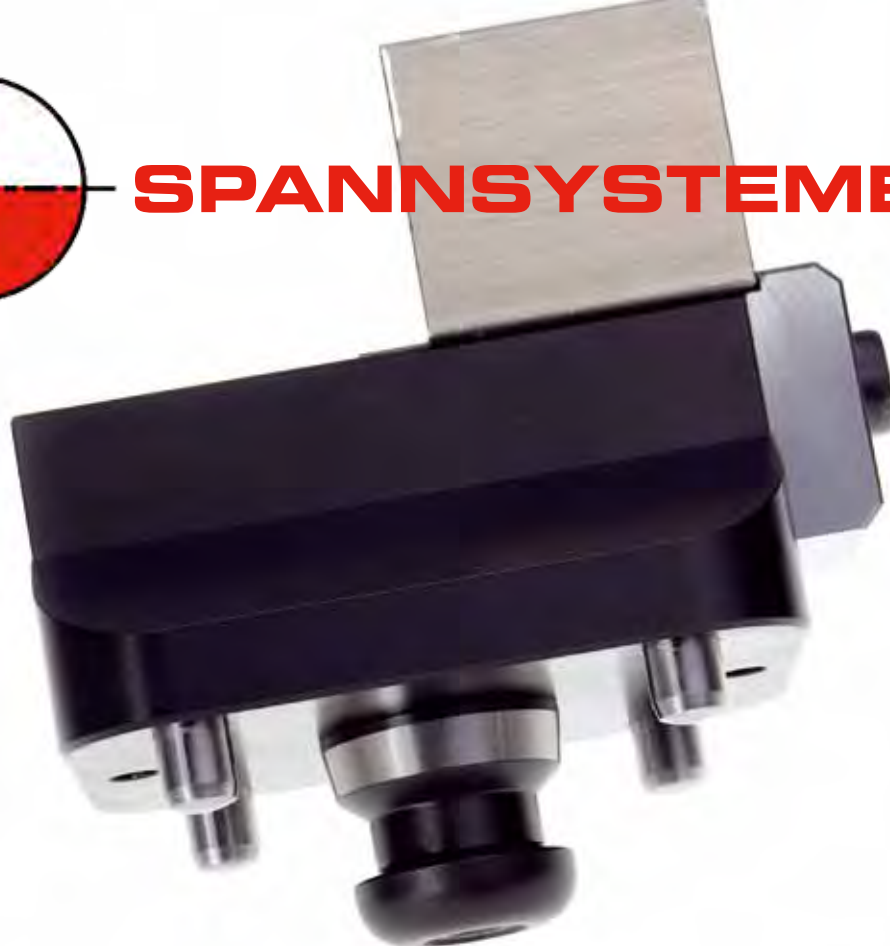


SPANNSYSTEME



Zeropoint clamping

Clamping towers

Clamping stations

Clamping pallets

Magnet clamping

Vacuum clamping

Mechanical clamping



innotool[®]

austria



ESTD. 1996
by innotool austria

Preface

*„Our focus is the development of new technologies
and the manufacturing of highest quality solutions
to support your precision.“ (Johann Supanz, CEO)*

innotool austria has formed over the years to specialize in solutions for manufacturing process. Core competences are construction and development of new products. The following focal points are important for us:

- Innovative solutions in order to optimize your production
- High quality products at economic prices
- Development, construction, production and testing done in-house
- Flexible manufacturing capabilities, modern machines and strong partners guarantee high quality in μ -machining
- Time savings during production because of zero point clamping systems, sophisticated applications and pallet systems

All innotool austria products are assembled, tested and shipped from our headquarter in Altsch which guarantees continuous quality assurance.

FOR YOUR PRECISION



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Automation



A photograph of a white industrial robot arm, likely a KUKA, mounted on a white metal frame. The arm is equipped with a clamping mechanism at its end effector, featuring a black cylindrical body and a yellow cable. The background shows a white wall with a window. The text is overlaid on the left side of the image.

Function of Automation Clamping chucks

Automation chucks and Clamping rings / -knobs

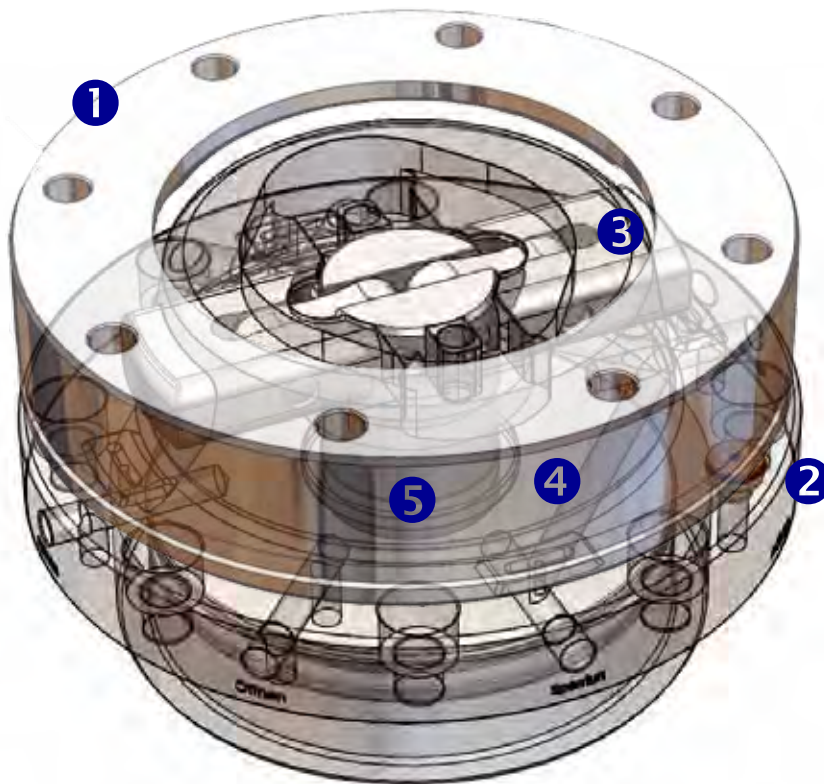
Automation units

Robot interfaces and palett couplings

Highest Precision. Outstanding Stability.

UNILOCK Automation chuck

Visual illustration of the ESA 110 Automation chuck.



1 Clamping ring

The high-precision, play-free UNILOCK Automation Clamping rings are made out of hardened steel and suitable for solid applications.

2 Body

UNILOCK Automation chucks are manufactured in different versions, according to their application. Material: steel, hardened, corrosion-resistant.

