



LYNDEX NIKKEN

CLAMPING CATALOG

- > Zero Point Clamping System
- > Modular Clamping System

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LYNDEX NIKKEN

The system provider
for your production

MODULAR CLAMPING RAIL SYSTEM

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Manufacturing demands are evolving - batch sizes are shrinking, lead times are tightening, and warehousing must be minimized.

At the same time, maximizing spindle uptime is essential to stay competitive. Yet expanding capacity is often difficult due to high machine costs and a lack of skilled labor.

However, not much has changed with the traditional T-slot work holding solutions to solve these challenges - setups are time-consuming and prone to error.

The solution is to upgrade to today's modern alternative to conventional T-slot tables and vices. Our Zero Point clamping and modular clamping rail system significantly reduces setup and changeover times, ensuring process reliability and maximum flexibility. This modular work holding has the flexibility and diversity to hold any workpiece while maintaining high accuracy.

As a full-service solution provider, we offer everything from clamping systems to highly adaptable machine tending —all from a single source.

CONVENTIONAL CLAMPING



Time-consuming positioning of the component on the machine table with many clamping devices. Furthermore, interfering contours often occur and the workflow is difficult to interrupt.

APPLICATIONS FOR THE ZERO POINT CLAMPING SYSTEM



Direct component clamping

Clamping pots optionally integrated into the machine table for optimum usage of the machining area.



Clamping tower

Ideal for horizontal machining thanks to its low weight.



Individual clamping options

Customizable clamping system with selectable pitch.



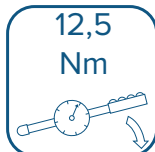
Large component clamping

High clamping forces enable the clamping of large components.

LEGEND



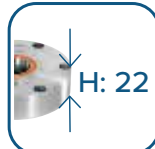
Repetition accuracy < 2.5 μm
(0.1 thou)



Maximum tightening torque for
jaw clamping
(precise details can be found in the
relevant operating instructions)



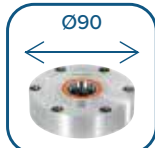
Pitch



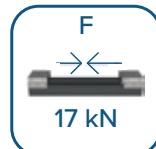
Clamping pot height



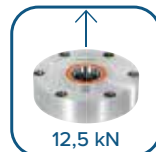
Indexed clamping pot
(*italic indicates a blind hole*)



Clamping pot size



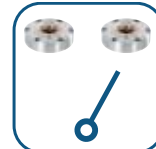
Max. clamping force
(precise details can be found in the
relevant operating instructions)



Pull-out force



Clamping stud



Some with individual actuation



Hole for the clamping stud



Product designed for automation

Pictograms all in metric si units

BRIEF OVERVIEW OF ACCESSORIES FOR THE ZERO POINT CLAMPING SYSTEM

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THE CENTER PIECE

All components are of stainless steel or steel with corrosion protection.
Only 5.5 bar (87 psi) air pressure is required to release the clamping studs.

Centered clamping with zero play
in the hardened steel cone.

Radial springs
mounted in nitrile butadiene rubber.

Clamping pot housing

Non-wearing technology
Clamping plates provide the necessary clamping force.

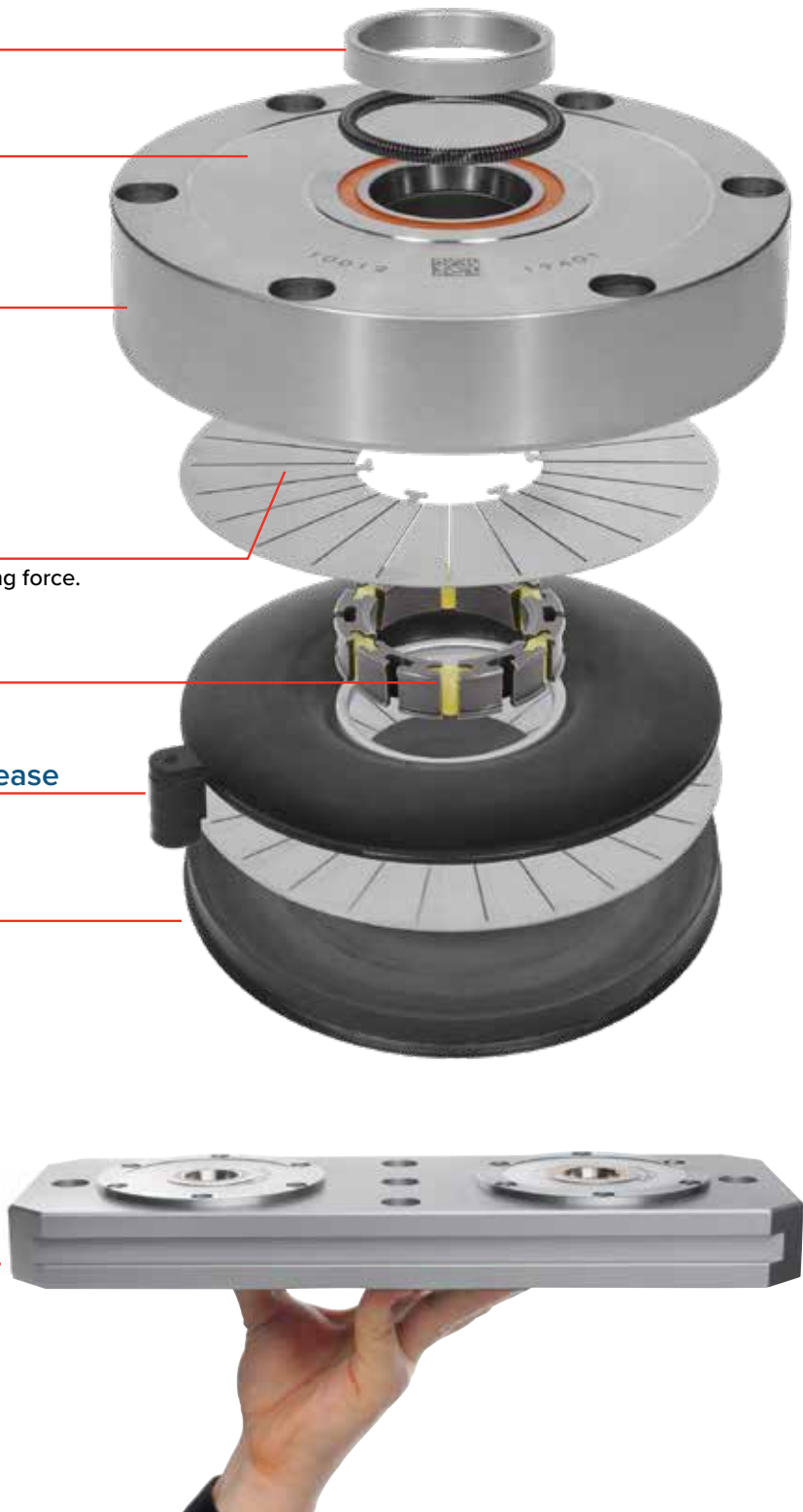
Locking unit

Compressed air connection for release

Cover

Simple access

Low weight. Installed height from 36 mm (1.4 inch). Base plate of surface treated high-tensile aluminium.



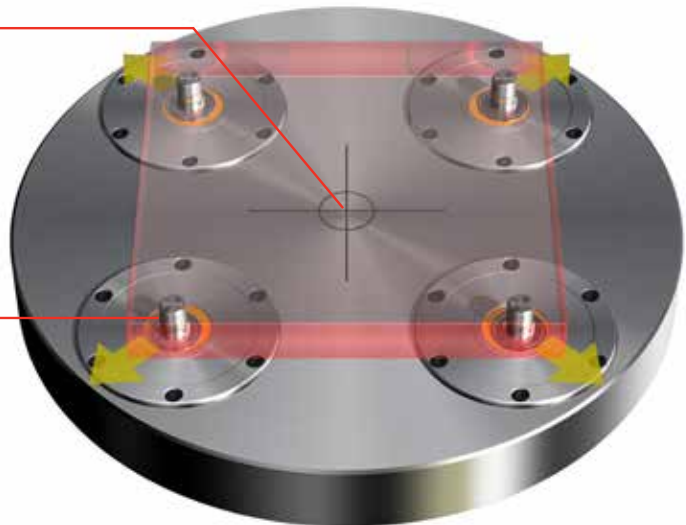
THERMAL SYMMETRY - REFERENCE TO THE CENTER AT ALL TIMES

Absolute zero point

Compensation for thermal expansion is always symmetrical about the center axis.

