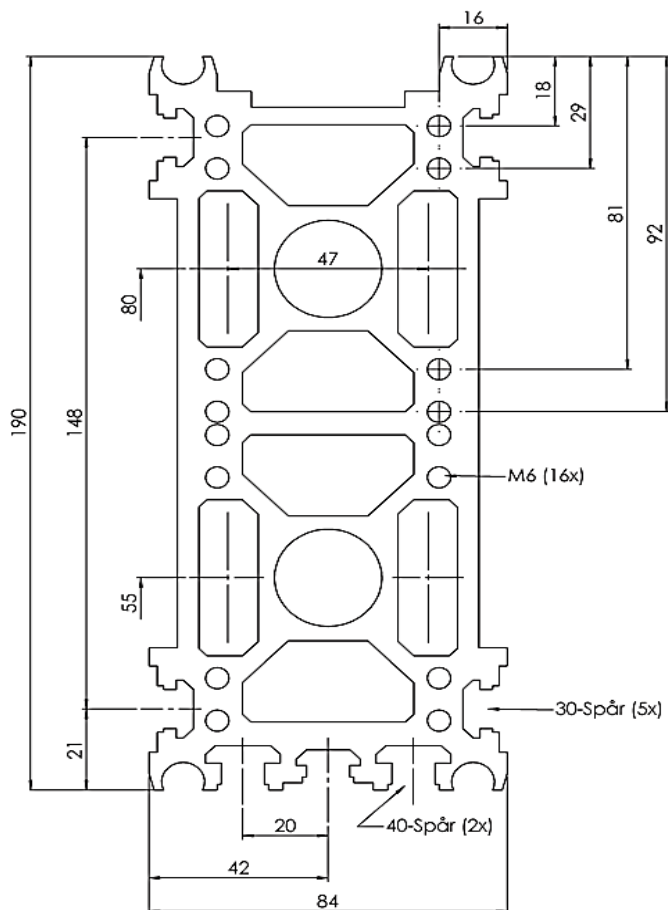
W_x 181 cm⁴

W_y 74 cm⁴

Vikt 15,4 kg/m

max length 7570 mm

Longer length, see splicing



Drive shaft and adaptors



A-side of pulley house,
IEC flange + mtg holes



B-side of pulley house
Pilot dia can be made.

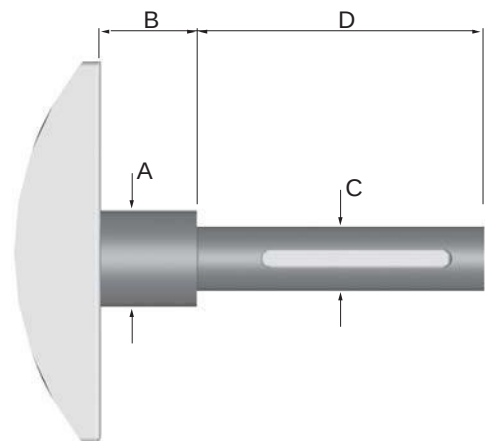
Direct mounting of hollow shaft gearboxes

Aratron has a big number of drive shafts to fit well-known brands of gearboxes: Lenze, Nord, SEW, Siemens as well as many brands of worm gear units. Hollow shaft gearbox with IEC output flange mounts directly on all our units. Pilot dia 80, 95 and 110 are used.

The advantage is compactness, ease and the linear unit carries the motor and gear without coupling and adaptor. Dimensions according to picture are always made for all units.

For parallel drives the shaft can extend through the pulleybox or the hollow gear shaft.

Short shafts are naturally available too for usage with shaft couplings



Direct mounting of planetary gearboxes

For applications where a planetary gearbox is preferred, we have designed modifications to the pulley boxes to fit **Nidec planetary gearboxes** or dimensionally compatible alternatives

Adaptors to mount planetary gearboxes

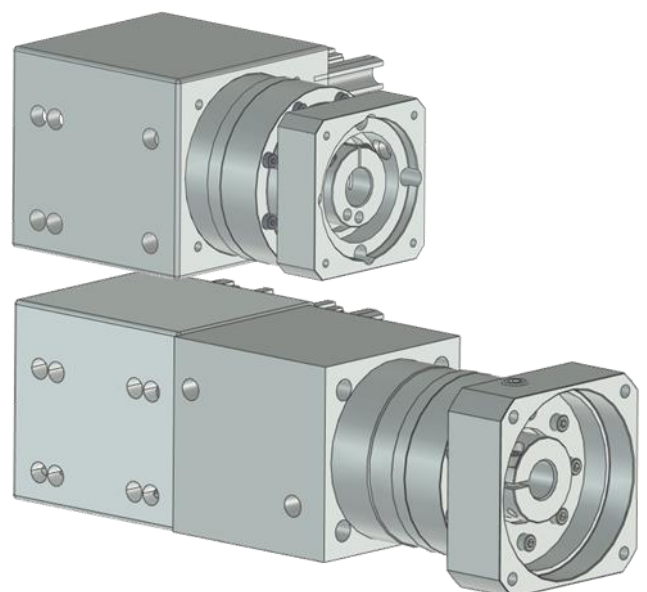
Adaptors, designed to fit between the pulley box and the **Nidec gear** or dimensionally compatible alternatives

See the following pages for the respectively pulley box or contact Aratron for more info.

tel: +46 8 40 41 600 /

www.aratron.se

info@aratron.se

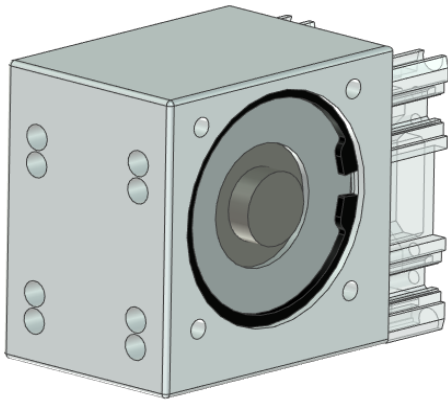


Pulley box AD for ALx2x

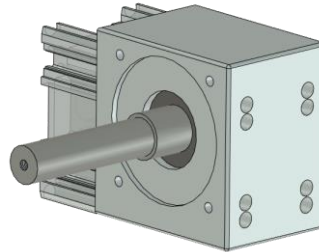
timing belt on 84 side

Pilot according to IEC dia 95 or 110

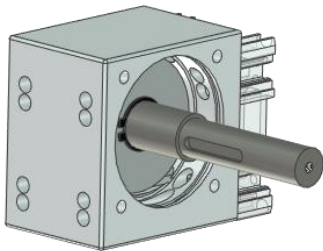
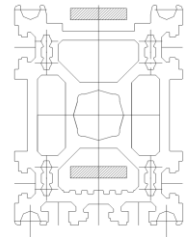
All these options (except three can have the shaft extension through the pulley box for parallel drives.



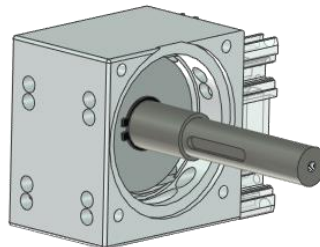
TL1 4AD standard pulley box, IEC 95 pilot dia on A-side



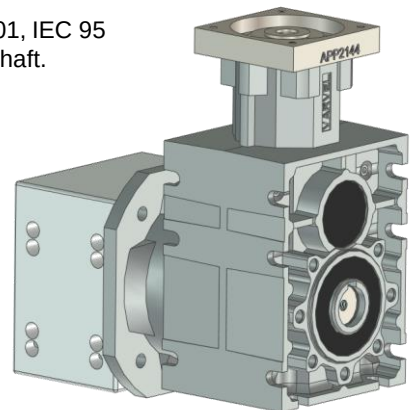
Modified AD box, 1000-1403-01, IEC 95 pilot on B-side, custom drive shaft.
[1301-AD-B-1403-01-1429-SL](#)



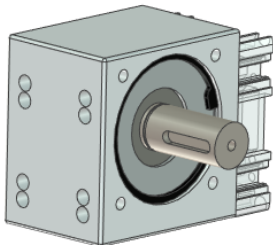
Customized drive shaft for hollow shaft gear IEC 95 pilot on A-side TL1 4AD (or B-side, 1000-1403-01)
[1301-AD-A-1429](#)



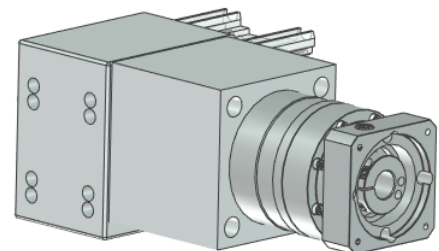
Customized drive shaft for hollow shaft gear IEC 110 pilot on A-side TL1 4AD110 (or B-side 1000-1403-22)
[1301-AD110-A-1429](#)



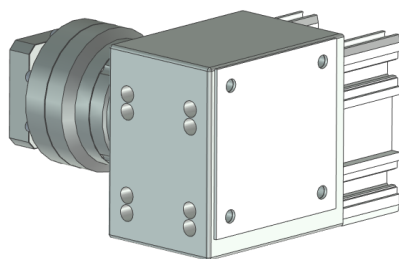
Customized drive shaft and bevel gear Mounting on A or B-side.
[1301-AD110-A-1429-405-SRO02](#)



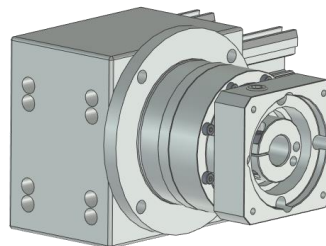
Short shaft and doublesided bearing for use with shaft coupling, TL1 4AD std box.
[1301-AD-A-E1](#)



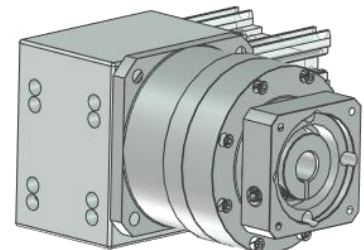
With adaptor, coupling and planetary gearbox VRL090 on A side TL1 4AD (or B-side 1000-1403-01)
[1301-AD-A-201-28-1319-52-VRL090-1](#)



Directly mounted planetary gear VRS075 on B-side 1000-1403-23 box including cover plate
[1301-AD-B-1403-23-VRS075-1](#)



Directly mounted planetary gear VRL090 on A-side TL1 4AD (or B-side 1000-1403-11)
[1301-AD-A-1319-15-VRL090-1](#)



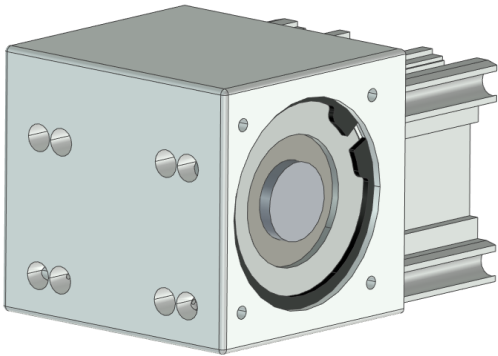
Directly mounted planetary gear VRB115 on A-side 1000-1403-31 (or B-side 1000-1403-30)
[1301-AD110-A-1403-31-VRB115-1](#)

NOTE these three options can not have a through shaft for parallel drives

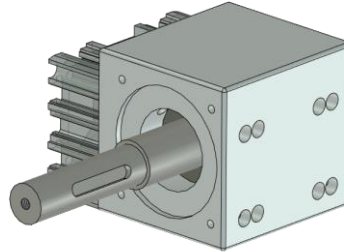
Pulley box AE for ALx3x

timing belt on 110 / 190 side
Pilot according to IEC dia 80

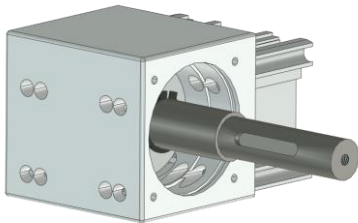
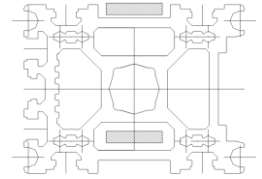
All these options (except one can have the shaft extension through the pulley box for parallel drives.