3 Slide Wedges

Solid slide wedges are made out of high-tensile steel and hardened for a save locking function of the Clamping knob.

4 Piston

The UNILOCK piston includes high-quality sealing elements and knee lever operation, which ensures a balanced movement of the slide wedges.

5 Springs

Springs made out of fatigue-resisting quality steel ensure the preservation of clamping force without air pressure assistance.

Operation-Air connection

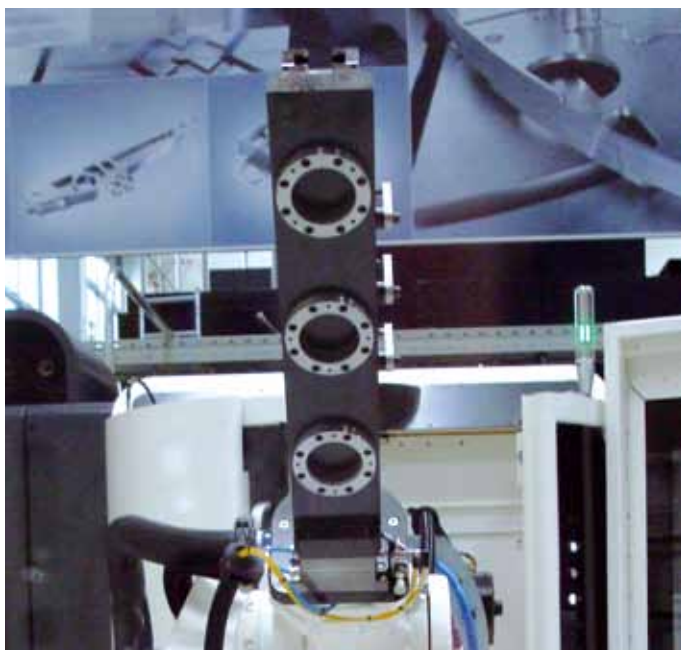
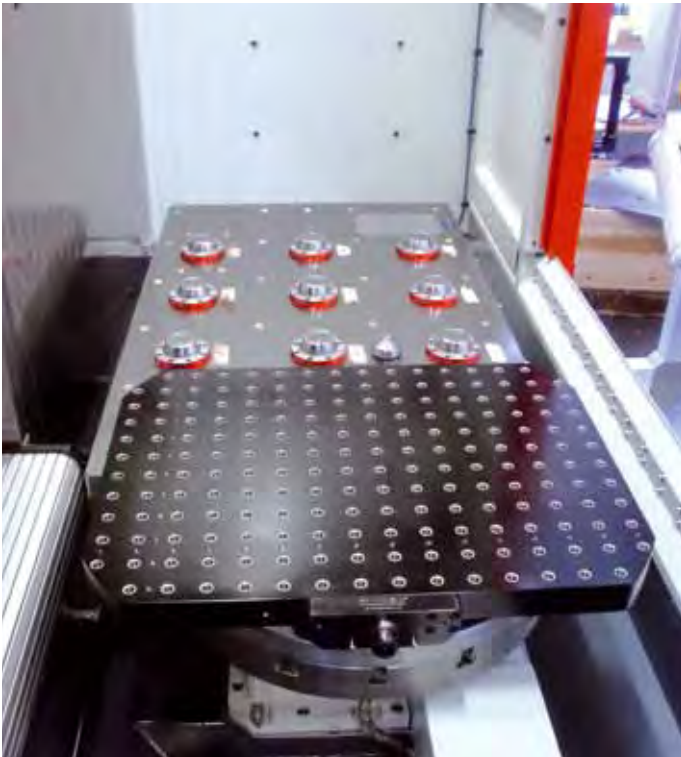
UNILOCK chucks have two air connection possibilities. There is a threaded port one on the side and an o-ring sealed counterbored port on the bottom. UNILOCK AUTOMATION chucks have air connections from the bottom.

For an essential increase of the pulling force, UNILOCK Clamping chucks offer a TURBO EFFECT over a double acting cylinder. This Effect increases clamping force, depending on the air pressure that assists the force of the springs. During a turbo-lock operation, the piston bottom is supplemented with compressed air.

Basically, all UNILOCK chucks have a TURBO EFFECT when a plumbed and sealed bottom-side is provided.

Fields of application

UNILOCK Automation components in use



ESA 120/70

UNILOCK ESA 120/70 Automation clamping chuck works after the UNILOCK Standard precept. It includes an integrated coolant output as well as a reduced ring support with sealing air.