Just one type of clamping stud

No displacement of the zero point.



HSK principle

Systems operate on the same principle as an HSK tool arbor taper. The resilience of the interface ensures zero radial play, together with the axial position relative to the axial face.

Repetition accuracy < 2.5 µm (0.1 thou)

Gauge errors up to ± 0.1 mm (0.004 inch) can be compensated over two clamping pots.



DISADVANTAGE OF THE CLASSIC ZERO POINT CLAMPING SYSTEM

Axis at 0°

Axis at 180°

Free pin

Free pin

Axis of rotation

Displacement

Zero pin

Floating pin

Positioning via a cylindrical or conical clearance fit.

Example:

Clearance fit Ø 32 H5/h5 = 22 µm (0.9 thou)

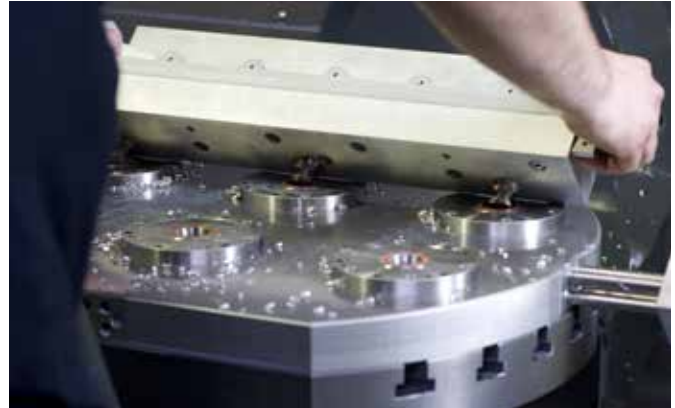


UNIQUE BENEFITS

ZERO POINT	Conventional Systems
Very high accuracy using the HSK principle. On insertion of the stud, the tapered ring of the clamping pot expands slightly within its resilient range. This results in absolutely zero-play high precision seating with a repetition accuracy of 2.5 µm (0.1 thou).	Usually a mating fit is necessary (for instance 32 mm h5/H5 for studs and sockets). The combination specified permits a minimum play of 0 µm and a maximum play of 22 µm (0.9 thou). Under such conditions, how can repeat accuracies up to 2.5 µm (0.1 thou) be achievable in series production?
Just one type of clamping stud is required. Logistically simple to manage, since there is only one type of stud that must be screwed into the available stud hole. No differentiation between zero pins, floating pins and free pins.	In general uses three types of studs (zero pins, floating or sword pins, and free pins). Logistically complicated. Documentation must be maintained for each fixture detailing which type of stud must be fitted at each position and at what angular position. High risk of errors!
Thermal symmetry Compensates for thermal effects and for pitch errors. The tapered rings always compensate errors relative to the center of the clamping points. (For instance on a round table the center of the pallet always remains centered on the axis of rotation).	Rigid system with 3 different types of stud. Thermal effects and pitch errors lead to asymmetrical displacement relative to the zero pin. (On a round table the center of the pallet is displaced away from the axis of rotation).
No self-locking In the event of a crash the fixture or the clamping device yields and thereby can save the machine spindle from possible damage. For instance in the event of failure of the energy supply push-out screws can be used to remove the fixture.	With a self-locking system, the result of a crash is the greatest possible damage. In the event of failure of the energy supply, in most cases the fixture must be destroyed in order to remove the pallet.
No tilting Uncomplicated insertion and removal, even if skewed or significantly off-center.	In some cases the component must be positioned very precisely and parallel for insertion or removal, because cylindrical or tapered clamping pins with minimum taper must be used. The removal especially of highly asymmetric heavy components is very problematic.
Pneumatic low-height system The patented design of the spring retainer guarantees very high clamping forces. Normal workshop air pressure is sufficient to release the clamping fixture.	Hydraulic systems have inherent disadvantages: Pump - pipework - collisions - leakage - bleeding etc. Pneumatic systems are often installed at significantly greater heights.
Patented design, simple assembly. High reliability is achieved by the use of extremely few and simple components. Even chips cannot compromise the functional principle.	Complex mechanisms with ball cages, pistons, actuators and other components. When they are clogged with chips there is always the risk they will jam or malfunction.

Direct clamping

Direct clamping of the components on to a base unit. Holes as sockets for the clamping studs are specified at the design stage. Quicker and more accurate changeover (also across machines) of components.



Turning

The productivity advantages also extend to turning operations due to using pre-balanced base units.



Quality assurance

This can be used throughout the entire process chain, it is also the ideal complement for your coordinate measuring machine.



Spark erosion

Reliable operation even in dielectric environments.



CLAMPING POTS OVERVIEW

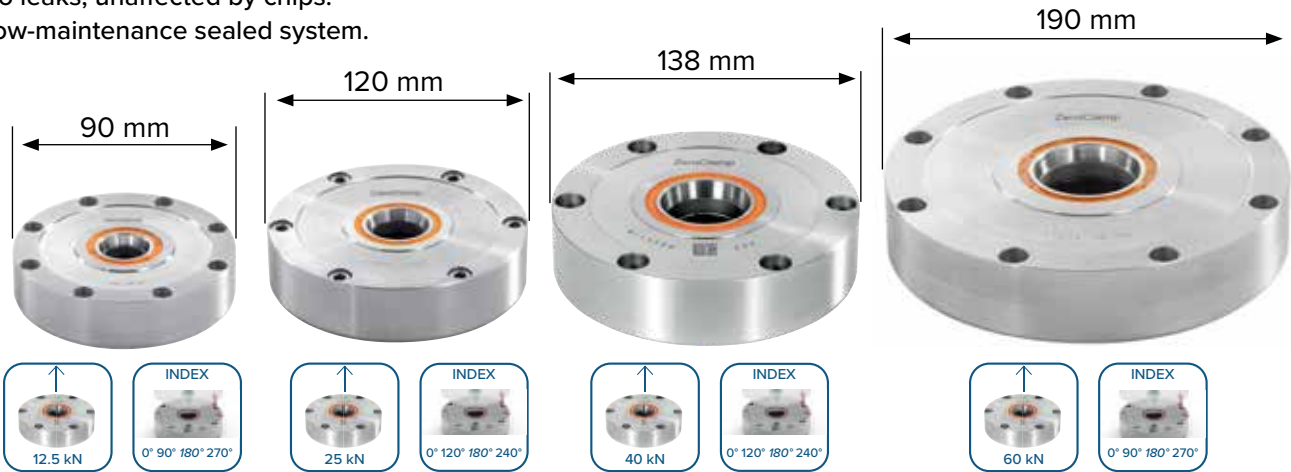
The clamping pot family consists of four clamping pots ranging from Ø 90 mm (3.5 inch) to Ø 190 mm (7.5 inch).

Clamping forces to 60 kN (13,500 lbf) offer security even when performing heavy-duty machining.

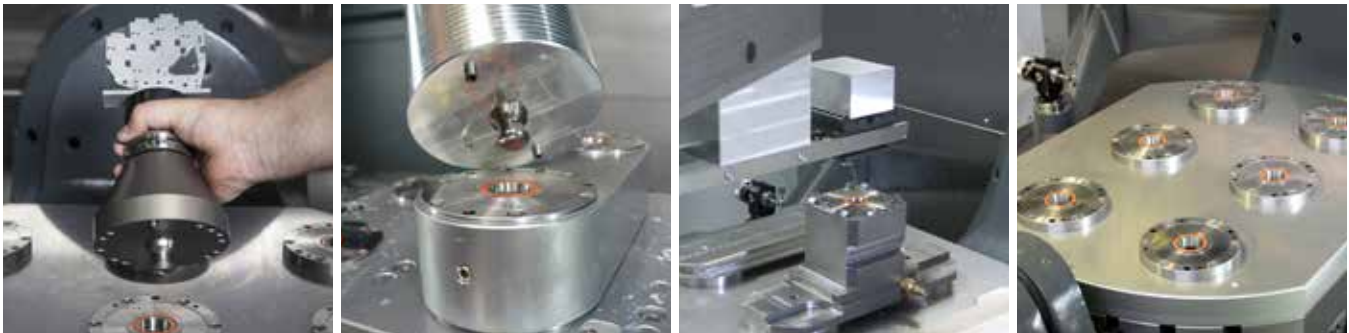
All clamping pots deliver a repetition accuracy < 0.0025 mm (0.0001 inch).