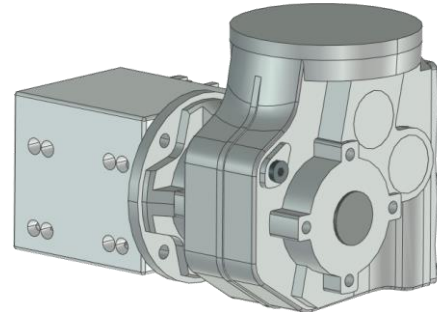
TL1 4AE standard pulley box, IEC 80 pilot dia on A-side



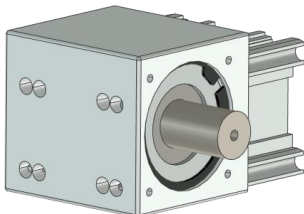
Modified AE box, 1000-1403-02, IEC 80 pilot on B-side, custom drive shaft.
[1301-AE-B-1403-01-1429-SL.zip](#)



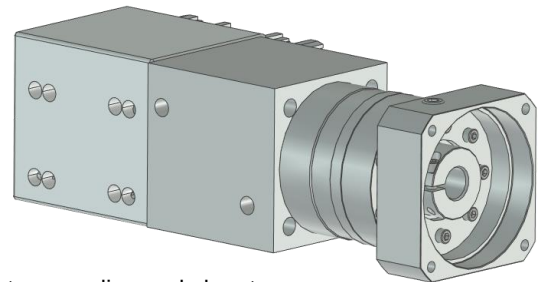
Customized drive shaft for hollow shaft gear IEC 95 pilot on A-side
TL1 4AE [1301-AE-A-1429](#)
(or B-side, 1000-1403-02)



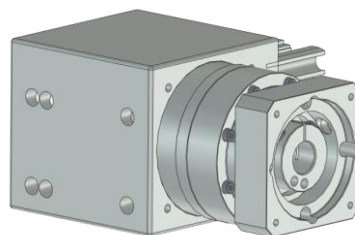
Customized drive shaft and bevel gear Mounting on A or B-side.



Short shaft and doublesided bearing for use with shaft coupling, TL1 4AE box
[1301-AE-A-E1-SL](#)



With adaptor, coupling and planetary gearbox VRL090 on A-side TL1 4AE
[1301-AE-A-E1-28-1319-56-VRL090-1](#)
(or B-side 1000-1403-02)



Directly mounted planetary gear VRL090 on A-side 1000-1319-20
[1301-AE-A-1319-20-VRL090-1](#)
(or B-side 1000-1319-21)

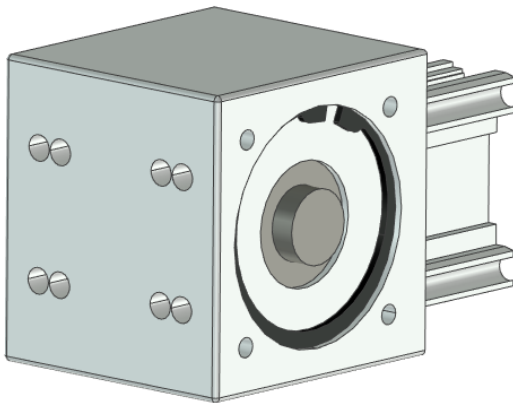
NOTE this alternative can not have a through shaft for parallel drives

Pulley box AF for ALx4x

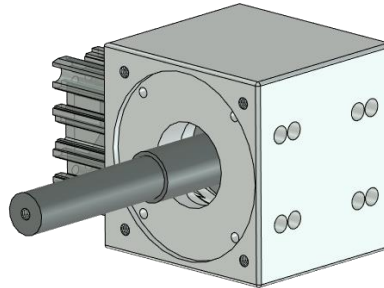
timing belt on 110 / 190 side

Pilot according to IEC dia 80 , 95 or 110

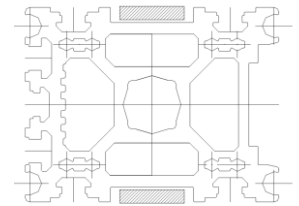
All these pulley boxes can be turned 180 degree for A or B use !



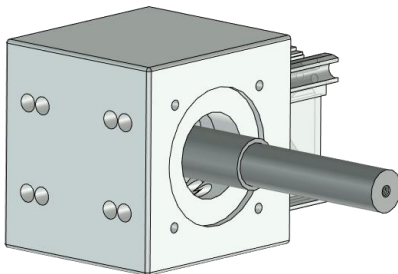
TL1 4AF standard pulley box, IEC 95 pilot dia shown as A-side



Modified AF box, 1000-1403-41, IEC 110 pilot shown as B-side, custom drive shaft.

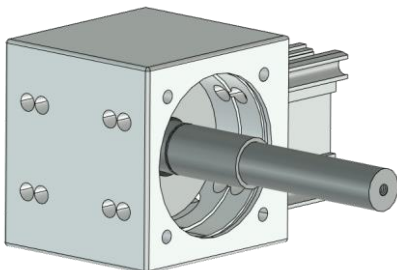


[1301-AF-A-1403-41-1429-SL](#)



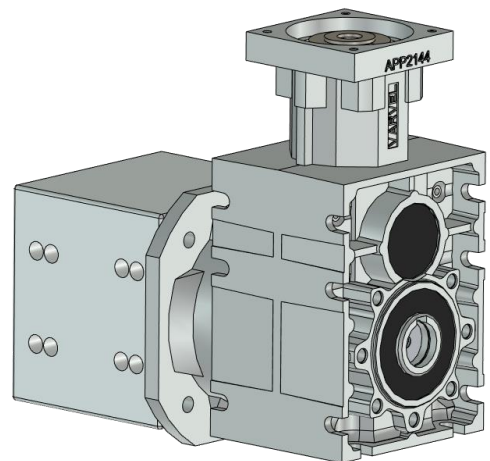
Modified AF box, 1000-1403-06 IEC 80 pilot, shown as A-side

[1301-AF-A-1403-06-1429-SL](#)



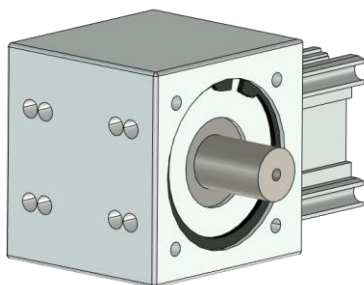
Customized drive shaft for hollow shaft gear
Shown with IEC 95 pilot and A-side TL1 4AF

[1301-AF-A-1429](#)



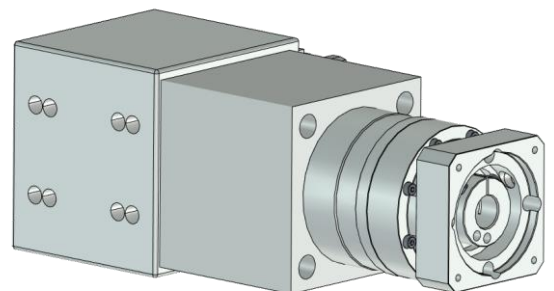
Customized drive shaft with bevel gear IEC 110 pilot, shown as A-side TL1 4AF

[1301-AF-A-1403-41-1429-SR002](#)



Short shaft and doublesided bearing
for use with shaft coupling TL1 4AF
box, shown on A side

[1301-AF-A-E1-SL](#)



With adaptor, coupling and planetary
gearbox VRL090 shown on A-side TL1 4AF

[1301-AF-A-E1-28-1319-52-VRL090-1](#)

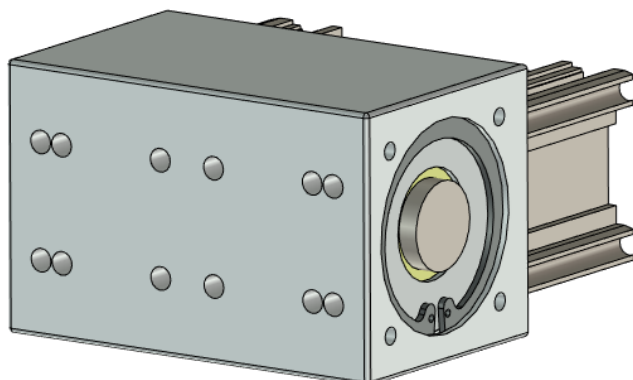
Pulley box AH for ALx5x

timing belt on 190 side

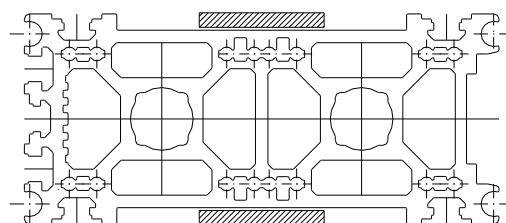
Pilot according to IEC dia 80 , 95 or 110

All these pulley boxes can be turned 180 degree for A or B use !

All these options (except one can have the shaft extension through the pulley box for parallel drives.

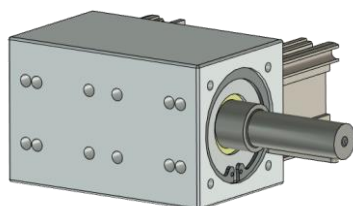
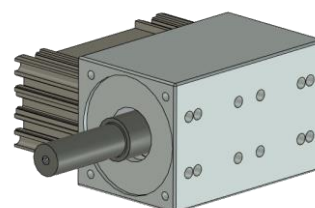


TL1 4AH standard pulley box, IEC 95 pilot dia shown as A-side



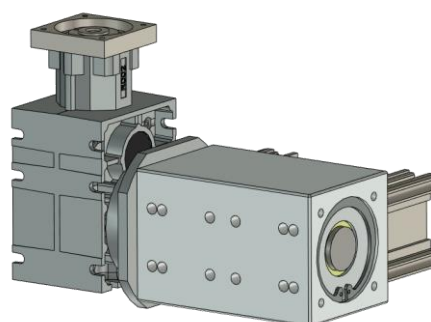
Modified AH box, 1000-1403-08, IEC 110 pilot shown as B-side, custom drive shaft.