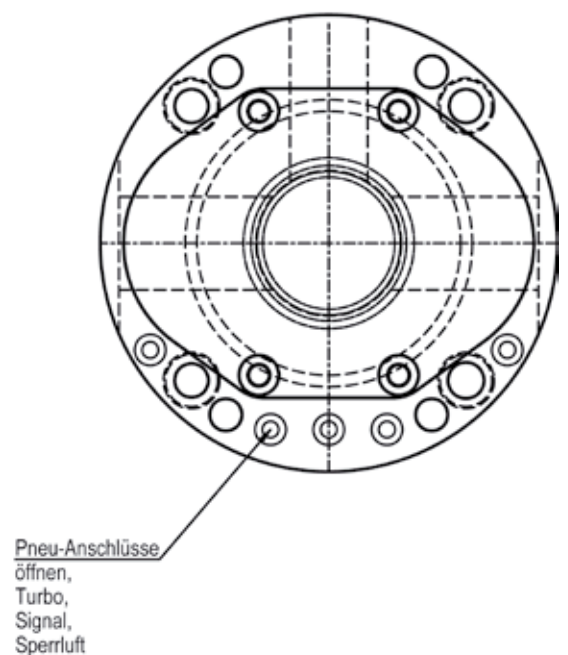
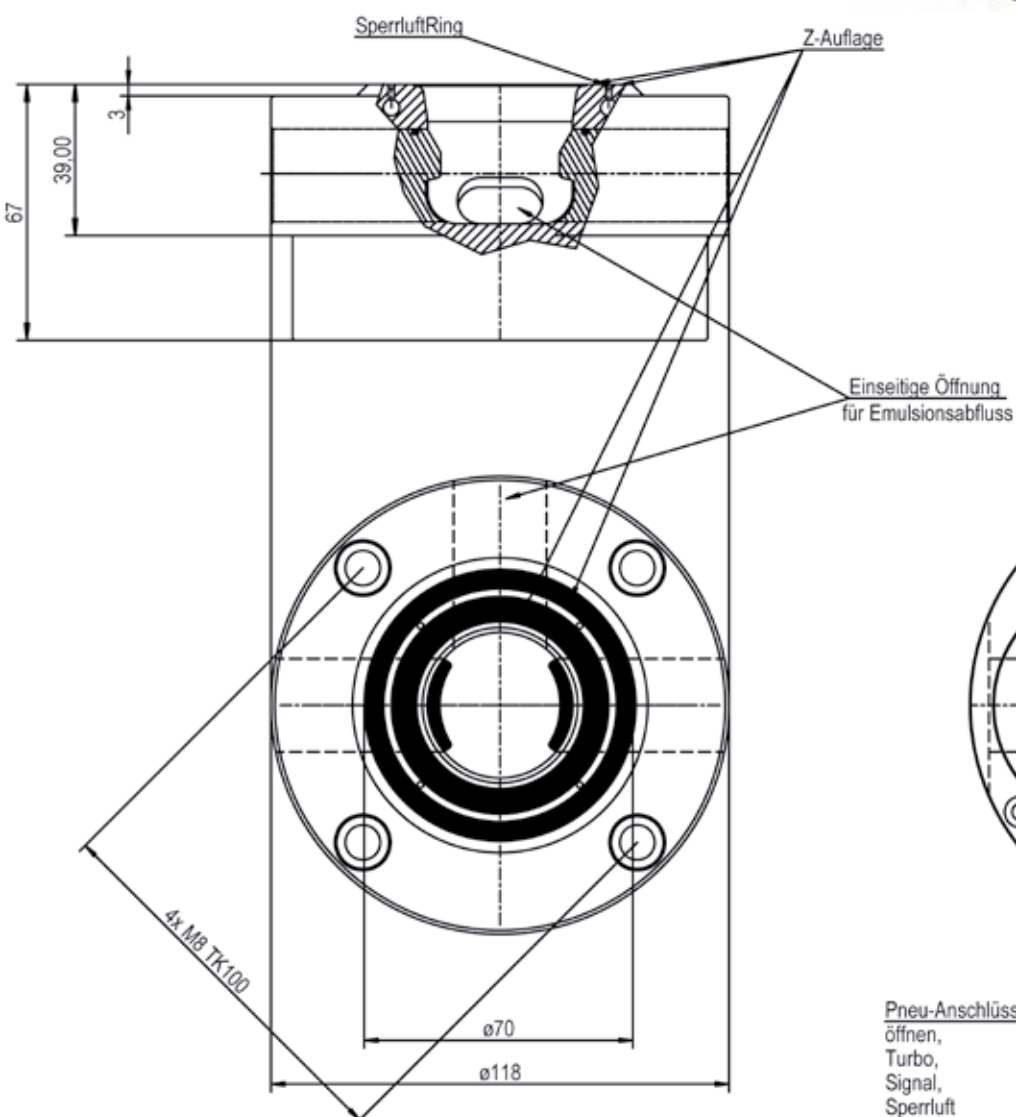
Open-control is navigated over a micro valve and the ESA 120/70 also includes a system control.



Item No.	Specifications
UL500.720	Retention force: 50'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 3,8 kg

Scope of delivery

ESA 120/70 incl. mounting screws and dirt ring (colour optionally)

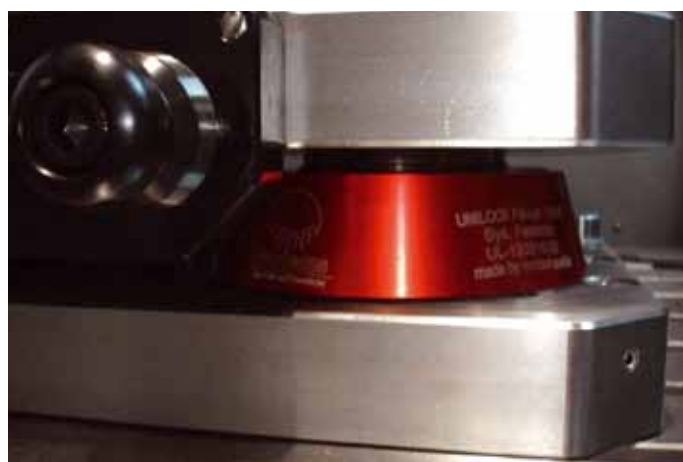
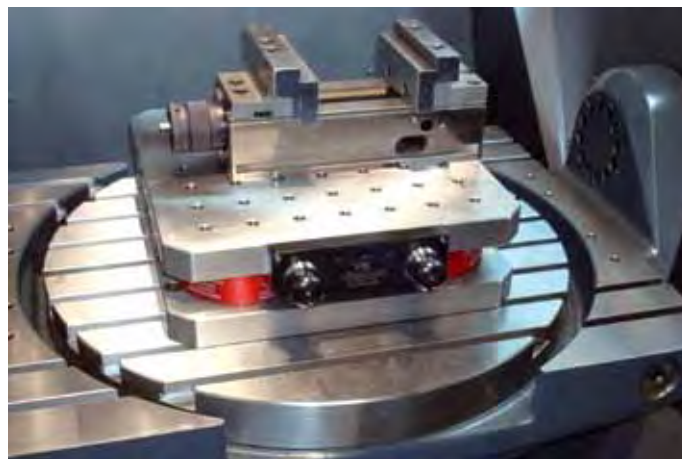




Fields of application

The ESA 120/70 is designed for automation use with robots or pallet change systems.

For a low-wear job, the combination with UNILOCK Clamping knob (Centering collar length 10mm) and UNILOCK Support ring 70x5mm (hardened) is recommended.



Item No.	Description
UL500.721	Support ring 70x5mm, hardened
UL500.722	Clamping knob kit for ESA 120/70 Including: 1x SBA 40-25-5-12, 1x SBB 40-25-5-12, 2xSBC 40-25-5-12, 4x hardened Support ring 70.5mm



ESA 110

This Automation chuck is the smallest UNILOCK Automation chuck, for flexible use. Powerful, reliable and sensitive in dealing with Robots.