No leaks, unaffected by chips.

Low-maintenance sealed system.



Clamping pots with indexing holes enable the clamping of a component on only one clamping pot.

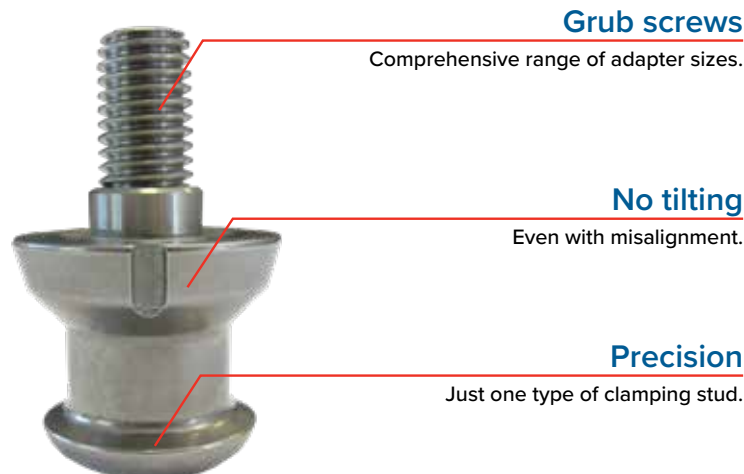


CLAMPING STUD OVERVIEW

Overlapping fit sizes permit **free and variable** clamping of a component on various different clamping pot sizes.

For the zero point clamping system you need **just one type of clamping stud** (no differentiation between zero pins, floating pins and free pins).

-> Process reliability through very simple application.



CLAMPING POT Ø 90 MM (3.5 INCH)



Application:

For direct clamping of components or clamping fixtures.

Scope of supply:

Clamping pot, 8 screws for attachment, 3 dowel pins (only for indexed clamping pots), O-rings and compressed air feed nipples.

Note:

We recommend the use of dust caps WH-ZP90-ACC-CAP for the securing screws. This prevents the accumulation of dirt.



Part No.	WH-ZP90-STD	WH-ZP90-INDX
Version	without orientation	with orientation
Clamping force	12.5 kN (2800 lbf)	12.5 kN (2800 lbf)
Weight	0.72 kg (1.59 lbs)	0.71 kg (1.57 lbs)

DUST CAPS

Part No.	Description
WH-ZP90-ACC-CAP	Dust cap set 50 units

CLAMPING STUD FOR POT Ø 90 MM (3.5 INCH)

Application:

For clamping components or fixtures in the clamping pot Ø 90 mm (3.5 inch).

Scope of supply:

Clamping studs and grub screws.

Part No.	WH-ZP90-STUD-12M10	WH-ZP90-STUD-14M12
Size	12M10	14M12
Fit	12k6	14k6
Thread	M10	M12



CLOSURE STUD FOR POT Ø 90 MM (3.5 INCH)

Application:

For unused clamping pots Ø 90 mm (3.5 inch), to protect them against chips and dirt. If clamping pots are not required, they must be fitted with a closure stud.

Part No.	WH-ZP90-SSTUD-H	WH-ZP90-SSTUD-V
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CLAMPING POT Ø 120 MM (4.7 INCH)



Application:

For direct clamping of components or clamping fixtures.

Scope of supply:

Clamping pot, 6 screws for attachment, 3 dowel pins (only for indexed clamping pots), O-rings and compressed air feed nipples.

Note:

We recommend the use of dust caps WH-ZP120-ACC-CAP for the securing screws. This prevents the accumulation of dirt. Available with optional compressed air feed/monitoring (see page 15 onward).



Part No.	WH-ZP120-STD	WH-ZP120-INDX
Version	without orientation	with orientation
Clamping force	25 kN (5500 lbf)	25 kN (5500 lbf)
Weight	1.84 kg (4.06 lbs)	1.80 kg (3.97 lbs)

DUST CAPS

Part No.	Description
WH-ZP120-ACC-CAP	Dust cap set 50 units

CLAMPING STUD FOR POT Ø 120 MM (4.7 INCH)

Application:

For clamping components or fixtures in the clamping pot Ø 120 mm (4.7 inch).

Scope of supply:

Clamping studs and grub screws.

Part No.	WH-ZP120-STUD-12M10	WH-ZP120-STUD-16M10	WH-ZP120-STUD-18M12	WH-ZP120-STUD-18M16
Size	12M10	16M10	18M12	18M16
Fit	12k6	16k6	18k6	18k6
Thread	M10	M10	M12	M16



CLOSURE STUD FOR POT Ø 120 MM (4.7 INCH)

Application:

For unused clamping pots Ø 120 mm (4.7 inch), to protect them against chips and dirt. If clamping pots are not required, they must be fitted with a closure stud.

Part No.	WH-ZP120-SSTUD-H	WH-ZP120-SSTUD-V
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CLAMPING POT Ø 138 MM (5.4 INCH)



Application:

For direct clamping of components or clamping fixtures.

Scope of supply:

Clamping pot, 6 screws for attachment, 3 dowel pins (only for indexed clamping pots), O-rings and compressed air feed nipples.

Note:

We recommend the use of dust caps WH-ZP138-ACC-CAP for the securing screws. This prevents the accumulation of dirt. Available with optional compressed air feed/monitoring (see page 15 onward).



Part No.	WH-ZP138-STD	WH-ZP138-INDX
Version	without orientation	with orientation
Clamping force	40 kN (9000 lbf)	40 kN (9000 lbf)
Weight	2.74 kg (6.04 lbs)	2.67 kg (5.89 lbs)

DUST CAPS

Part No.	Description
WH-ZP138-ACC-CAP	Dust cap set 50 units

CLAMPING STUD FOR POT Ø 138 MM (5.4 INCH)

Application:

For clamping components or fixtures in the clamping pot Ø 138 mm (5.4 inch).

Scope of supply:

Clamping studs and grub screws.



Part No.	WH-ZP138-STUD-12M10	WH-ZP138-STUD-18M12	WH-ZP138-STUD-18M16	WH-ZP138-STUD-25M16	WH-ZP138-STUD-25M10
Size	12M10	18M12	18M16	25M16	25M10
Fit	12k6	18k6	18k6	25k6	25h6
Thread	M10	M12	M16	M16	M10

CLOSURE STUD FOR POT Ø 138 MM (5.4 INCH)

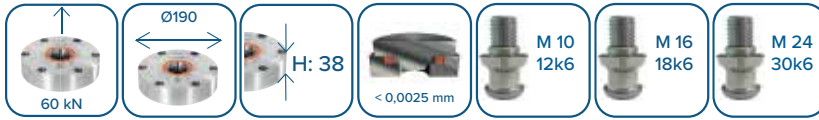
Application:

For unused clamping pots Ø 138 mm (5.4 inch), to protect them against chips and dirt. If clamping pots are not required, they must be fitted with a closure stud.

Part No.	WH-ZP138-SSTUD-H	WH-ZP138-SSTUD-V
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CLAMPING POT Ø 190 MM (7.5 INCH)



Application:

For direct clamping of components or clamping fixtures.

Scope of supply:

Clamping pot, 8 screws for attachment, 3 dowel pins (only for indexed clamping pots), O-rings and compressed air feed nipples.



Part No.	WH-ZP190-STD	WH-ZP190-INDX
Version	without orientation	with orientation
Clamping force	60 kN (13500 lbf)	60 kN (13500 lbf)
Weight	5.56 kg (12.26 lbs)	5.45 kg (12.26 lbs)

CLAMPING STUD FOR POT Ø 190 MM (7.5 INCH)

Application:

For clamping components or fixtures in the clamping pot Ø 190 mm (7.5 inch).