[1301-AH110-B-1403-08-1429-SL](#)



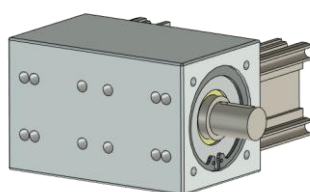
Customized drive shaft for hollow shaft gear Shown with IEC 95 pilot and as A-side

TL1 4AH [1301-AH-A-1429-SL](#)



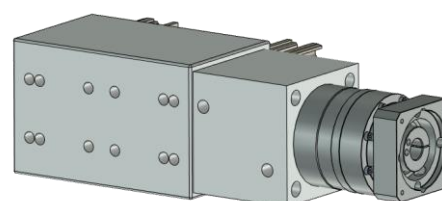
Customized drive shaft with bevel gear IEC 110 pilot, shown as B-side 1000-1403-08

[1301-AH110-B-1403-08-1429-SRO02](#)



Short shaft and doublesided bearing for use with shaft coupling TL1 4AH box, shown as A side

[1301-AH-A-187-SL](#)

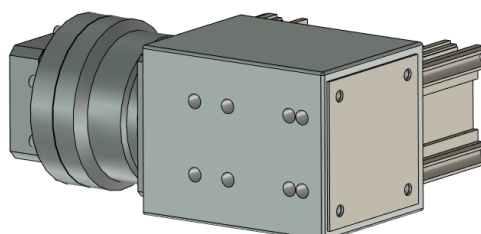


With adaptor, coupling and planetary gearbox VRL090 shown as A-side TL1 4AH

[1301-AH-A-187-28-1319-52-VRL-090-1](#)

Directly mounted planetary gear VRS100 shown as B-side TL1 4AH-VRS100 incl cover plate

[1301-AH-B-4DG-B32-VRS100-1](#)



NOTE this alternative can not have a through shaft for parallel drives

Drives

Shaft couplings

Couplings with both keyway and clamping function for high reliability.

Serie 24, 28 och 38

Hole diameters up to 40 mm.

<https://www.aratron.se/wp-content/uploads/2018/04/Aratron-Lagerstandard-Kloppkopplingar-2018-04-17.pdf>



Planetary gearboxes Nidec

Series VRB / VRS for mounting directly in the pulleyboxes

-VRS 075 or VRB 115 for ALR/ALS23/26

-VRS 100 for ALR/ALS56

Pulley wheel is mounted directly on the shaft of the gear.



Serie VRL 090 for mounting directly in pulleyboxes of linear units

ALR/ALS 33/36

Alternatively with an adaptor and coupling.

There are several flanges for motors available, see "PDF-fil" below, go to table with the shaft size of motor, bushings are available to reduce the hole, i.e from 28 down to 24 or 22

<https://www.aratron.se/sv/vara-produkter/vaxlar/planetvaxlar/>

[PDF-fil \(aratron.se\)](#)

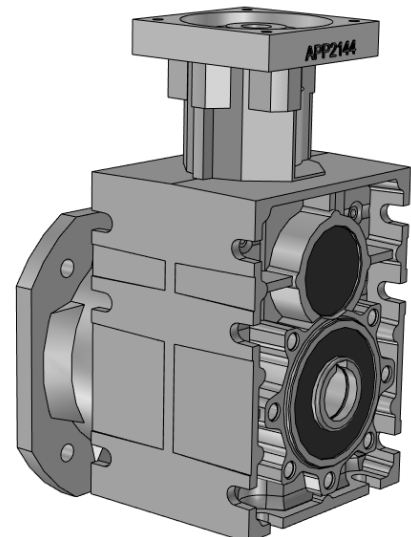
http://www.nidec-shimpo.co.jp/selection/all/index.php?Mode=INDEX&SHORT_NAME=eng



Hollow shaft gearboxes

Bevel gear with IEC flange can be mounted directly on the pulleyboxes. This type of gear is also needed to be used for Z-axis in gantries.

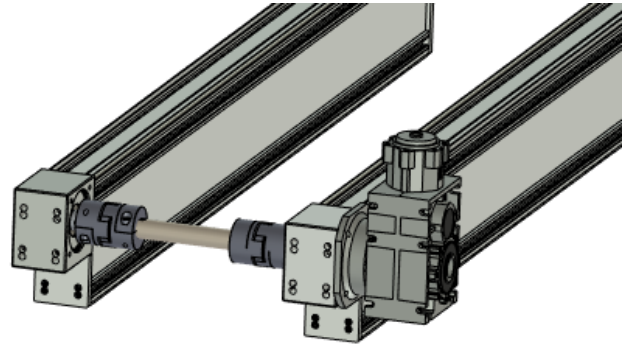
For motor-adaptor plate contact Aratron for more info.



Drives

Parallel drive, direct assembly of gear

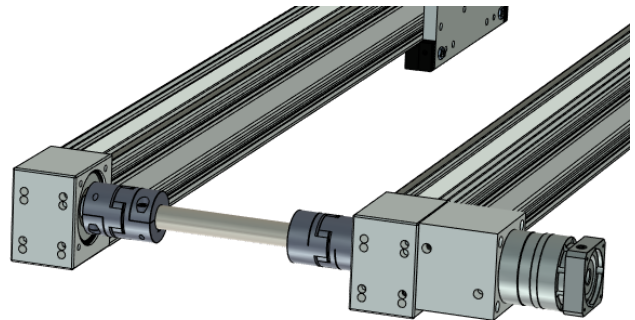
Hollow shaft gear with IEC flange, assembled directly to the pulleybox saves space and is an easy way without additional parts.



Parallel drive with adaptor

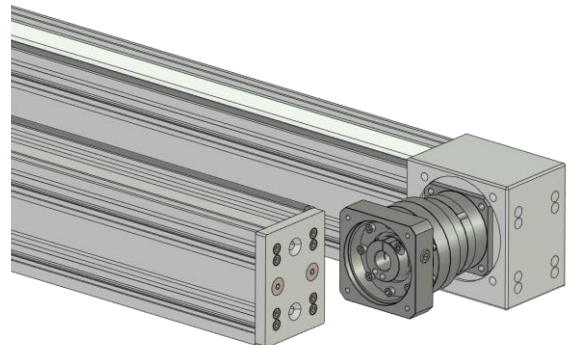
Planetary gear with coupling and adaptor. Gear and couplings as well as transmission shaft can be supplied.

The gear is supplied with proper flange for the motor.



Direct mounting of planetary gear

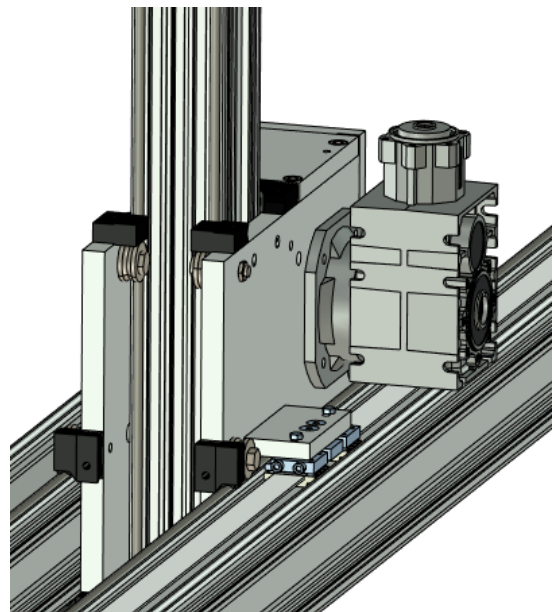
Planet gearbox can in some cases be mounted directly into the pulleybox. This will always be a single belt drive (not parallel)



Vertical drive, gantry units

Hollow shaft gearbox (IEC flange) directly mounted for Z-Omega drive.

A compact solution and no need for Z gear and motor to move up and down.



Mounting alternatives

Fastening with internal steel plates

Steelplates mounted in the internal structure of the profile gives a strong fastening of the linear unit. The plates have M8 threads, cc 80 mm and are fixed with a set screw during transportation. The 190 profile can have plates in two channels, 80 mm apart. The timing belt must be observed as it in some cases give restrictions.

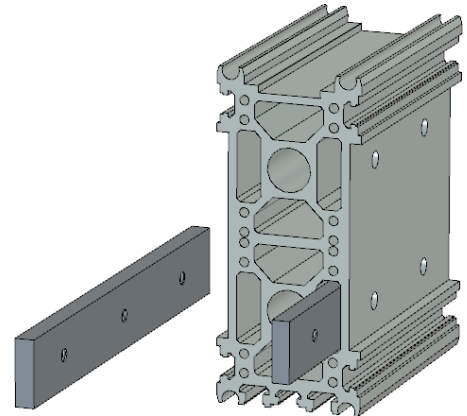
Predrilled holes, 11 mm, are made per drawing.

Dimensions . 238 alt 478 x 35 x 10 mm (l x h x t)

Material . . . Steel

Part no . . . TL1 9CB-STEEL-238

TL1 9CB-STEEL-478



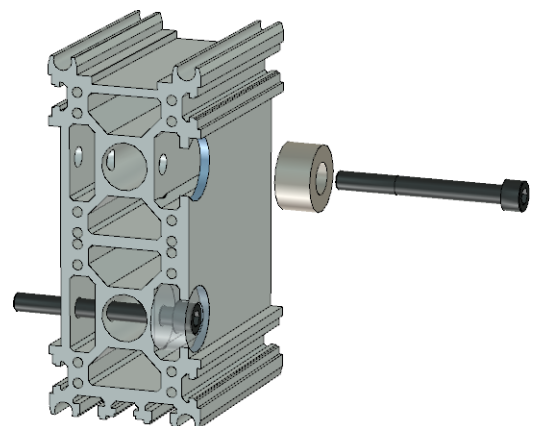
Fastening with plunges

Fastening from the front side with M10 screws through the profile for ALR & ALS 13, 16, 23, 26, 56 and most of the gantries. A thick washer spreads the force in the structure of the profile and gives a secure fastening. Pls note this option needs a min dimension from the belt-return wheels of min 150 mm.

For 110 profile it is one hole and for 190 it is two holes 80 mm apart.

Placement are made in the profile per drawing.

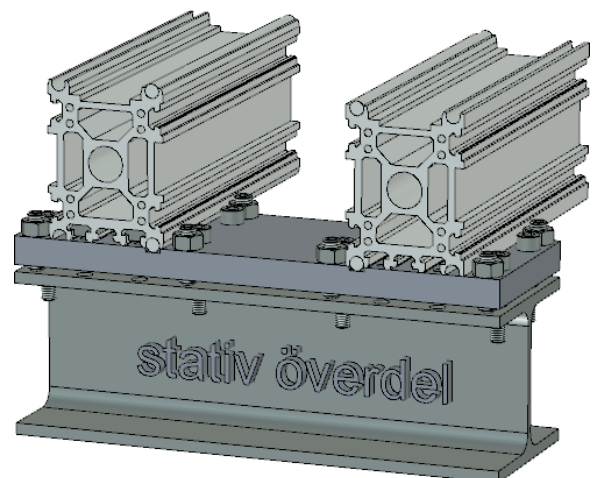
Part no . . . TL1 4HB



Fastening of linear gantry by a mounting plate

This plate allows the gantry to be mounted on a surface w/o the need of machining. Plate have adjustment screws for easy alignment / adjustment:

- The distance between the beams
- Straightness
- Machine frame milling eliminated