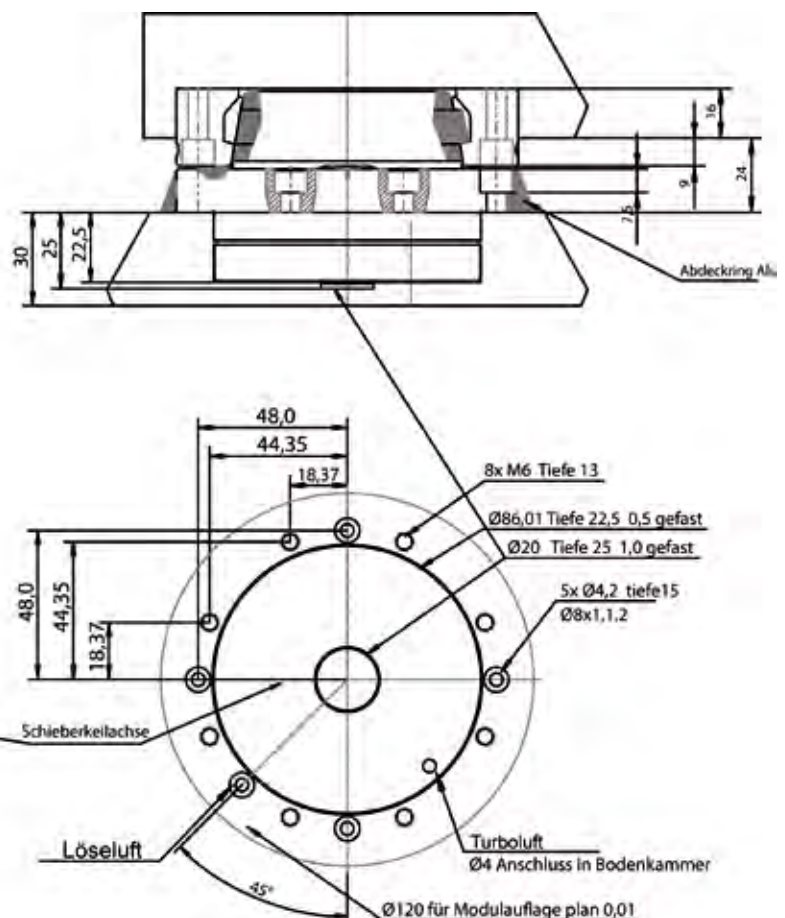
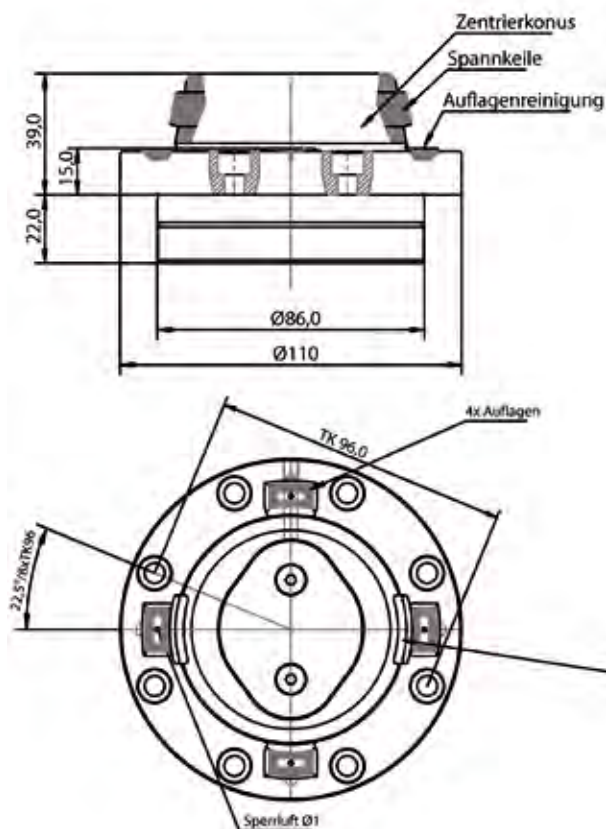
It is ready for action for every Automation application.



Item No.	Specifications
UL500.700	Retention force: 70'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 2,20 kg

Scope of delivery

ESA 110 including mounting screws, protection caps for mounting screws, dirt-ring (colour optional) and o-rings.





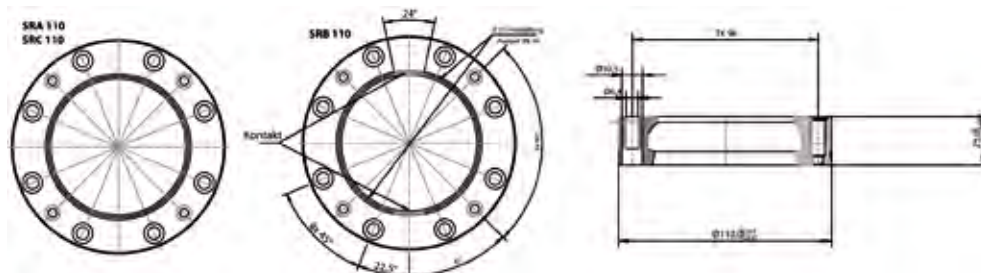
Fields of application

ESA 110 has been developed for automatically change of middle size pallets (until max. 500x500mm/19.685"x19.685") and includes a blow-off-function on all four clamping supports.

The blow-off pneumatic cycle can optionally be used to monitor pallet presence.



Ident. Nr.	Description
UL500.701	SRA 110, Clamping ring compl., type A
UL500.702	SRB 110, Clamping ring compl., type B
UL500.703	SRC 110, Clamping ring compl., type C



ESA 125

This Automation chuck is the middle one of the UNILOCK Automation chucks, for powerful use.