Scope of supply:

Clamping studs and grub screws.

Part No.	WH-ZP190-STUD-18M16	WH-ZP190-STUD-30M24
Size	18M16	30M24
Fit	18k6	30k6
Thread	M16	M24



CLOSURE STUD FOR POT Ø 190 MM (7.5 INCH)

Application:

For unused clamping pots Ø 190 mm (7.5 inch), to protect them against chips and dirt. If clamping pots are not required, they must be fitted with a closure stud.

Part No.	WH-ZP190-SSTUD-V
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CLAMPING POTS WITH MONITORING VALVE



Pneumatic monitoring of the clamping situation. The **support of the component/fixture** as well as the **position of the clamping mechanism** can thus be examined via the dynamic pressure. This ensures even more secure clamping of your component and reliable monitoring even for heavy components, as the position of the clamping mechanism is monitored in parallel. A control unit is recommended for the monitoring of clamping pots.

Note:

The control unit offers various operating and monitoring functions. In an automated version, it is possible to connect to the machine control as well as the sealing air.

Part No.	WH-ZP120-STD-SENS	WH-ZP120-INDX-SENS	WH-ZP138-STD-SENS	WH-ZP138-INDX-SENS
Version	Ø 120 mm (4.7 inch)	Ø 120 mm (4.7 inch) with orientation	Ø 138 mm (5.4 inch)	Ø 138 mm (5.4 inch) with orientation
Clamping force	25 kN (5500 lbf)	25 kN (5500 lbf)	40 kN (9000 lbf)	40 kN (9000 lbf)
Weight	1.90 kg (4.19 lbs)	1.89 kg (4.17 lbs)	2.85 kg (6.28 lbs)	2.65 kg (5.84 lbs)

+ Added security

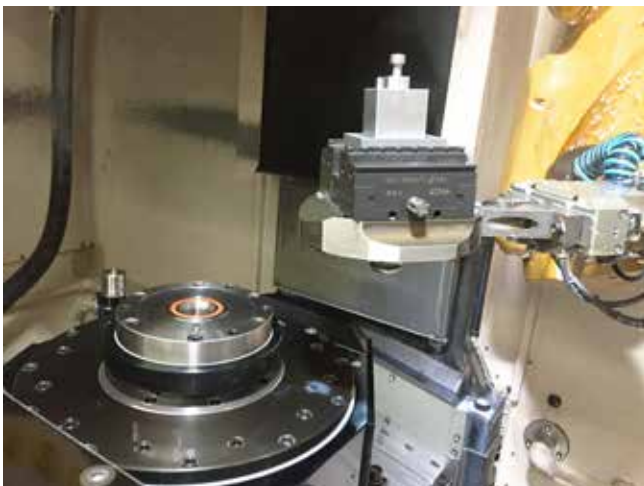
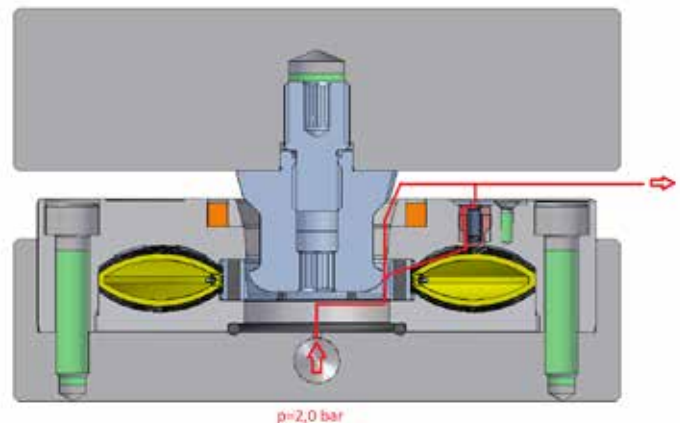
Monitoring of the clamping situation in two areas. Support and clamping mechanism.

+ Optimized costs

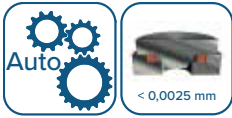
The clamping and support situation can be monitored at all times without the need for further sensors.

+ In shape for the future

Ideal for automation, even at a later date.



4-CHANNEL CONTROL - FLEXIBILITY IN EVERY SITUATION



The 4-channel control enables the **monitoring and operation of the first and second level** (see illustration). The support of the component/clamping device can thus be monitored at any time via the dynamic pressure and the clamping devices can be operated using the compressed air. Ideal for the zero point clamping system, from **manual up to fully automated operation**.

Note:

Unused 4-channel clamping pots require special protection against dirt and chips.

Part No.	WH-ZP120-STD-AUTO	WH-ZP120-INDX-AUTO	WH-ZP138-STD-AUTO	WH-ZP138-INDX-AUTO
Version	Ø 120 mm (4.7 inch)	Ø 120 mm (4.7 inch) with orientation	Ø 138 mm (5.4 inch)	Ø 138 mm (5.4 inch) with orientation
Clamping force	25 kN (5500 lbf)	25 kN (5500 lbf)	40 kN (9000 lbf)	40 kN (9000 lbf)
Weight	1.78 kg (3.92 lbs)	1.70 kg (3.75 lbs)	2.92 kg (6.44 lbf)	2.79 kg (6.15 lbf)

Variant 1:
Extension base

Opening and discharging via compressed air, as well as dynamic pressure monitoring.

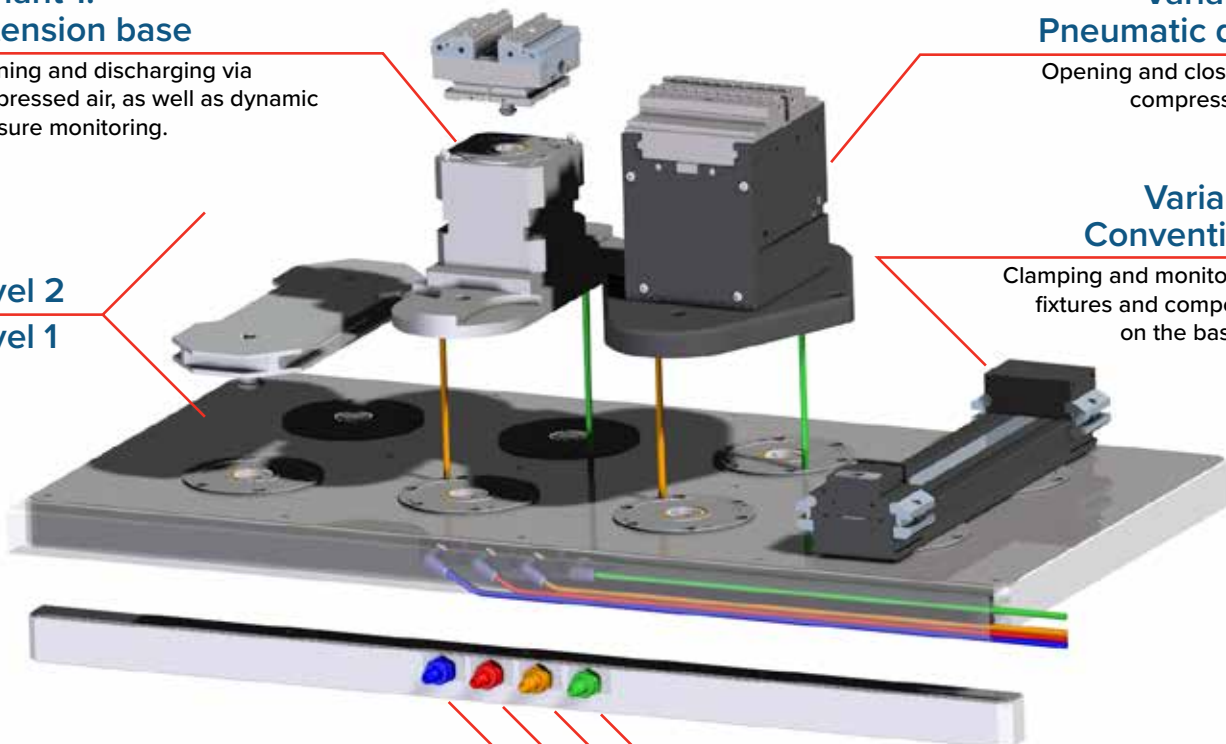
Variant 2:
Pneumatic drive

Opening and closing via compressed air.