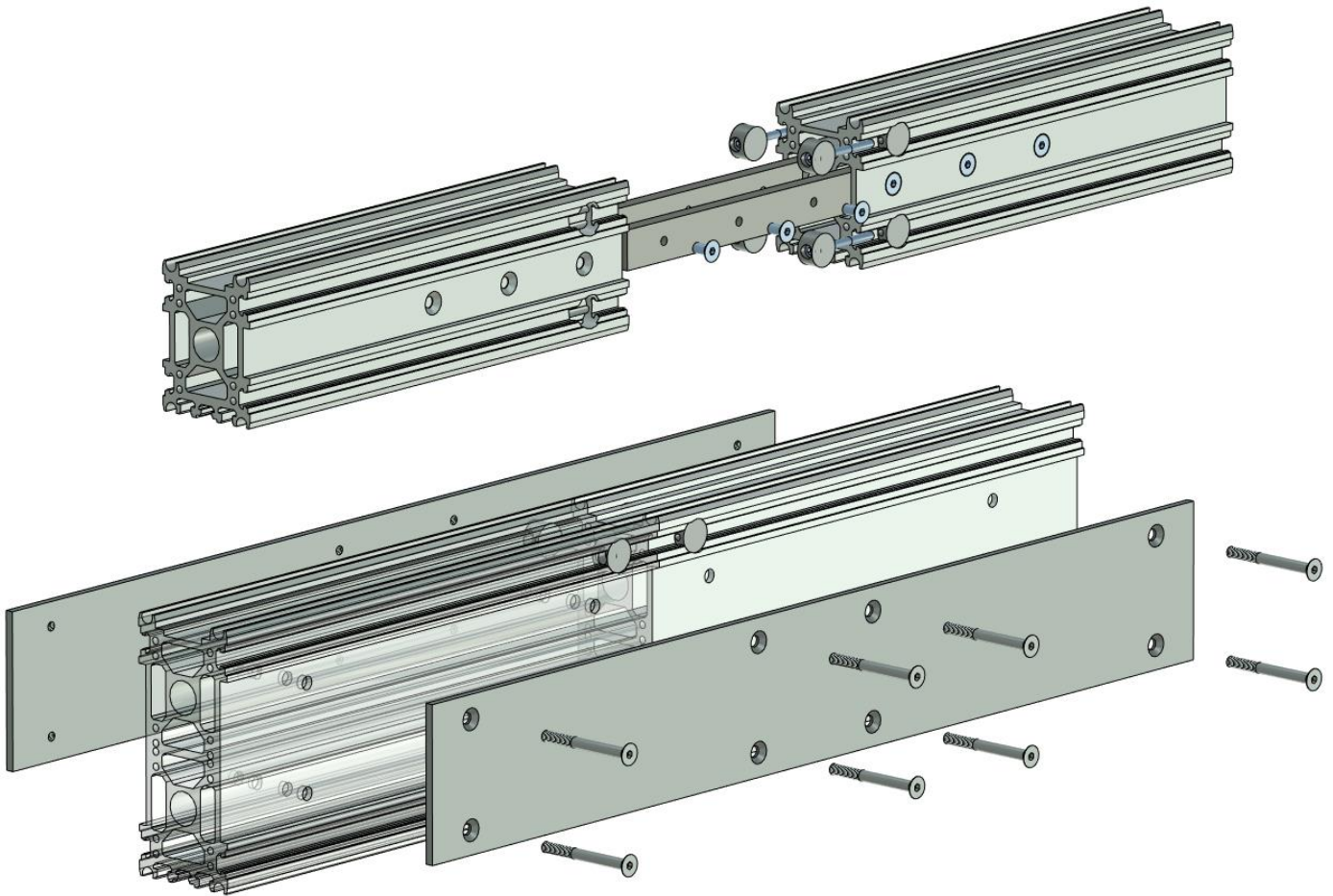
Fastening by the use of slot stones in the grooves

All slots can be prepared with the type N slot stone per request / drawing, ref to page 71.

Splicing of profiles

Splicing method for 110*84 profile

Profile-ends are tightened together by 4 plunge-connections. As an optional reinforcement one a couple of internal steelbars may be used. (pls note: the timing belt give some restrictions)



Splicing method for 190*84 profile

Profile-ends are tightened together by 4 plunge-connections. As an optional reinforcement one a couple of external steelplates, 800 mm long, may be used. The steelplates only fit ALx2x units which means almost all gantry solutions.

This connection gives a very good support and in most cases eliminate the need of external support at the place of the splicing.

Accessories

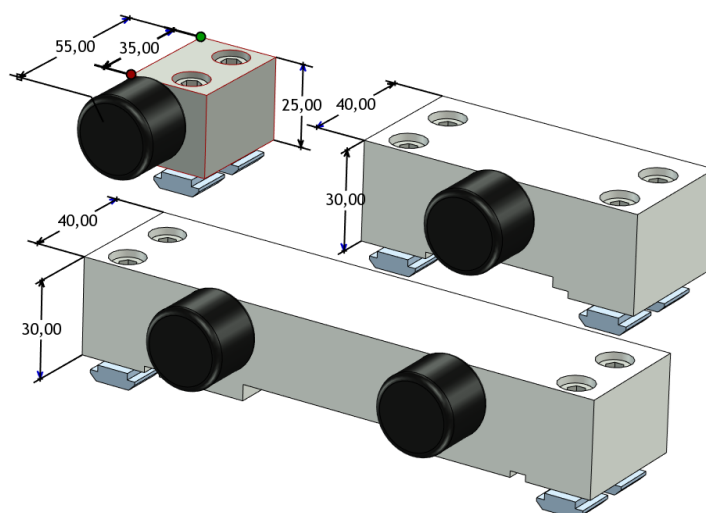
Stop pads

For the linear units and gantries special end stop are available.

These are normally mounted on request but can also be ordered separately.

NOTE, stoppers reduce the available stroke

	Part no
ALR & AP enheter	TL1 9BA-S
ALS x3- enheter	1000-1321-10-S
ALS x6- enheter	1000-1321-09-S



Support bearing kit

The linear units are intended for a direct attachment of gearboxes on the pulley housing. In other cases a support bearing kit is needed.

The kit is supplied as bushing, bearing and a seeger ring.

	Part no
ALR2/ALS2 and ALR4/ALS4	TL1 4GC-S
ALR3/ALS3	TL1 4GB-S
ALR5/ALS5	TL1 4GD-S



Adaptors

An adaptor is needed when the gearbox manufacturer does not have an output flange that conforms to IEC std of the size the linear unit specifies. Aratron have over time developed many adaptors for well-known gear brands

[Contact Aratron for further information .](#)

Info@aratron.se

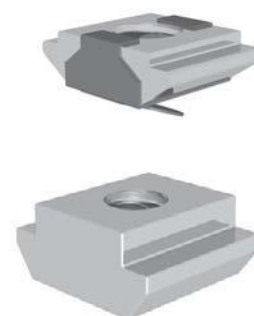


Slotstones

Type F, with spring clip, can be folded down in the groove while type N must be installed from the end.

Pls note the different grooves 30 and 40 size.

	Part no type F	Part no type N
30-groove		
M4	4006716	
M5	4006711	
M6	4006712	4026203
M8		4026206
40-groove		
M4	4006715	
M5	4006713	
M6	4006714	4026203
M8		4026206

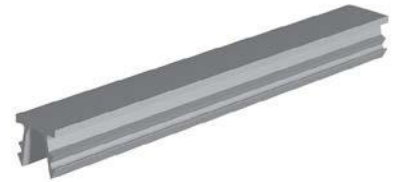


Accessories

Cover strips

cover strips are used for covering T-grooves and / or to fix cables / tubing up to 8 mm dia in the grooves
Manufactured in PVC, 2 meter long.

grey	4000577
yellow	4000579
red	4000581
blue	4000583
black	4000570



Target for sensors

All units with roller linear bearing have mounting holes prepared for usage of prox swithes M12*1.
The target is movable anywhere along the groove in the profile.
Length 60 mm
Proximity switch is not included.

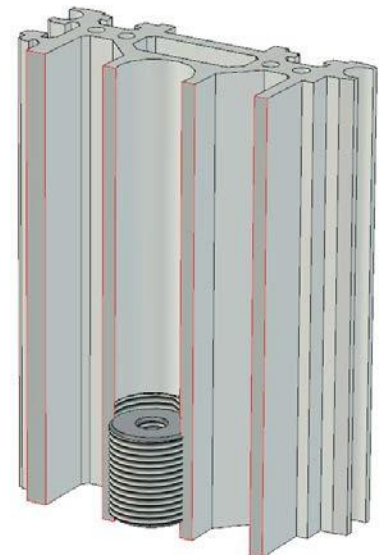
Part noTL19A-60-S-KIT



Thread insert

In the lower end of gantries a threaded insert can be mounted.
This option gives a very strong fixation of gripper attachments.
Thd ext M27*2-30 , int M10*1,5-30

Part no 1000-1349-08



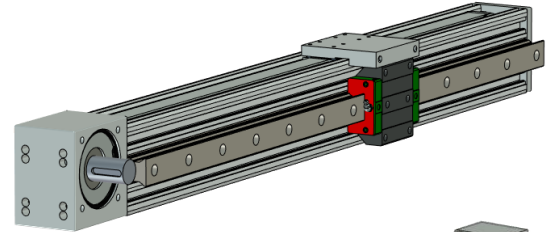
Alternative designs

Aratron have long experience designing linear and gantry units to optimize solutions for our customer. With our AL/AP-system we have, in an easy way, the flexibility to achieve cost-effective customized solutions with "that little extra".

The following pages show a selection of units we made on behalf of customers but mainly consisting of our standard details.

ALS23-CGW35

ALS23-35 with one carriage, size 35 to achieve a unit which gives a short dimension combined with high rigidity.



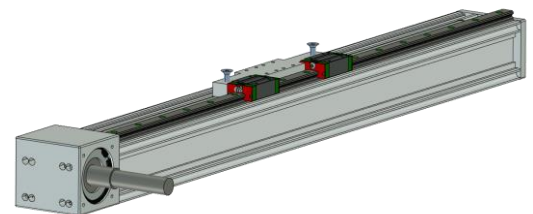
ALR36U-double timing belts

This unit has two belt drives for separate driving of the carriages. It is also possible to have the carriages on each side of the profile to be able to "pass each other".



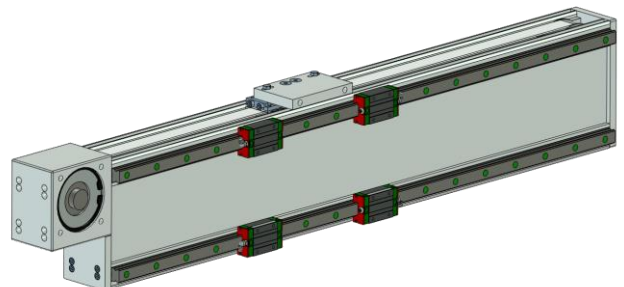
ALS33-single guide rail

Linear unit with just one rail and two blocks, suitable for applications where two parallel units are mounted, delivered with or without a carriage plate.



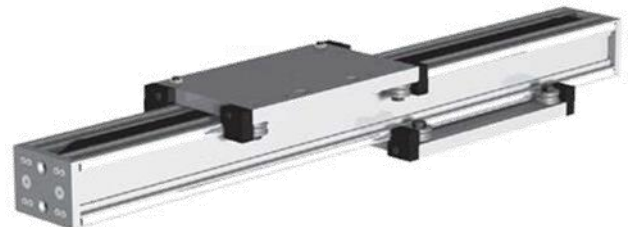
ALS26U- with two guide rails

ALS26 without carriage plate, the customer makes an own based on our basic drawing



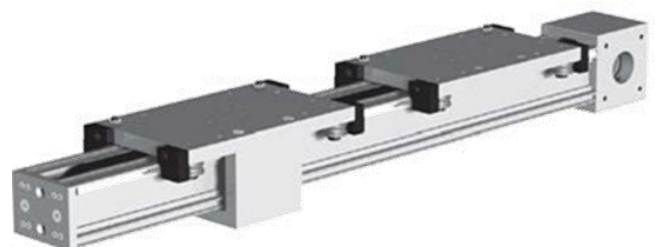
ALR43-beltsynchronized right - left

A solution with two return wheels mounted into the profile, the carriages will have a synchronized motion by use of the timing belt.