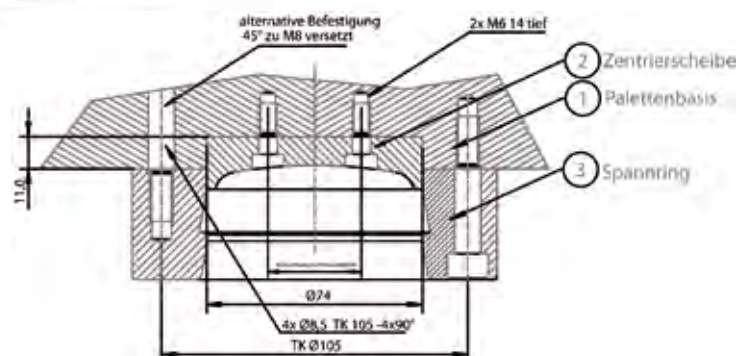
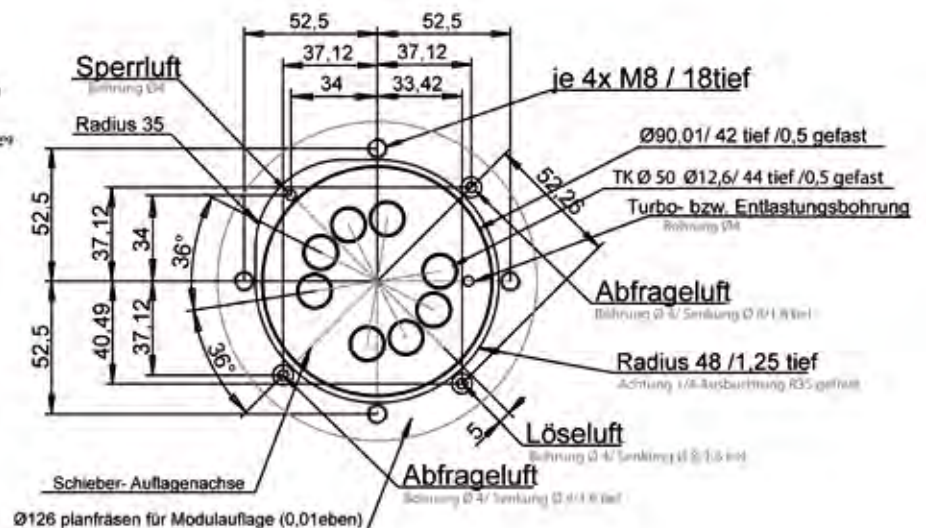
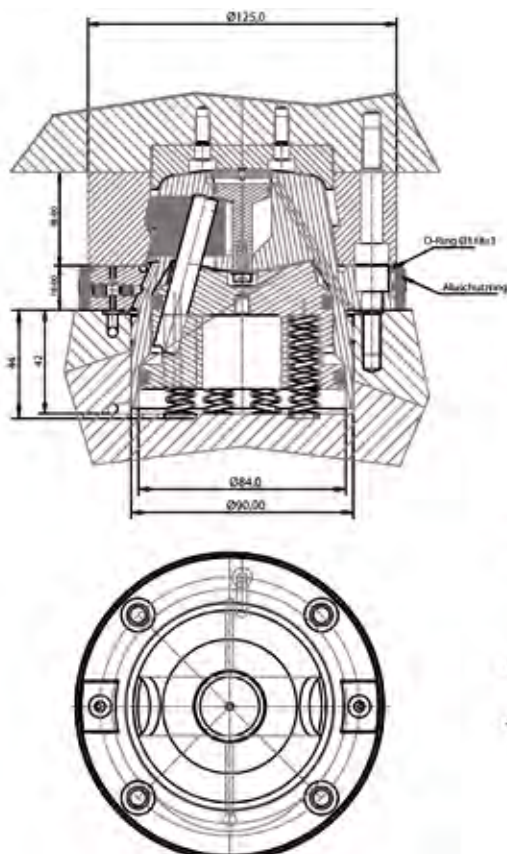
An integrated lift function supports the disassembling of heavy devices.



Item No.	Specifications
UL500.044	Retention force: 70'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 3,60 kg

Scope of delivery

ESA 125 including mounting screws, protection caps for mounting screws, pressure-spring and o-rings.





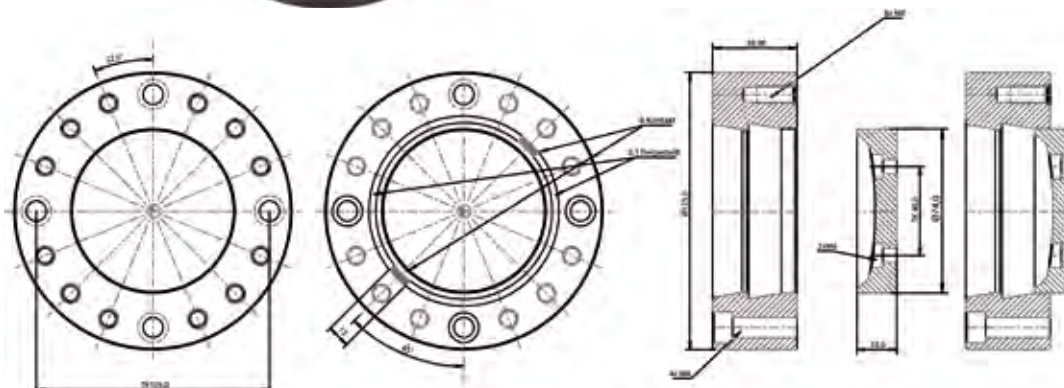
Fields of application

ESA 125 has been developed for automatically change of pallets up to a size of 2.5m/98.425" and a weight of max. 5 tons. This chuck allows a safe operation on vertical lathes as well as on turning and milling centers.

The blow-off pneumatic cycle can optionally be used to monitor pallet presence.



Item No.	Description
UL500.174	SRA 125, Clamping ring compl., type A
UL500.175	SRB 125, Clamping ring compl., type B
UL500.176	SRC 125, Clamping ring compl., type C



ESA 185

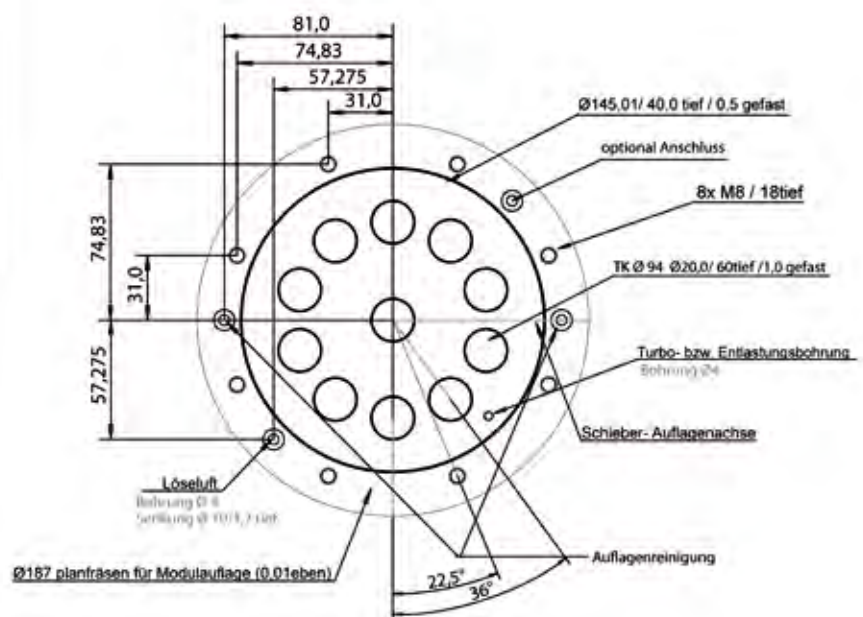
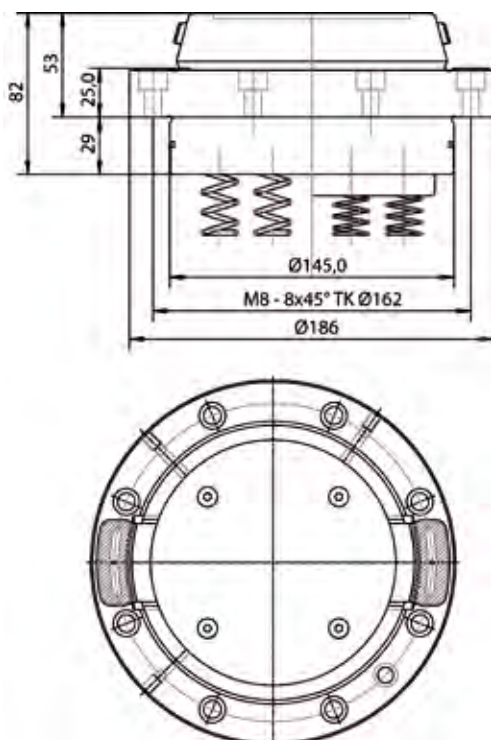
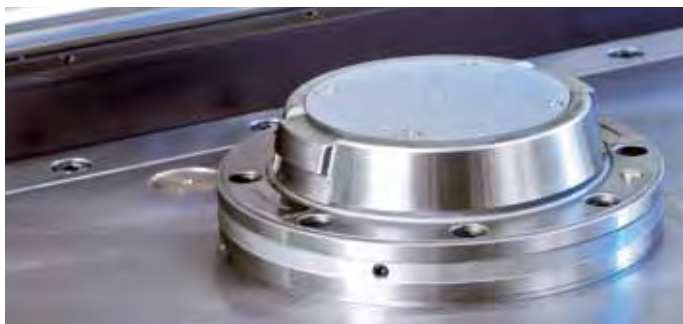
This Automation chuck is the largest of the UNILOCK Automation chucks and is especially suited for the use in heavy machining. Supporting pallets up to a size of 1000x1000mm/39,370"x39,370" or until a weight of 10 tons, this chuck offers safety, force and accuracy in the turning and milling area. The blow-off pneumatic cycle can optionally be used to monitor pallet presence.