Variant 3:
Conventional

Clamping and monitoring of fixtures and components on the base unit.

Level 2
Level 1



Opening the clamping pots on level 1

Monitoring and discharging on level 1

Compressed air feed for level 2 for operation or special function

Compressed air feed for level 2 for operation or special function

STANDARD BASE UNITS CLAMPING POT Ø 120 MM



Version:

Base units with clamping pots Ø 120 mm (4.7 inch), anodized. Height 44 mm (1.7 inch).

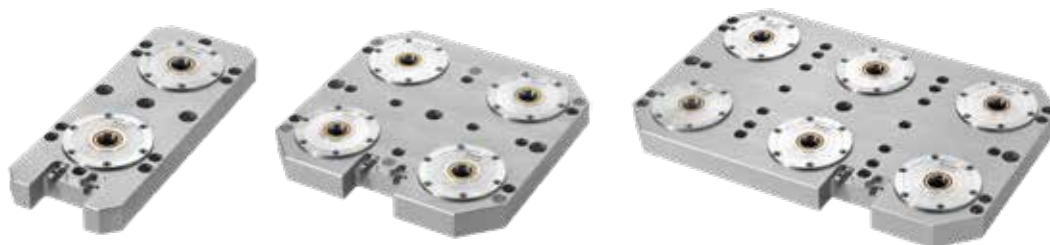
All holes for T-slot spacings of 63, 100, and 125 mm (2.5, 3.9 and 4.9 inch). Center hole Ø 25 H7.

Scope of supply:

Base unit with mounted clamping pots.

Note:

Cover panel and connection block (WH-ZP-ACC-AIRBLCK-STD/WH-ZP-ACC-AIRBLCK-PRE) are optionally available.



Part No.	Description	L mm/inch	W mm/inch	Suitable cover plate
WH-ZP120-BASE2-P200	Standard 2-pot base unit	416/16.4	166/6.5	WH-ZP120-ACC-CP2
WH-ZP120-BASE4-P200	Standard 4-pot base unit	366/14.4	366/14.4	WH-ZP120-ACC-CP4
WH-ZP120-BASE6-P200	Standard 6-pot base unit	366/14.4	566/22.3	WH-ZP120-ACC-CP6
WH-ZP120-BASE8-P200	Standard 8-pot base unit	366/14.4	766/30.2	WH-ZP120-ACC-CP8

STANDARD BASE UNITS CLAMPING POT Ø 138 MM



Version:

Base units with clamping pots Ø 138 mm (5.4 inch), anodized. Height 54 mm (2.1 inch).

All holes for T-slot spacings of 63, 100, and 125 mm (2.5, 3.9 and 4.9 inch). Centre hole Ø 25 H7.

Scope of supply:

Base unit with mounted clamping pots.

Note:

Cover panel and connection block (WH-ZP-ACC-AIRBLCK-STD/WH-ZP-ACC-AIRBLCK-PRE) are optionally available.

Part No.	Description	L mm/inch	W mm/inch	Suitable cover plate
WH-ZP138-BASE2-P200	Standard 2-pot base unit	446/17.6	196/7.7	WH-ZP138-ACC-CP2
WH-ZP138-BASE4-P200	Standard 4-pot base unit	396/15.6	396/15.6	WH-ZP138-ACC-CP4
WH-ZP138-BASE6-P200	Standard 6-pot base unit	396/15.6	596/23.5	WH-ZP138-ACC-CP6
WH-ZP138-BASE8-P200	Standard 8-pot base unit	396/15.6	796/31.3	WH-ZP138-ACC-CP8

12-POT CLAMPING TOWER



Version:

Tower with indexed clamping pots Ø 120 mm (4.7 inch).
Clamping pots with individual actuation.
Base plate 500 x 500 x 50 mm (19.7 x 19.7 x 2.0 inch).
Tower 200 x 200 x 630 mm (7.9 x 7.9 x 24.9 inch).
Overall height with base plate 680 mm (26.8 inch).

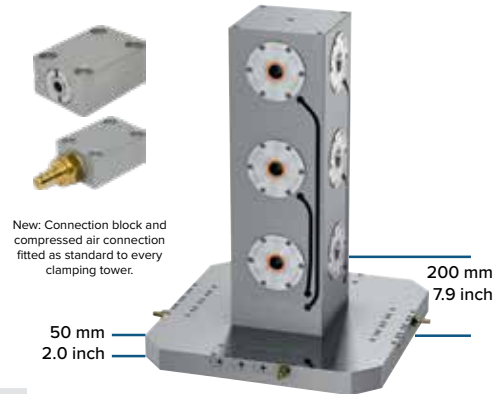
Scope of supply:

Tower with clamping pots and connection blocks mounted on each face, with separate compressed air connection.

Note:

Suitable base unit WH-ZP120-BASE6-P2035 or base unit with pitch of 200 mm.

Part No.	L	W	H	Pitch	Weight
WH-ZP120-TOMB-SQ200	200 mm (7.9 inch)	200 mm (7.9 inch)	630 mm (24.9 inch)	200 mm (7.9 inch)	109 kg (240 lbs)



Version:

Tower with indexed clamping pots Ø 120 mm (4.7 inch).
Clamping pots with individual actuation.
Base plate 500 x 500 x 50 mm (19.7 x 19.7 x 2.0 inch).
Tower 200 x 400 x 500 mm (7.9 x 15.7 x 19.7 inch).
Overall height with base plate 550 mm (21.7 inch).

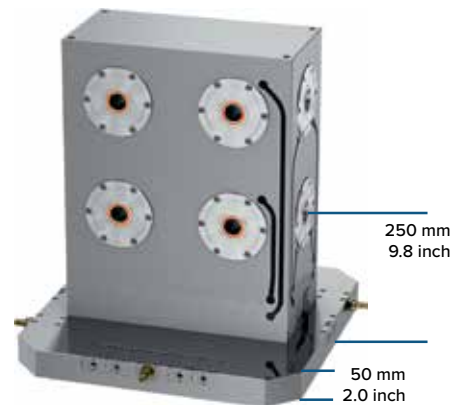
Scope of supply:

Tower with clamping pots and connection blocks mounted on each face, with separate compressed air connection.

Note:

Associated base unit WH-ZP120-BASE6-P2035 or base unit with pitch of 200 mm.

Part No.	L	W	H	Pitch	Weight
WH-ZP120-TOMB-RE400	200 mm (7.9 inch)	400 mm (15.7 inch)	500 mm (19.7 inch)	200 mm (7.9 inch)	143 kg (315 lbs)



BASE UNIT FOR CLAMPING TOWER



Version:

6 clamping pots Ø 120 mm (4.7 inch). Height 54 mm (2.1 inch).

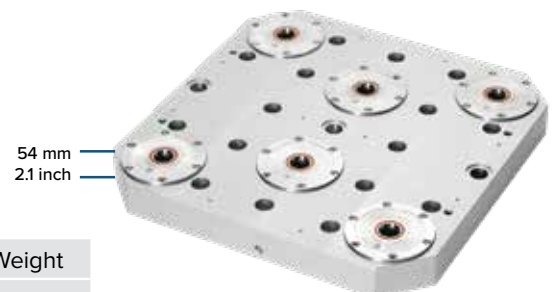
Application:

Special base unit for clamping towers.

Note:

Cover plate available as an option.

Part No.	L	W	H	Pitch	Weight
WH-ZP120-BASE6-P2035	500 mm (19.7 inch)	500 mm (19.7 inch)	54 mm (2.1 inch)	4 x 350 mm 1 x 200 mm	38 kg (83.8 lbs)



ALIGNMENT SET

Application:

For parallel alignment of a base unit in the T-slots.

Scope of supply:

Alignment set includes hexagon socket head screw.