ALR43-belt driven right – left

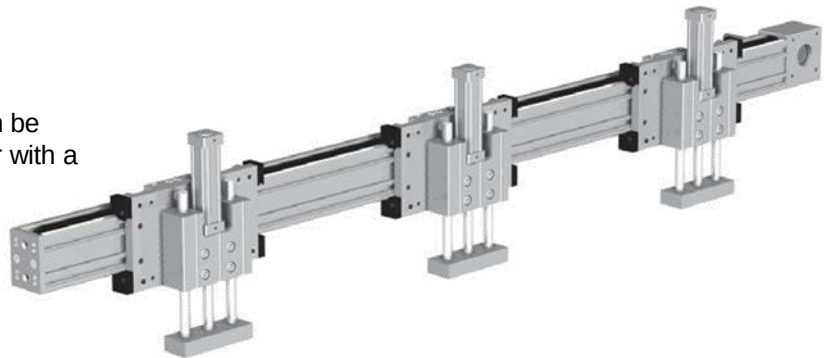
A unit with the carriages connected to the timing belt to get a right – left synchronized motion. The lower part of the belt is connected with a bracket.



Alternative designs

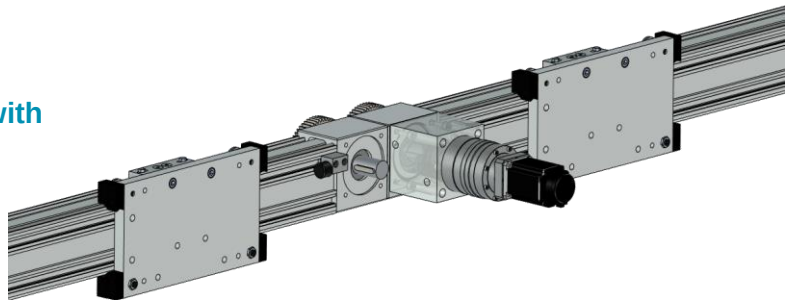
ALR23-transferunit

Linear unit with multiple carriages to get a transferfunction. The vertical movement can be pneumatic units or with a ballscrew together with a guide rail attached to the carriage. The carriages can be supplied with custom hole pattern.



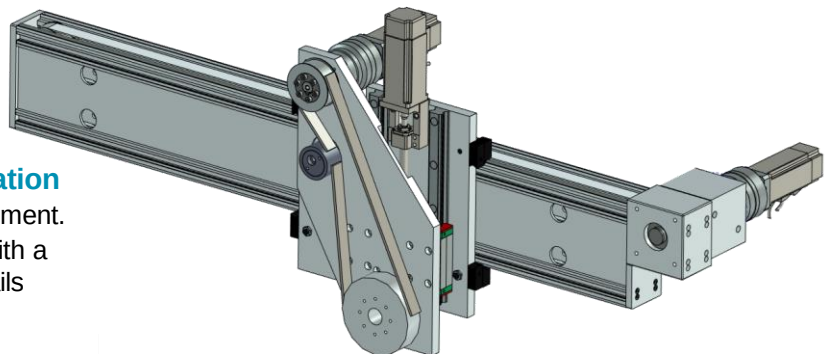
ALR23-belt driven units, synchronized with sprockets

ALR23 units for e.g. format changes where right-left gear is desired, obtained with the help of 2 gears !
(this saves a motor and gear)



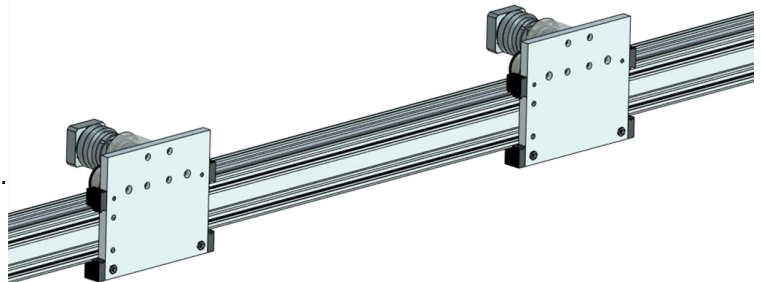
ALR26U-with Z-movement and rotation

A unit with ball screw and rails for Z movement. Gripper bracket has a rotation mounted with a cross roller bearing to be able to turn details upside down.



ALR63-belt driven

A unit with two separately omega-driven carriages. Equipped with planetary gears..



ALS63-43 telescopic motion

Linear unit with fixed motor, movable beam and synchronized carriages that provides a telescopic function.



Combinations

ALS56 with ballscrew + ALR26

Ball screw drive vertically, common carriage plate, horizontal beam movable

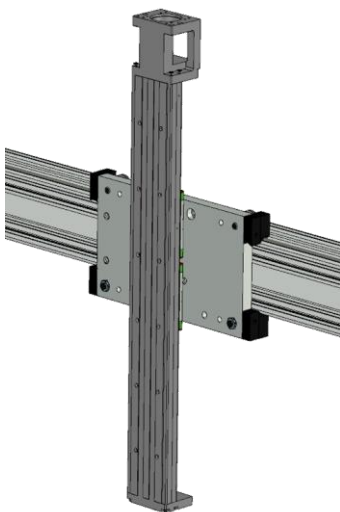


ALR26U-ALS23-35

Belt-driven linear combination with the vertical beam fixed mounted on the horizontal carriage. Rail guide provides a short length on the vertical unit.

ALR26-ALR23

Belt-driven linear combination with the vertical unit moving. These two units have a common carriage with all the rollers directly mounted in the plate, TL1 1MA (R). Compact and simple solution.



ALR kombinerad med Hiwin KK serie

For shorter transverse or lifting movements together with a longer longitudinal movement, series KK linear units can often be a very good alternative. These are delivered with one or two sledges. The rail is made entirely of steel for high rigidity and takes high loads. Motor adapters and shaft couplings are available.

Link: [CAD Hiwin KK-enheter](#)

Combinations

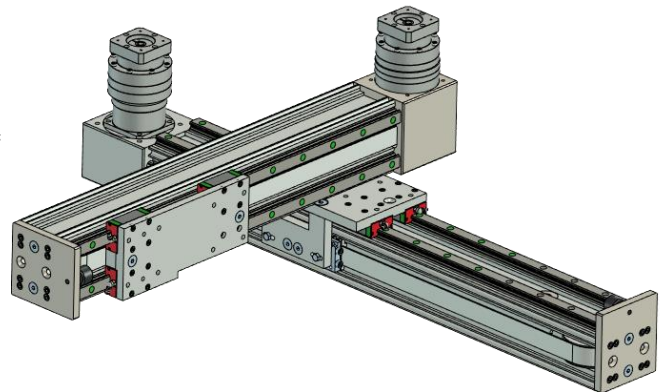
ALR56-ALR23

Belt-driven linear combination with the transverse linear unit fix mounted on the horizontal carriage.



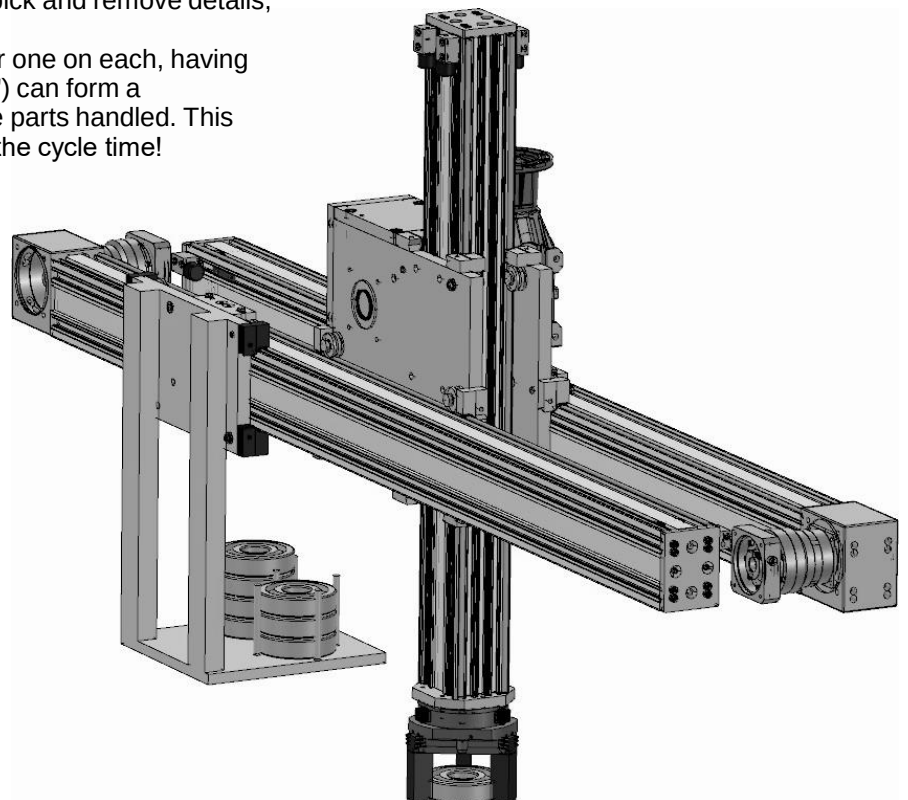
ALS23-ALS33

Belt-driven linear combination with the transverse beam fix mounted on the horizontal carriage. Three guiderail blocks allows most of the carriage of the crossing unit to be driven in over the horizontal.



Extra carriage mounted on e.g. linear gantry

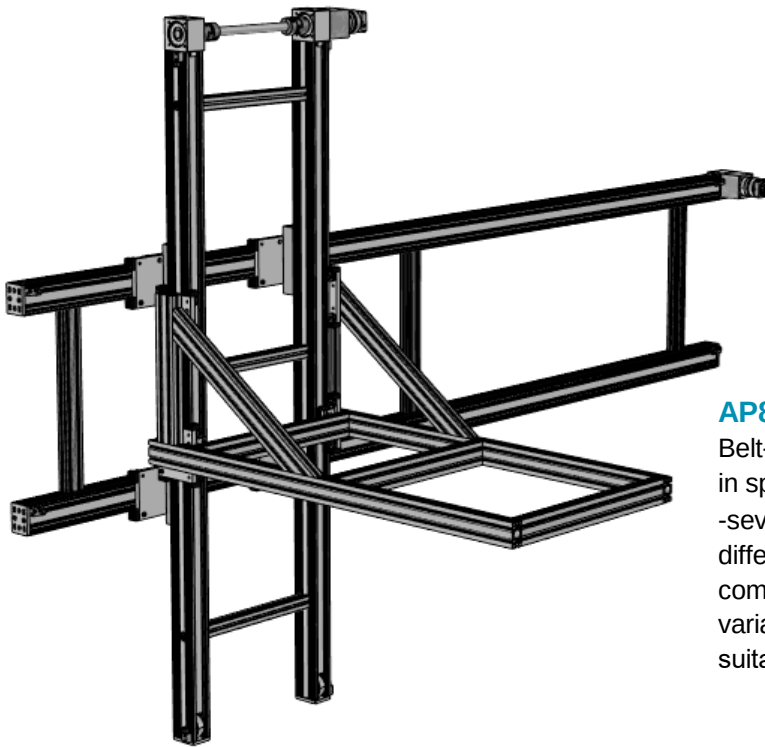
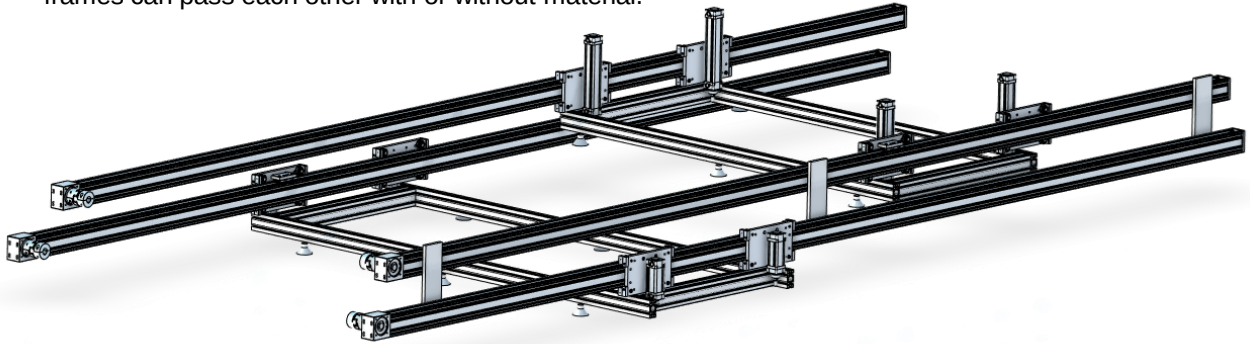
An extra carriage with a separate belt drive and motor can easily be mounted outside on gantries AP230-260 / AP520-560. This carriage can pass the Y-Z box on the outside alternatively be mounted on the inside of the Y-bars. This option gives opportunities to pick and remove details, spacers in stoves and similar. A carriage like this on the beam (or one on each, having them connected with a "U-bracket") can form a intermediate storage station for the parts handled. This ability to "store" can often shorten the cycle time!