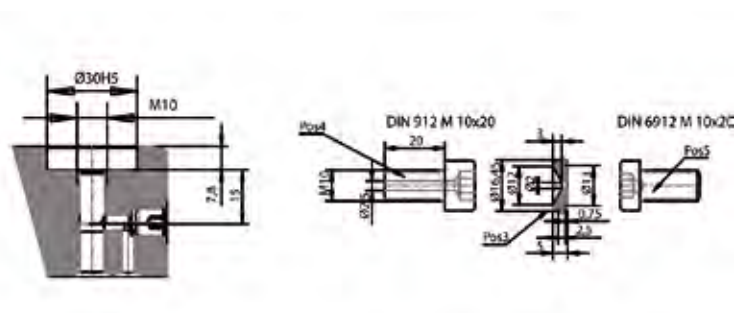
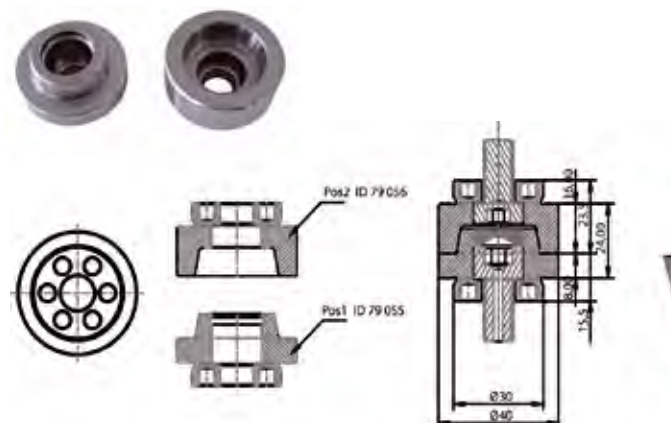
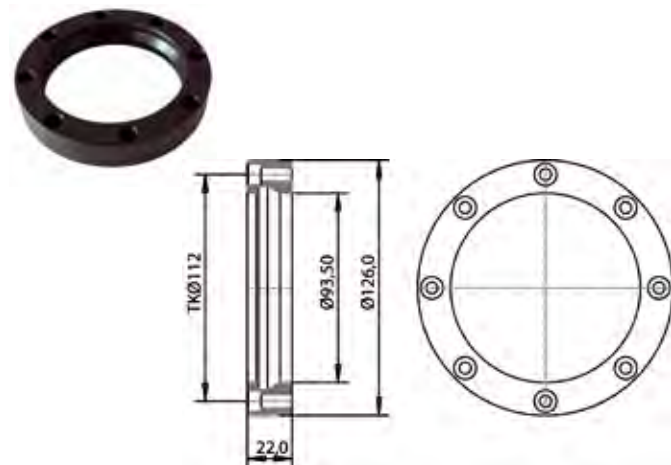
Item No.	Specifications
UL500.705	Retention force: 100'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 9,70 kg

Scope of delivery

ESA 185 including mounting screws, protection caps for mounting screws, centering pin and o-rings.



These centering elements guarantee a high-precision pallet positioning for single and multiple chuck applications. Single UNILOCK Automation chucks are oriented and supported with external centering devices. The big advantage here is in the planar cone contact with integrated blow-off-functions at both the chuck and the external orientation and support devices.



ASSF 170

This Automation device made out of steel, with body dimensions of 170x170mm/6.692"x6.692", can be used as a single station.

It will be delivered including four clamping wedges and four hardened and grinded Centering devices (for details please note page 149).

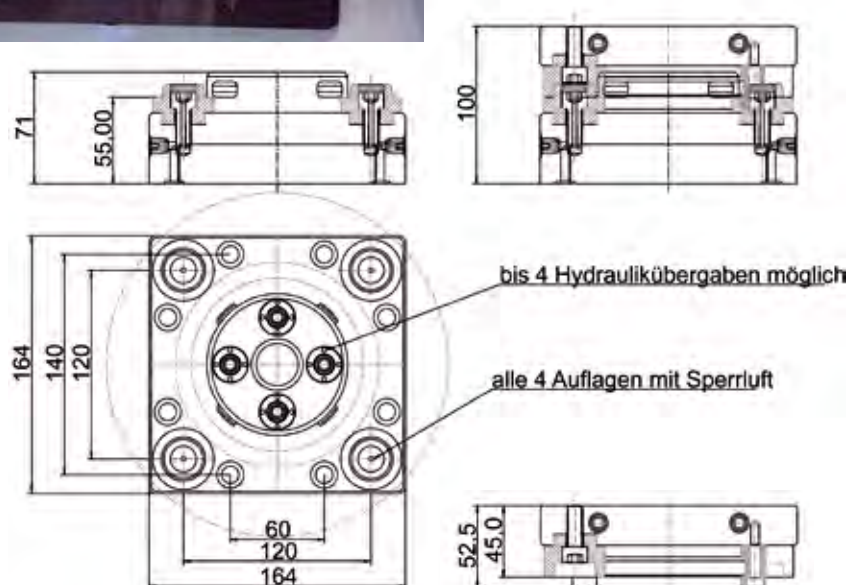


Item No.	Specifications ASSF 170
UL500.710	Retention force: 50'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 9,50 kg

Scope of delivery

ASSF 170 including straight Installation-Air-Connections, sealing plugs and O-Rings.