Part No.	WH-ZP-ALGN25-1040	WH-ZP-ALGN25-1240	WH-ZP-ALGN25-1440	WH-ZP-ALGN25-1640	WH-ZP-ALGN25-1840	WH-ZP-ALGN25-2240
Size in mm Slot width/ clamping thickness	10/40	12/40	14/40	16/40	18/40	22/40

CENTERING SET

Application:

For centered alignment in the center hole.

For base units with 44 - 54 mm (1.7 - 2.1 inch) height.

The clamping thickness is 40 - 50 mm (1.6 - 2.0 inch).

Scope of supply:

Centering set includes hexagon socket head screw.



Part No.	WH-ZP-ACC-CENT25-3040	WH-ZP-ACC-CENT25-3240
Size in mm Centering-Ø/ centering height	30/10	32/10

1-POT EXTENSION BASES



Version:

1-pot extension base with indexed clamping pot Ø 120 mm (4.7 inch).
Pitch of the clamping points/studs on the underside 200 mm (7.9 inch).

Scope of supply:

Extension base with suitable clamping studs and plug-in connector.

Part No.	L mm/inch	W mm/inch	H mm/inch	Number of studs	Weight kg/lbs
WH-ZP120-RISE1-H120	330/13.0	198/7.8	120/4.7	2	13.1/28.9
WH-ZP120-RISE1-H150	330/13.0	198/7.8	150/5.9	2	14.0/30.9
WH-ZP120-RISE1-H200	330/13.0	198/7.8	200/7.9	2	14.8/32.6
WH-ZP120-RISE1-330-H200	330/13.0	330/13.0	200/7.9	4	20.9/46.1



2-POT EXTENSION BASES



Version:

2-pot extension base with clamping pots Ø 120 mm (4.7 inch).
Pitch of the clamping points/studs on the underside 200 mm (7.9 inch).

Scope of supply:

Extension base with suitable clamping studs and plug-in connector.

Part No.	L mm/inch	W mm/inch	H mm/inch	Number of studs	Weight kg/lbs
WH-ZP120-RISE2-H100	330/13.0	130/5.1	100/3.9	2	12,9/28.4
WH-ZP120-RISE2-H120	330/13.0	130/5.1	120/4.7	2	15.2/33.5
WH-ZP120-RISE2-H160	330/13.0	130/5.1	160/6.3	2	19.2/42.3
WH-ZP120-RISE2-H200	330/13.0	130/5.1	200/7.9	2	23.5/51.8
WH-ZP120-RISE2-330-H150	330/13.0	330/13.0	150/5.9	4	33.3/73.0
WH-ZP120-RISE2-330-H160	330/13.0	330/13.0	160/6.3	4	34.3/75.7



CLAMPING POT DOUBLE

Version:

Double clamping pot with orientation.
For direct clamping of components or clamping fixtures.
Ideally for complex workholding.

Scope of supply:

Clamping pot double, plug-in connector G 1/8".

Note:

Optional clamping studs (Ø 120 mm/4.7 inch see page 18, Ø 138 mm/5.4 inch see page 13).



Part No.	Height	Weight
WH-ZP120-CPD100	100 mm/3.9 inch	5.2 kg/11.5 lbs



Part No.	Height	Weight
WH-ZP138-CPD150	150 mm/5.9 inch	7.1 kg/15.7 lbs

Variable position

Individual positioning of clamping pot double also for grid pallet, tombstone etc.



SINGLE POT SOCKET

Application:

Single pot socket for universal use on machine tables with T-slots.

Scope of supply:

Single pot socket with clamping pot, table clamps and plug-in connector.

Note:

Centering mandrel not included in the scope of supply.

Part No.	WH-ZP120-STD-TSLT	WH-ZP120-INDX-TSLT	WH-ZP138-STD-TSLT	WH-ZP138-INDX-TSLT
Size	Ø 120	Ø 120	Ø 138	Ø 138
Indexed	No	Yes	No	Yes



SUITABLE CENTERING MANDREL

Part No.	Description
WH-ZC-ACC-CENT	for pot Ø 120 & Ø 138 mm

STANDARD CONNECTION BLOCK

Version:

Two holes and one plug-in connector G 1/4" to connect release line and discharge line.

Application:

For connecting base units to the compressed air supply.

Part No.	WH-ZP-ACC-AIRBLCK-STD
----------	-----------------------



PREMIUM CONNECTION BLOCK

Version:

G 1/4" plug-in connector to connect the compressed air. Manual valve for releasing, locking and discharging. It is not possible to release and discharge simultaneously.

Application:

For connecting base units to the compressed air supply.

Part No.	WH-ZP-ACC-AIRBLCK-PRE
----------	-----------------------



ISO40 ADAPTER

Version:

Aluminium with internal taper for SK 40/MAS-BT tool arbor.

Application:

5-axis machining of small workpieces.

Scope of supply:

SK 40 adapter with grub screw.

Part No.	Suitable for	Weight kg/lbs
WH-ZP90-40ADPT	Clamping pot Ø 90 mm	0.89/1.96
WH-ZP120-40ADPT	Clamping pot Ø 120 mm	1.51/3.33
WH-ZP138-40ADPT	Clamping pot Ø 138 mm	1.94/4.28



SUITABLE CLAMPING STUDS

Part No.	Description
WH-ZP90-STUD-14M12	For clamping pot Ø 90 mm
WH-ZP120-STUD-18M16	For clamping pot Ø 120 mm
WH-ZP138-STUD-18M16	For clamping pot Ø 138 mm



CLEANING STUD

Application:

With activated flushing spindle for cleaning machine table and workpiece.
Usable for every conventional tool holder Ø 25 mm (1.0 inch)
(automated change from tool magazine).

Note:

Ideal for automated machine tool. High operational reliability.



Part No.

WH-ZP-ACC-CSTUD

PULL-OUT FORCE TESTER

Application:

For testing the attachment force of the clamping pots.

Scope of supply:

Pull-out force tester and 4 clamping studs, suitable for all sizes of pots.

Note:

To measure the pull-out force, a conventional torque wrench is required.



Part No.

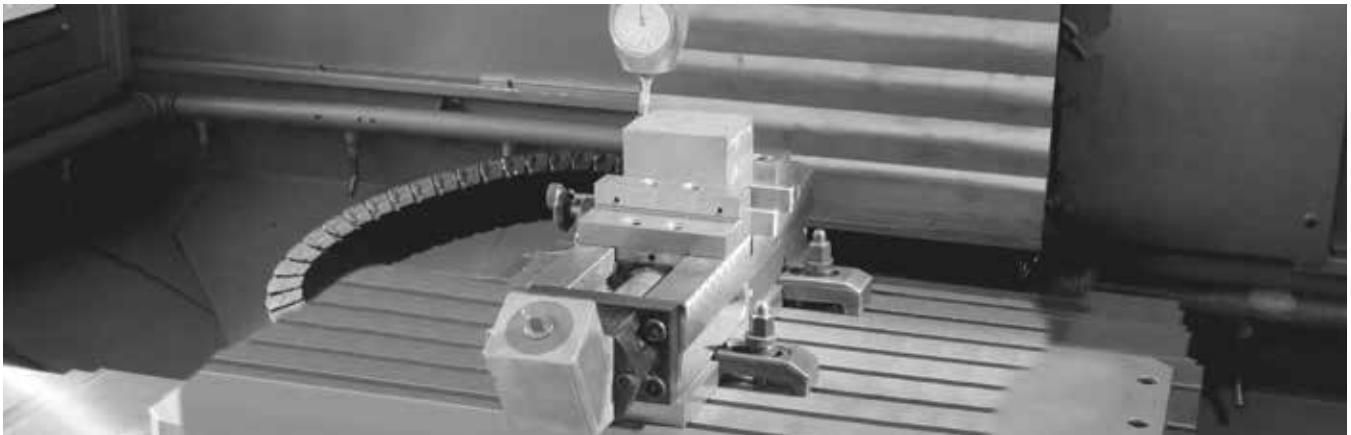
WH-ZP-ACC-PFT

Force measurement

By a torque wrench and pull-out force tester the clamping force of the zero point clamping system can be checked.