Solutions from Aratron

High capacity stacker solution

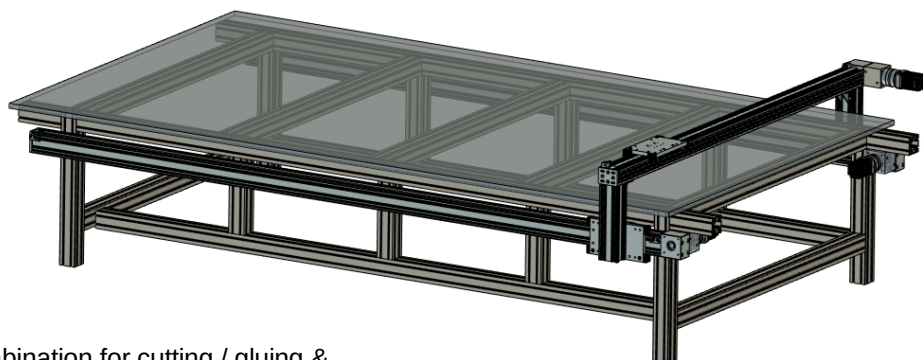
Belt-driven linear combination for handling board material. Two separate drives horizontally, the gripper frames can pass each other with or without material.



AP800-combination

Belt-driven linear combination for stacking applications in spaces with limited ceiling height.

-several variants of these solutions, with slightly different characteristics already exist. Customized combinations are often easy to arrange through our variety combination possibilities and some small suitable adaptation perhaps....



X-Y combination

Belt-driven linear combination for cutting / gluing & surface coating applications. Free bench surface..

Creative system solutions from Aratron

AP133-ALR23

Belt-driven linear combination with two separate drives horizontally, the vertical beams separately driven with omega drive.



AP800-combination

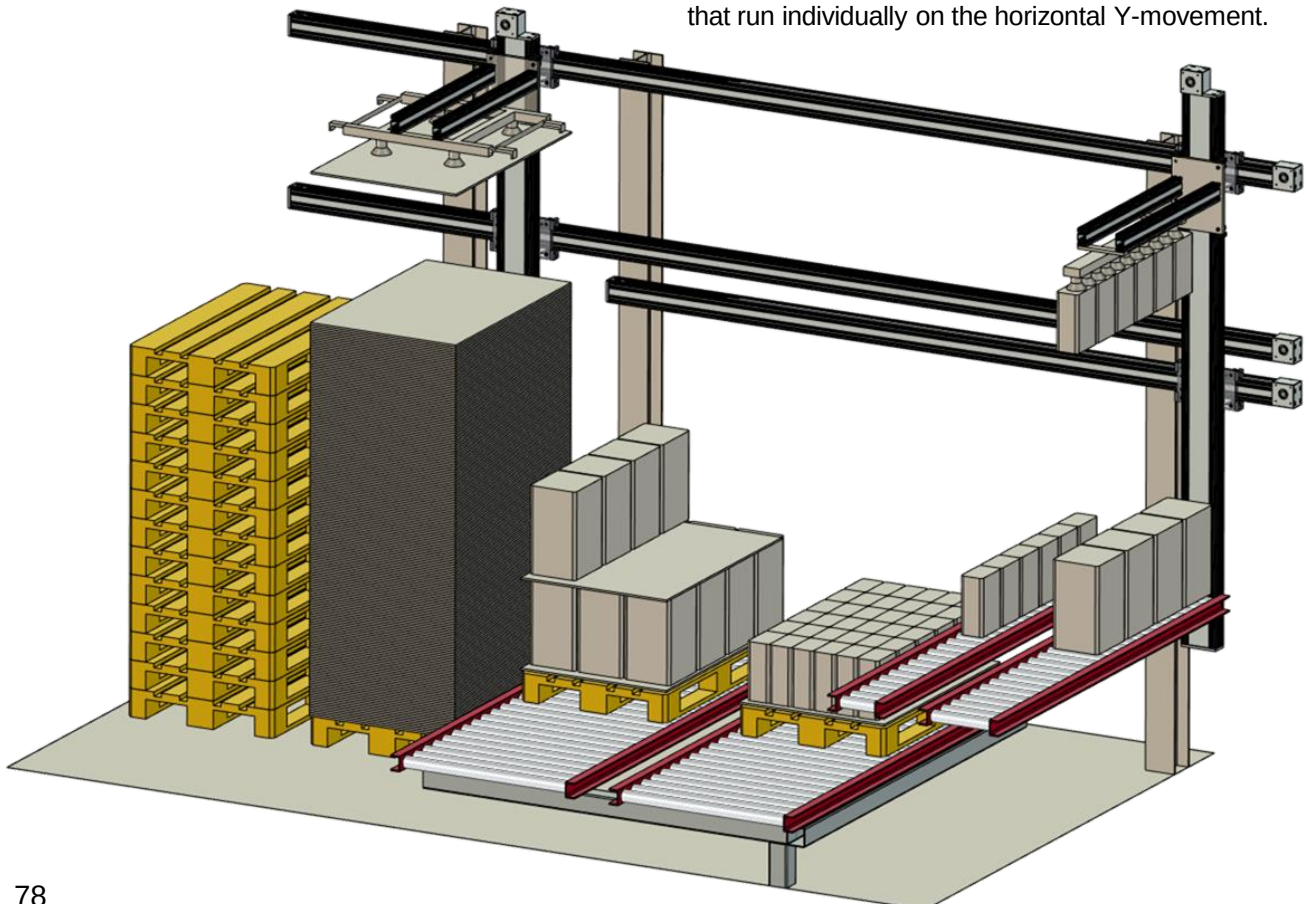
Belt-driven linear combination for stacking applications in spaces with limited ceiling height.

We have many different variants of these solutions.

AP800-combination

Belt-driven linear combination for stacking applications in spaces with limited ceiling height.

The picture shows two separate vertical movements that run individually on the horizontal Y-movement.

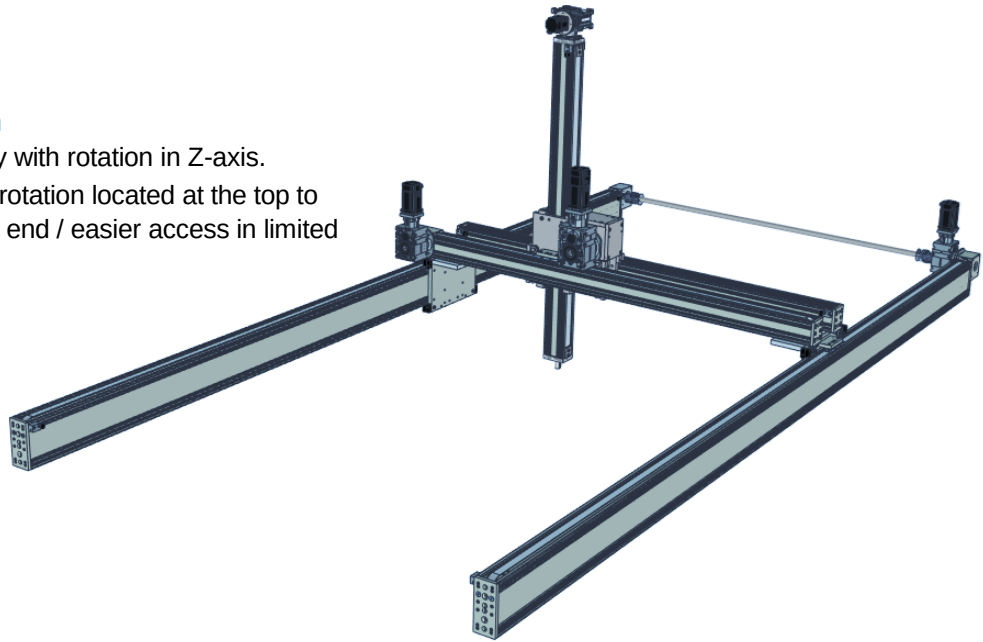


Creative system solutions from Aratron

AP530-with rotation

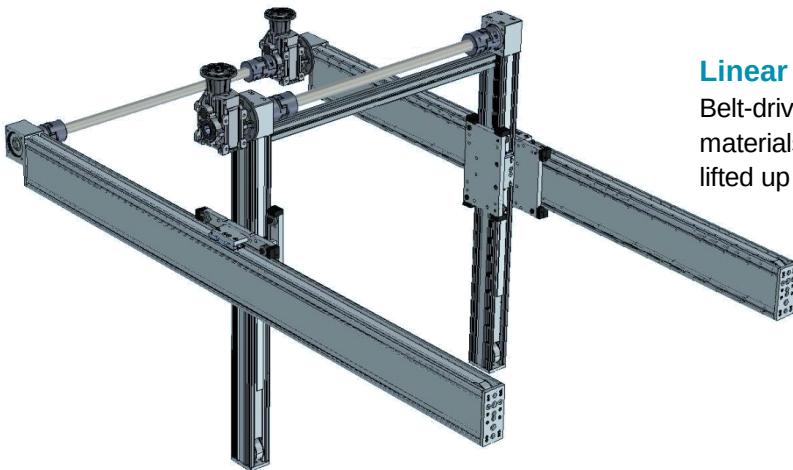
Belt-driven X-Y-Z gantry with rotation in Z-axis.

Motor and gear for the rotation located at the top to save space in the lower end / easier access in limited areas.



Linear gantry solution

Belt-driven 2-axis solution for eg larger "surface materials" where gripper construction and material are lifted up in-between the vertical units.