Item No.	Description
UL500.091	BALSF 170, Clamping pallet Automation for ASSF 170





ASSF 250

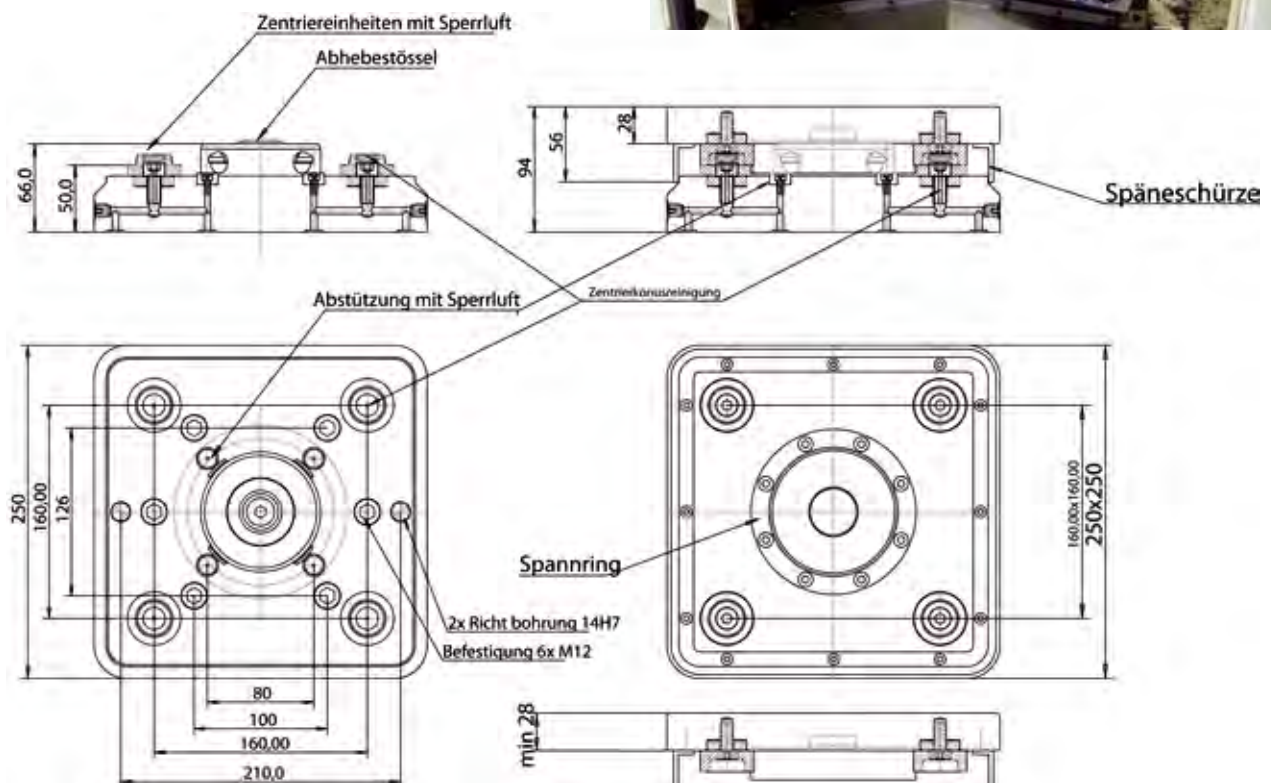
This Automation device made out of steel, with body dimensions of 250x250mm/9.842"x9.842", can be used as a powerful single station. Delivery includes four Clamping wedges and four hardened and ground Centering devices (for details please note page 149). A passage delivering compressed air to clamping devices is provided.



Item No.	Description
UL500.711	Retention force: 50'000 N Turbo pressure: 6 bar Repeatability: <0,005 mm Weight: 32,30 kg

Scope of delivery

ASSF 250 including straight Installation-Air-Connections, sealing plugs and o-rings.



Robot interfaces Pallet couplings

Two different Interface-Systems have been developed for changing of pallets with the help of robots.