CONVENTIONAL CLAMPING



Fixed clamping width, dependent on vise size. Clamping in the case of clamping mechanisms which are partly open is only possible for one component.

APPLICATIONS FOR MODULAR RAIL VISE SYSTEM



Forged clamping

Positive clamping using the pivoted clamping rail system.



Flexible basis

Can be used on the T-slot grid pallet, as well as on the zero point clamping system.



Blank part clamping

Parallel clamping jaws with gripper inserts permit positive clamping of blank parts.



Clamping multiple parts

Multiple parts, even different parts, can be clamped at the same time on a single clamping rail.

RAIL VISE 80

M 10
12x6



Version:

Compact modular design, clamping forces up to 20 kN (4500 lbf). Conventional clamping or grip clamping can still be performed. Pairing accuracy 0.03 mm (0.001 inch). Clamping rails can be coupled together infinitely. Precise serrations, pitch 2 mm (0.08 inch). Functional faces hardened and ground. Checking the clamping force using a torque wrench. A graduated scale rule at the top permits quick positioning.

Application:

Clamping of single and multiple components. A clamping rail with a length of 260 mm can be fastened to a clamping pot in a pivotable manner (see page 10). This clamping rail is equipped at the factory with supporting plates for this purpose.

Note:

The modular rail vise can also be fastened without a zero point clamping system using M12 screws or on T-slot table with the side clamp set.

Part No.	WH-MRV80-260	WH-MRV80-400	WH-MRV80-500	WH-MRV80-600
Weight in kg	5.4	7.7	10.0	11.6
Weight in lbs	11.9	17.0	22.0	25.6
Length in mm	260	400	500	600
Length in inch	10.2	15.7	19.7	23.6

Table clamps (set)



Application:

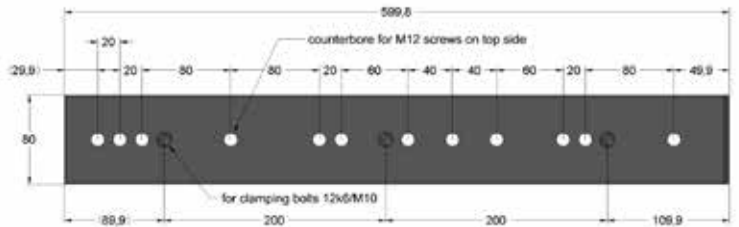
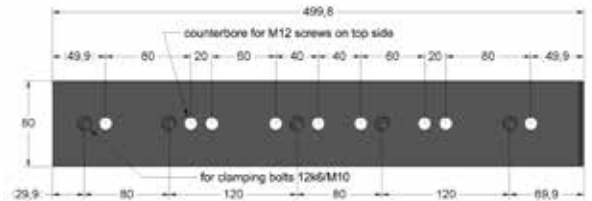
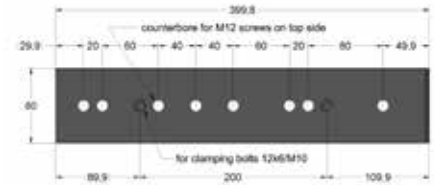
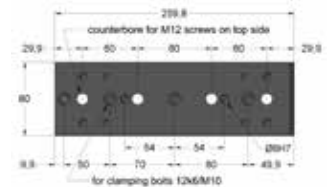
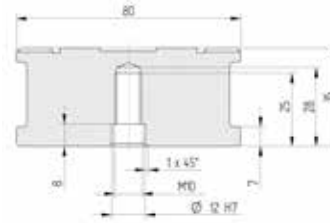
For securing the clamping rail to the T-slot table.

Scope of supply:

6 table clamps.

SUITABLE ACCESSORIES

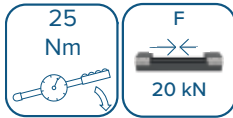
Part No.	Description
WH-MRV-ACC-CLAMPS	Table clamps set (6 pcs.)



Drawings all in metric si units

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PULL-DOWN BASE JAW 48



Version:

Pull-down width 40 mm (1.57 inch).

Jaw rear face as for a fixed jaw with 48 mm (1.89 inch) width.

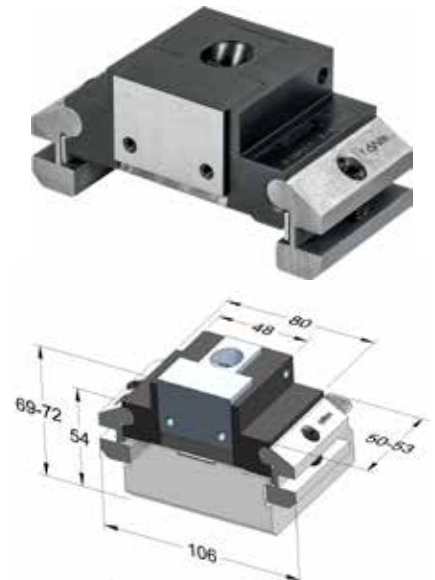
Application:

For clamping blank parts (ideal with gripper jaw)
and finished parts (ideal with carbide jaw).

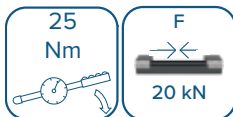
Part No.	Description	Weight
WH-MRV80-CB-BPD-48	Pull-down jaw 48	1.1 kg (2.4 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F-48NF	Carbide facing jaw 48NF
WH-MRV80-JAW-R-48NF	Gripper face jaw 48NF (2 pads)



PULL-DOWN BASE JAW 80



Version:

Pull-down width 80 mm (3.15 inch). The jaw rear face is arranged as a fixed jaw with 80 mm (3.15 inch) width.

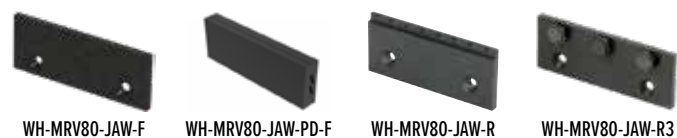
Application:

For clamping blank parts (ideal with gripper jaw)
and finished parts (ideal with carbide jaw).

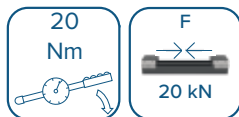
Part No.	Description	Weight
WH-MRV80-CB-BPD	Pull-down facing jaw 80	1.5 kg (3.3 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F	Carbide facing jaw 80
WH-MRV80-JAW-PD-F	Pull down face jaw 80
WH-MRV80-JAW-PD-FCC400	Pull down face jaw 80 carbide coated
WH-MRV80-JAW-R	Gripper facing jaw 80 (serrated)
WH-MRV80-JAW-R3	Gripper facing jaw 80 (3pads)



PARALLEL BASE JAW 48



Version:

Parallel clamping width 48 mm (1.89 inch).

The jaw rear face is arranged as a fixed jaw with 48 mm (1.89 inch) width.

Tapped holes for attaching facing jaws.

Application:

For clamping blank parts (ideal with gripper jaw)

and finished parts (ideal with carbide jaw).

Positive clamping with an aluminium/steel facing jaw (profiled jaws).

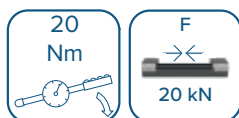
Part No.	Description	Weight
WH-MRV80-CB-BPAR-48	Parallel clamping jaw 48	1.2 kg (2.6 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F-48P	Gripper facing jaw 48P
WH-MRV80-JAW-R-48P	Carbide facing jaw 48P



PARALLEL BASE JAW 80



Version:

Parallel clamping jaw 80 mm (3.15 inch).

The jaw rear face is arranged as a fixed jaw with 80 mm (3.15 inch) width.

Tapped holes for attaching facing jaws.

Application:

For clamping blank parts (ideal with gripper and serrated jaw)

and finished parts (ideal with carbide jaw).

Positive clamping with an aluminium/steel facing jaw (profiled jaws).