AP234 variant

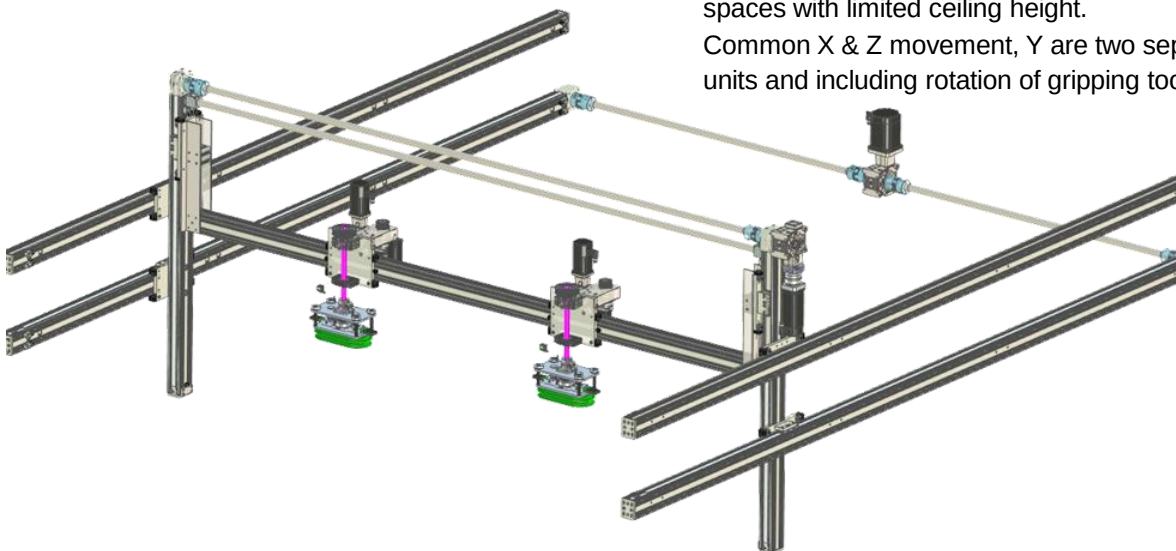
Belt-driven linear combination with two separate drives horizontally, the vertical beams separately driven with omega drive. One vertical has a turning function to be able to hand over details "upside down" where details are stacked "every other".

Creative system solutions from Aratron



Linear gantry

Belt-driven linear combination for stacking larger board material in spaces with limited ceiling height.



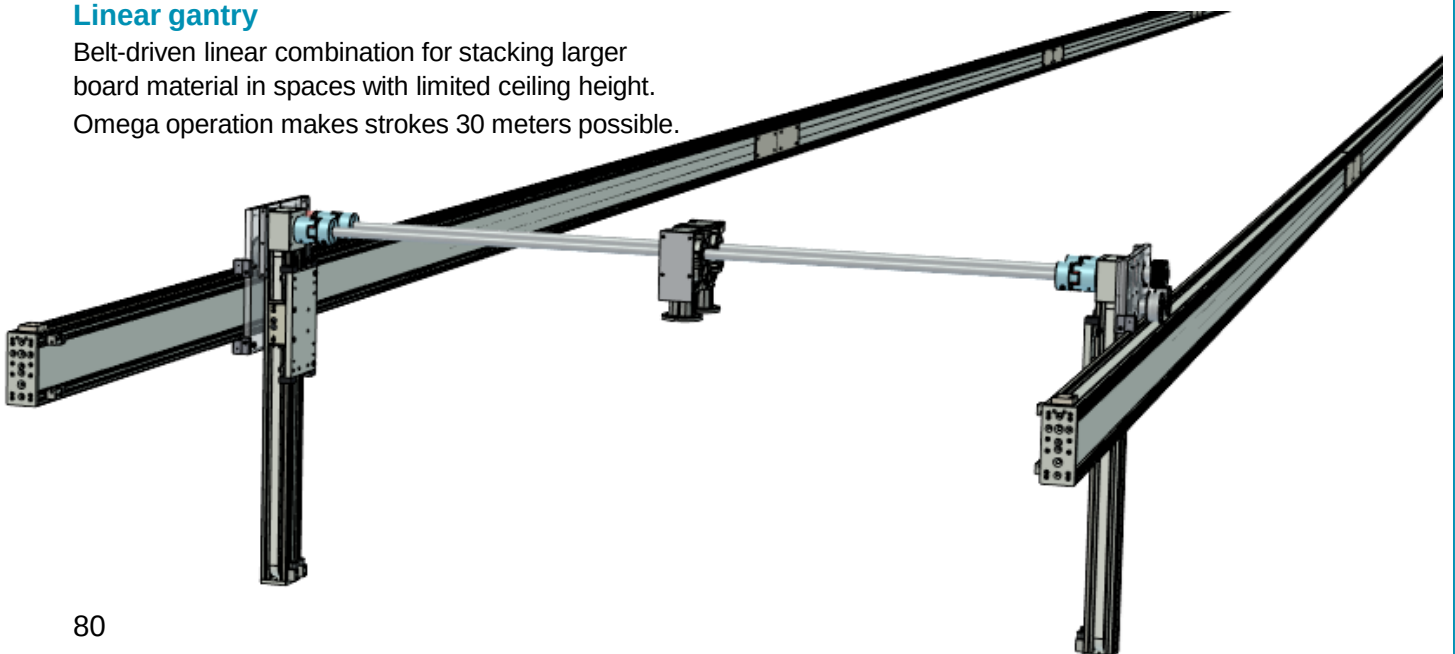
Linear combination X-Y-Z and rotation

Belt-driven linear combination for stacking applications in spaces with limited ceiling height.

Common X & Z movement, Y are two separately driven units and including rotation of gripping tools.

Linear gantry

Belt-driven linear combination for stacking larger board material in spaces with limited ceiling height.
Omega operation makes strokes 30 meters possible.



Solutions

Vertical lift / elevators

Depending on the load and torque, a simple linear unit or an assembly of 2 linear units can be used for vertical conveyor applications.

Can be built in several designs depending on application and needs. Roller bearing or rail guides, belt or ball screw drive.

Aratron can calculate and suggest a solution based on loads as well as the dynamic torques that occur, also suggesting gears and motors.



Robot tracks

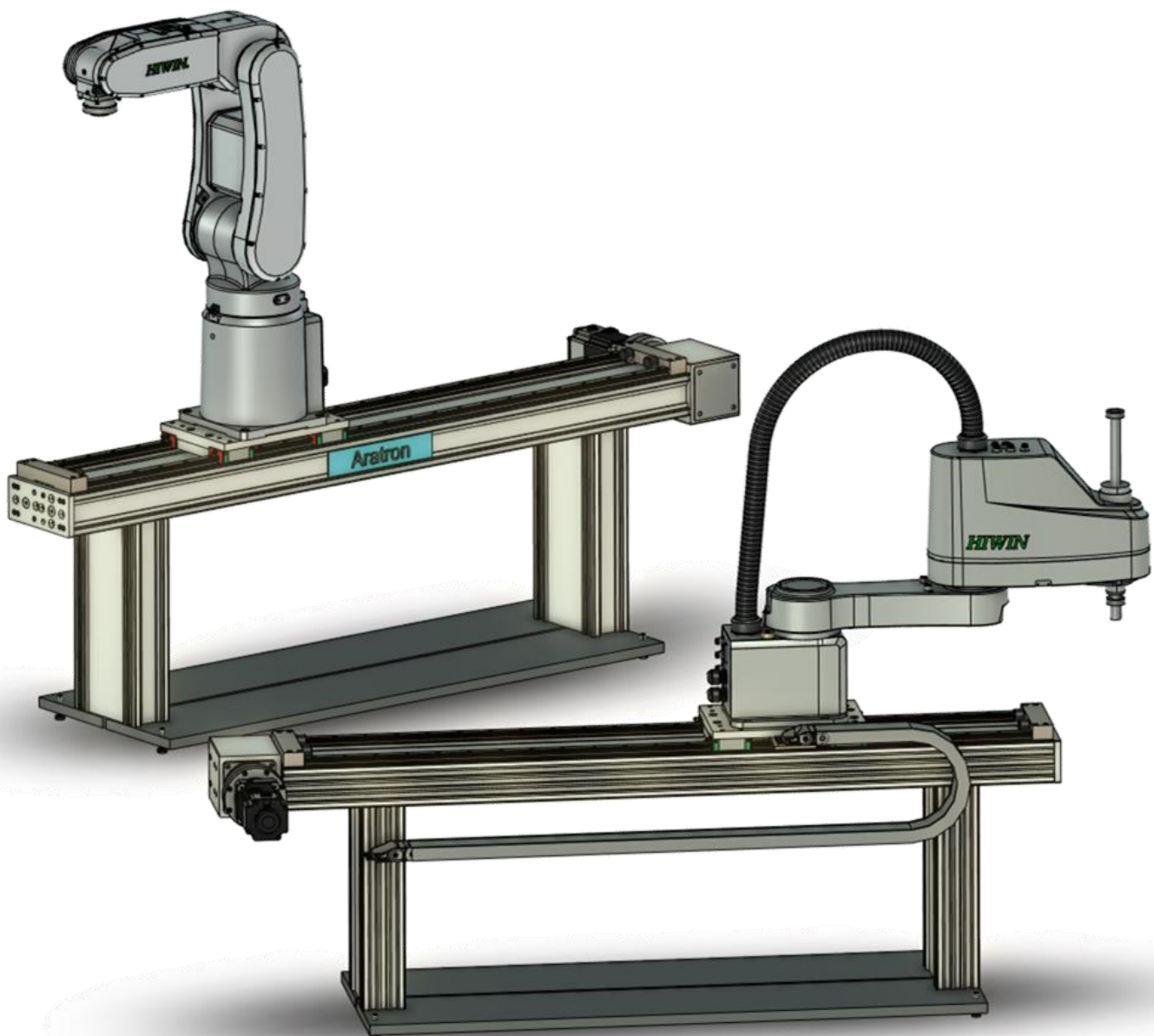
Robot tracks / adapted linear units

Belt-driven tracks for smaller robots.

Floor or "ceiling mounting".

Floor-stands in the pictures are only seen as examples, other solutions can easily be designed. Carriage plates with proper hole patterns for common robots are listed.

See also pg 20 , 25 & 83



Robot tracks

Robot tracks

Belt-driven tracks for both smaller and slightly larger robots.

Floor or "ceiling mounting"

See also pg 20 , 25 & 82



Linear motors

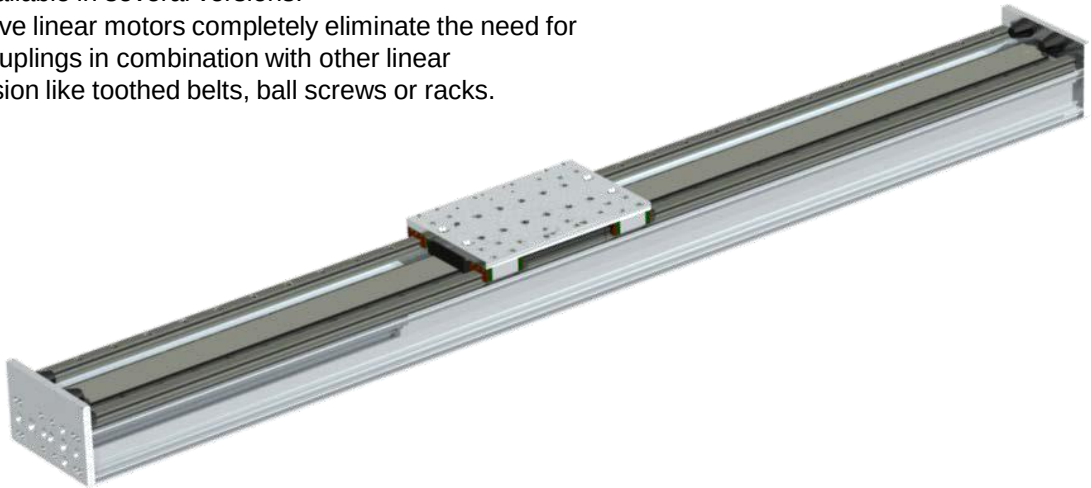
Linear motor-driven solutions

Linear units with linear motor drive for maximum performance and longest service life

For fast movements, high repeatability and accuracy, long strokes, linear motors are the best option available today. Speeds up to 5m/s and accelerations up to 50m/s².