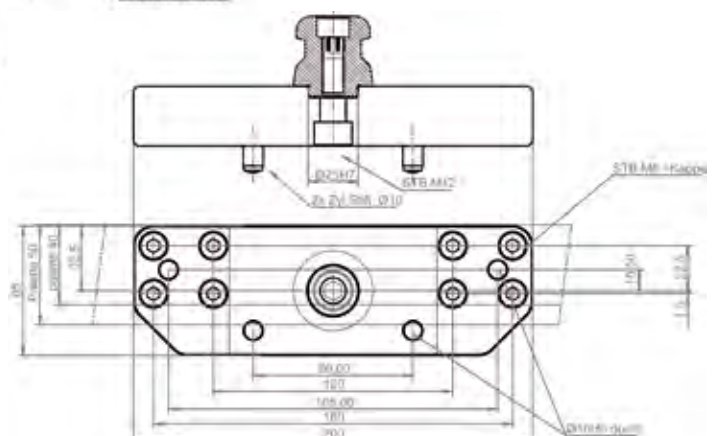
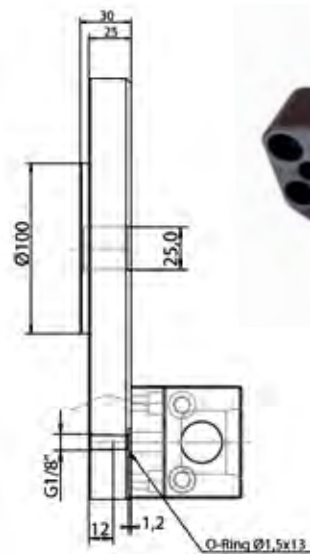
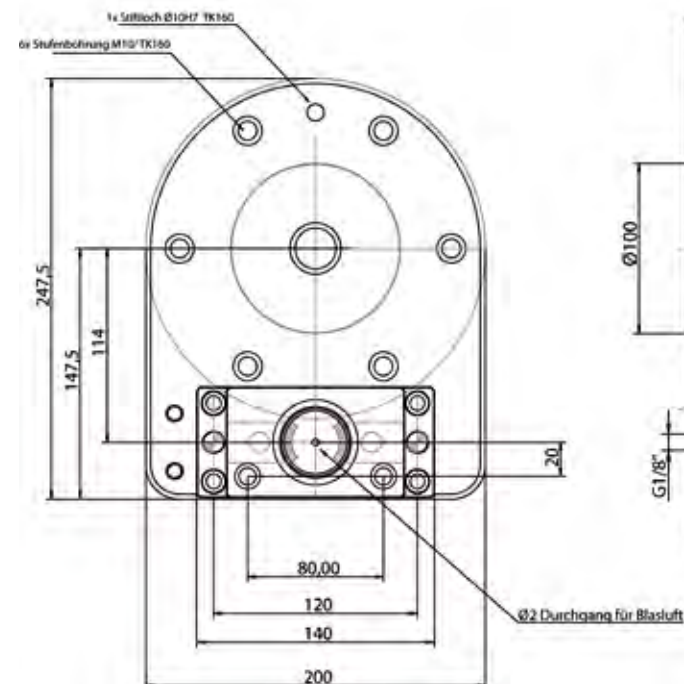
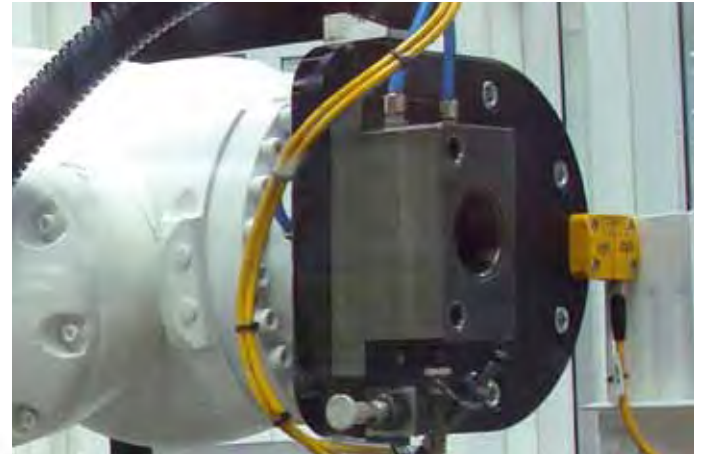
Robot interface 105-65-RK3 as Sleeve adaptor and robot interface RK5 as Clamping knob adaptor.



Item No.	Description
UL500.806	AFM 105-65-RK3, Assembly clamping chuck robot interface, incl. 2 precise pin- / indexing bushes 10mm
UL500.815	PKV 105-65, pallet coupling compl. for AFM 105-65-RK3

Scope of delivery

AFM 105-65-RK3 incl. 4 mounting screws.





Fields of application

RK3 and RK5 UNILOCK Robot interfaces can be adapted to the most common robot interfaces.

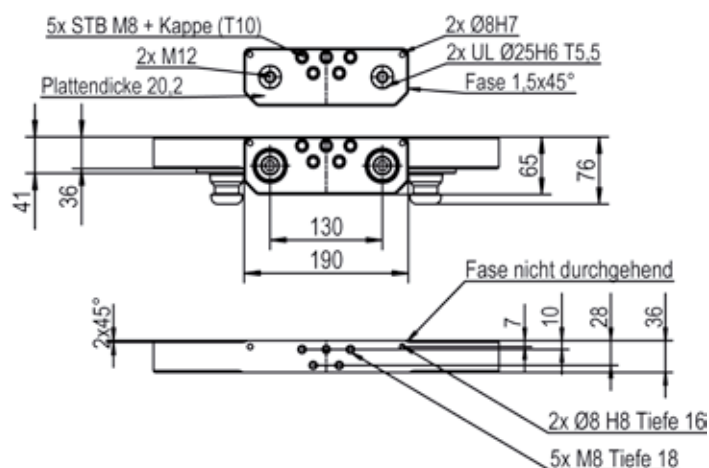
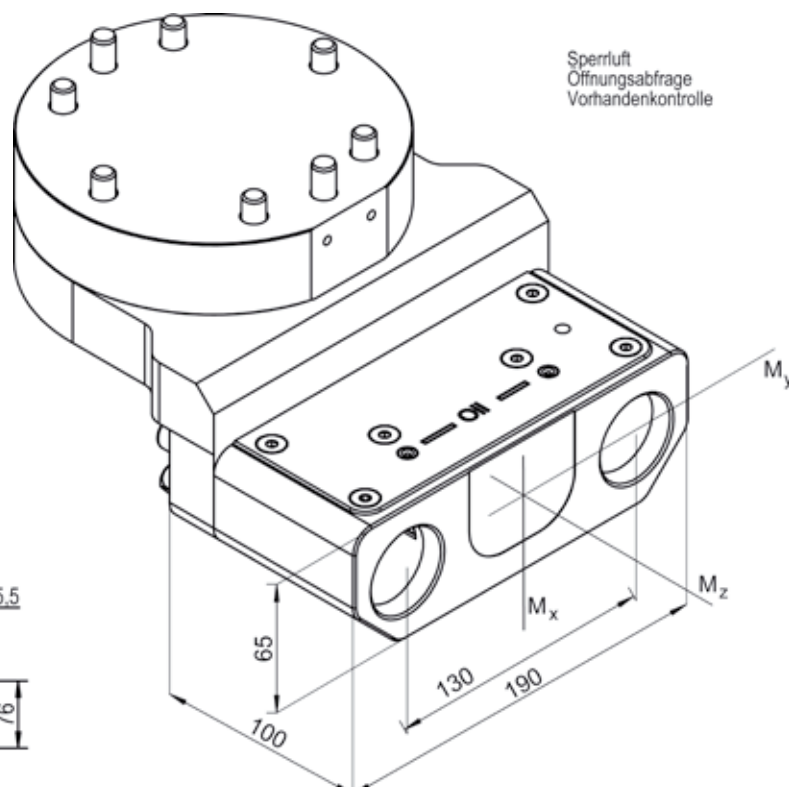
RK3 is using a one-bolt system and can be used for pallets with a weight to max. 500kg. RK 5 is developed specially for heavy-lift components and is designed with a strong two-bolt system.



Item No.	Description
UL500.818	RK5 robot interface 190x65mm, hardened for heavy-lift pallets
UL500.819	PVK5 pallet coupling 190x65mm, hardened for heavy-lift pallets

Scope of delivery

RK5 Robot interface incl. mounting screws.





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