Accuracy is depending on the resolution of the measuring scale, available in several versions.

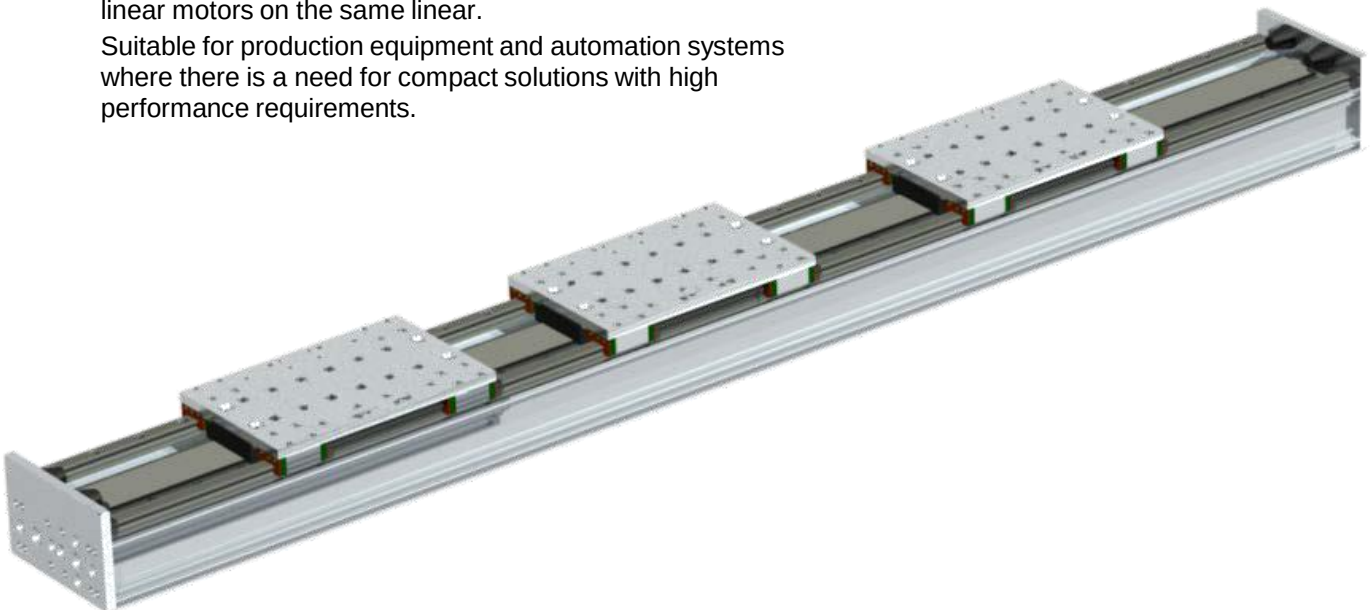
Direct-drive linear motors completely eliminate the need for gears, couplings in combination with other linear transmission like toothed belts, ball screws or racks.



Several sledges can be driven separately on the same linear unit

It is possible to separately drive, control and regulate several linear motors on the same linear.

Suitable for production equipment and automation systems where there is a need for compact solutions with high performance requirements.



Servo, motor and drives

HIWIN®
Motion Control and System Technology



**CONTROL
TECHNIQUES**



Aratron also offers solutions with servo drives from other motor suppliers with the following communication interfaces

EtherCAT®

**PROFI
NET®**

ETHERNET
POWERLINK



EtherCAT®

HIWIN Servodrives Serie E1

The universal design, supporting AC servo motor, linear motor and direct drive motor, meets the application needs of various industries.

The intelligent tuneless function can easily handle mechanism with different load changes, make the machine operate fast and stably, and effectively shorten the setup time.

•The evolving auto tune function can help the machine achieve its best performance. With 3.2kHz speed bandwidth, the productivity of the stage can be greatly increased.

The excellent performance of the unique gantry control function provides users a high performance and more cost-effective solution for control system.

•Support Functional Safety: STO function

•Support three types of pulse signal (A/B, Pulse/dir, CW/CCW) for command input

•With two independent channels of 16-bit high-resolution analog voltage command input, suitable for velocity control mode and torque control mode

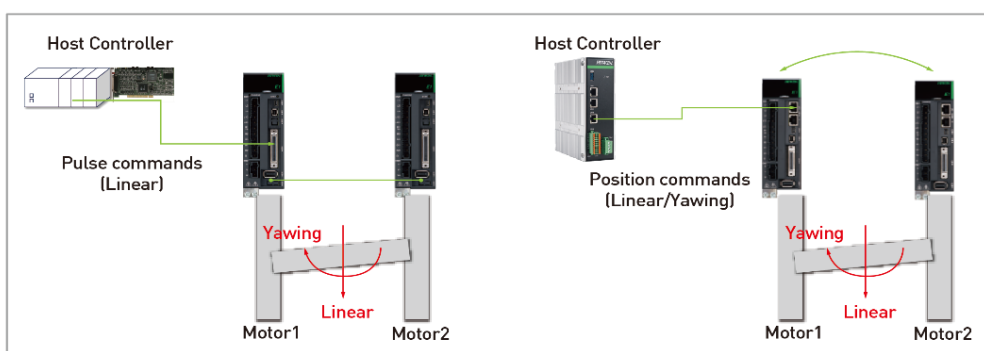
•Support standard EtherCAT (CoE) high speed communication interface

•Built-in velocity ripple compensation, vibration suppression and error compensation

HIWIN MIKROSYSTEM | Drive Highlight

Unique Gantry Application

Combines two E1 drives to realize gantry algorithm which contains linear and yawing control.



DIGITAX HD

One System for all your automation needs



COMMUNICATIONS

- Profinet
- EtherCat
- EtherNet I/P
- Modbus TCP
- PowerLink
- CANopen
- Interbus
- Profibus
- DeviceNet
- Modbus-RTU

FROM STAND ALONE...

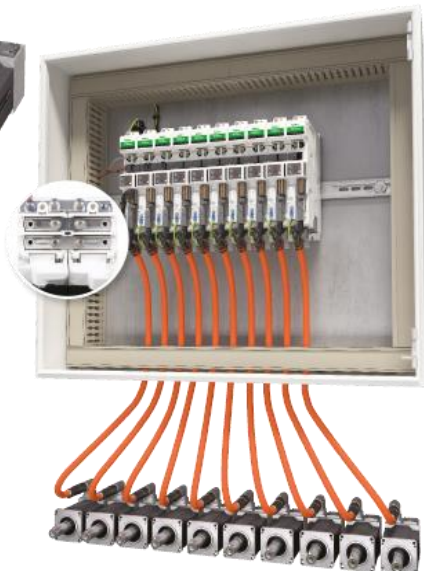
- Optimal solution for single-axis applications
- Minimum number of spare components
- Easy configuration and installation

...TO A MODULAR COMMON DC BUS SYSTEM

- Common DC bus for energy efficiency
- Reduce wiring complexity
- Space saving for high-axis-count applications

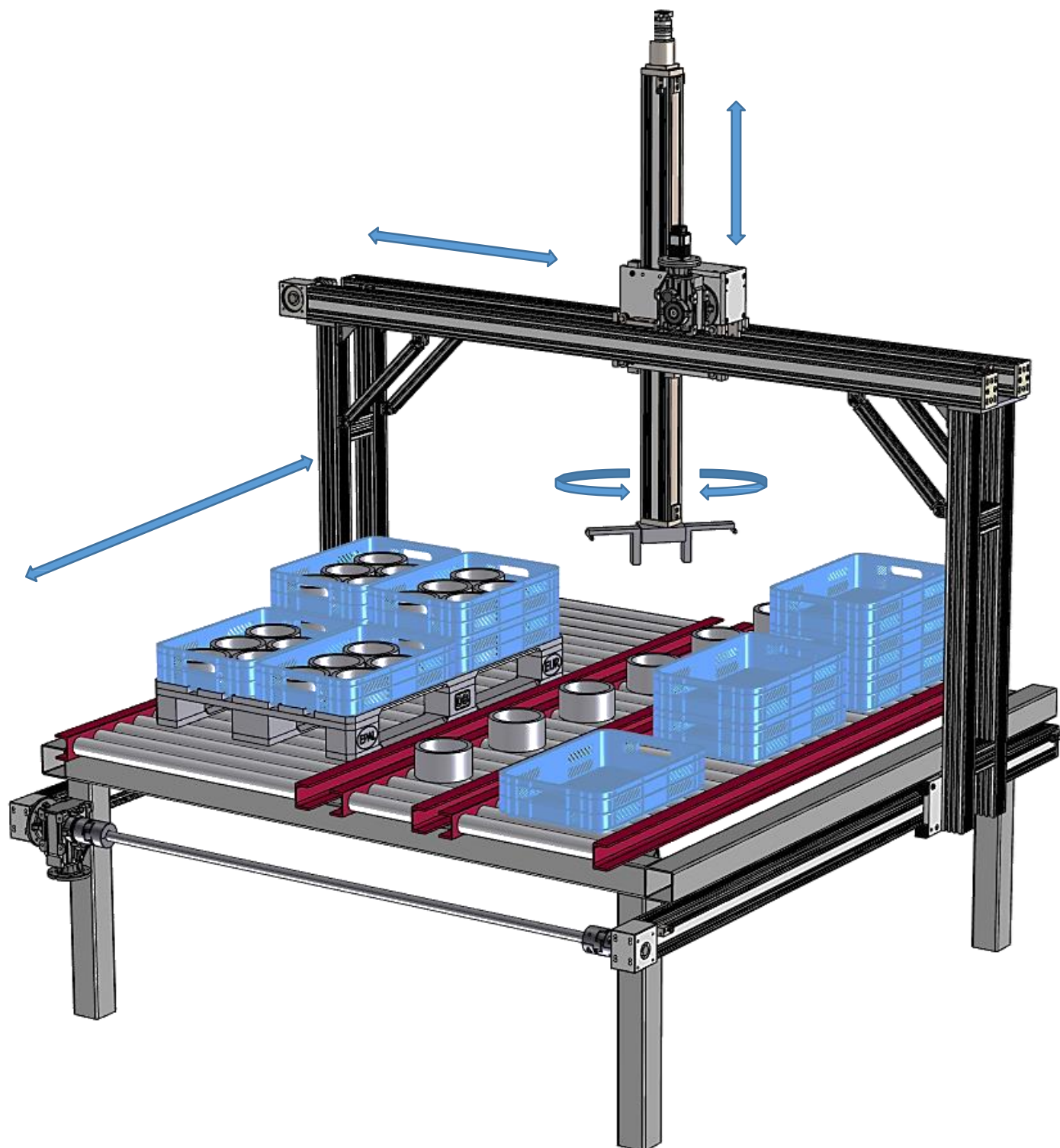
DIGITAX HD – THE BEST OF BOTH WORLDS

- Full standalone capability with best in class current density
- Competitive footprint in multi-axis configuration
- Reduced complexity without external power supply
- Maximum flexibility in mixing current ratings



Aratron

Set your thoughts in motion



From idea to concept and system...

Specialists on components and systems for linear & rotary motion
Technical partner for machine design, product development and industrial automation
System partner for the manufacture of customized subsystems without CE marking
Supplier with warehousing & logistics solutions for components and subsystems
Manufacturer of tooth belt pulleys, linear units, gantry robots and robot tracks

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