Part No.	Description	Weight
WH-MRV80-CB-BPAR	Parallel clamping jaw 80	1.4 kg (3.1 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F	Carbide facing jaw 80
WH-MRV80-JAW-PD-F	Pull down face jaw 80
WH-MRV80-JAW-PD-FCC400	Pull down face jaw 80 carbide coated
WH-MRV80-JAW-R	Gripper facing jaw 80 (serrated)
WH-MRV80-JAW-R3	Gripper facing jaw 80 (3pads)



Drawings all in metric si units

FIXED BASE JAW 48

Version:

Fixed jaw width 48 mm (1.89 inch).

Application:

For clamping blank parts (ideal with gripper jaw)
and finished parts (ideal with carbide jaw).
Positive clamping with an aluminium/steel facing jaw (profiled jaw).

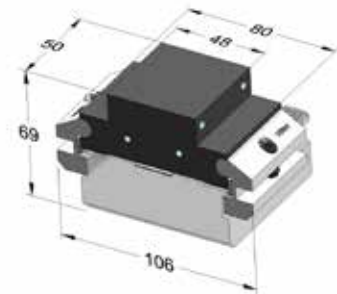
Part No.	Description	Weight
WH-MRV80-CB-BFIX-48	Fixed jaw 48	1.1 kg (2.4 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F-48NF	Carbide facing jaw 48NF
WH-MRV80-JAW-R-48NF	Gripper face jaw 48NF (2 pads)



WH-MRV80-JAW-F-48NF



Drawings all in metric si units

FIXED BASE JAW 80

Version:

Fixed jaw width 80 mm (3.15 inch).

Application:

For clamping blank parts (ideal with gripper or serrated jaw)
and finished parts (ideal with carbide jaw).
Positive clamping with an aluminium/steel facing jaw (profiled jaw).

Part No.	Description	Weight
WH-MRV80-CB-BFIX	Fixed jaw 80	1.3 kg (2.9 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-F	Carbide facing jaw 80
WH-MRV80-JAW-PD-F	Pull down face jaw 80
WH-MRV80-JAW-PD-FCC400	Pull down face jaw 80 carbide coated
WH-MRV80-JAW-R	Gripper facing jaw 80 (serrated)
WH-MRV80-JAW-R3	Gripper facing jaw 80 (3 pads)



WH-MRV80-JAW-F



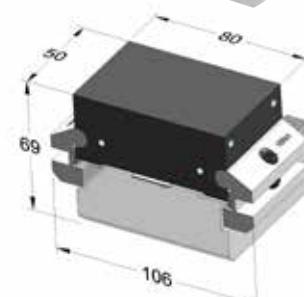
WH-MRV80-JAW-PD-F



WH-MRV80-JAW-R



WH-MRV80-JAW-R3



BASE JAW 80

Version:

Base jaw width 80 mm.
For mounting the top jaw.

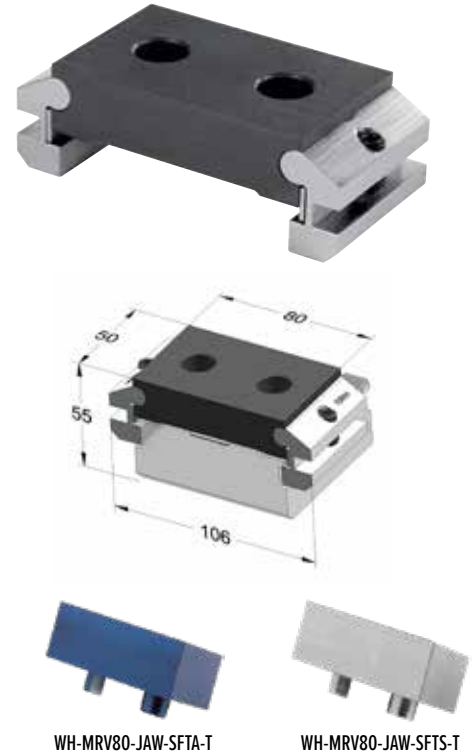
Application:

Mounting of soft top jaws in steel or aluminum, from which profiled jaws can be produced.
Ideal for modular clamping, serving as a fixed jaw between two components. The component is then clamped with a parallel clamping jaw and a facing jaw.

Part No.	Description	Weight
WH-MRV80-CB-BJ	Base jaw 80	0.8 kg (1.8 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV80-JAW-SFTA-T	Soft top jaw 80-alu
WH-MRV80-JAW-SFTS-T	Soft top jaw 80 steel



Drawings all in metric si units

SERRATED FACING JAW

Version:

Serrated facing jaw.
The tooth contour and spacing is compatible with the grip top jaws of the centering clamping fixtures.

Application:

For clamping blank parts.
Can be used for fixed and parallel clamping jaws of the corresponding size.

Part No.	Description
WH-MRV80-JAW-R	Serrated facing jaw 80
WH-MRV120-JAW-R	Serrated facing jaw 120



MAGNETIC STRIP 74

Version:

Magnetic (underside and reverse side).

Application:

Support for workpieces.



Part No.	Width/height	Thickness
WH-MRV80-ACC-MP10	74/10 mm (2.9/0.4 inch)	4 mm (0.2 inch)
WH-MRV80-ACC-MP15	74/15 mm (2.9/0.6 inch)	4 mm (0.2 inch)
WH-MRV80-ACC-MP20	74/20 mm (2.9/0.8 inch)	4 mm (0.2 inch)
WH-MRV80-ACC-MP25	74/25 mm (2.9/1.0 inch)	4 mm (0.2 inch)
WH-MRV80-ACC-MP30	74/30 mm (2.9/1.2 inch)	4 mm (0.2 inch)

ADJUSTABLE WORKPIECE STOP

Version:

Adjustable clamping of the dowel pin.

No projecting edges during machining.

Application:

High repetition accuracy when positioning.

Suitable also for the SL120 modular clamping rail system.



Part No.	Description
WH-ZV-ACC-WES	Adjustable workpiece stop

MAGNETIC WORKPIECE STOP

Version:

Workpiece stop with magnet.

Application:

High repetition accuracy when positioning on all magnetic surfaces.

Suitable also for the SL120 modular clamping rail system.



Part No.	Description
WH-MRV80-ACC-MWES	Magnetic workpiece stop

RAIL VISE 120

M 16
18k6



Version:

Compact modular design, clamping forces up to 40 kN (9000 lbf). Conventional clamping or grip clamping can still be performed.

Pairing accuracy 0.03 mm (0.001 inch).

Clamping rails can be coupled together infinitely.

Precise serrations, pitch 2 mm (0.08 inch).

Functional faces hardened and ground.

Checking the clamping force using a torque wrench.

A graduated scale rule at the top permits quick positioning.

Application:

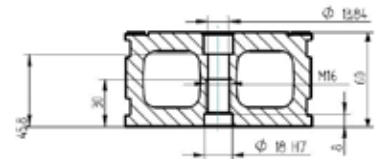
Clamping of single and multiple components.

Bracing panels must be used when clamping a workpiece over two or more rails on the zero point clamping system.

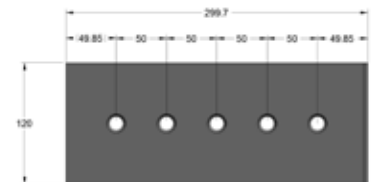
Clamping rails can also be clamped in a pivotable manner (see page 10), in which case supporting plates are required.

Note:

The modular clamping rail can also be fastened without a zero point clamping system using M12 screws or on T-slot table with the side clamp set.



Part No.	WH-MRV120-300	WH-MRV120-500	WH-MRV120-600	WH-MRV120-800
Weight in kg	9.3	9.7	18.5	25.5
Weight in lbs	20.5	21.3	40.8	56.2
Length in mm	300	500	600	800
Length in inch	11.8	19.7	23.6	31.5

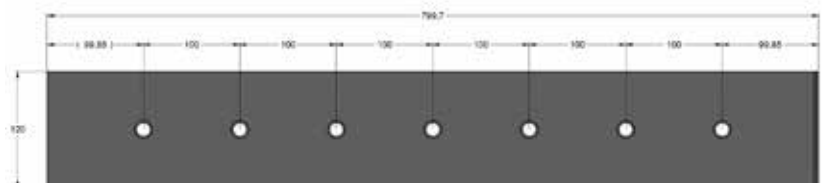
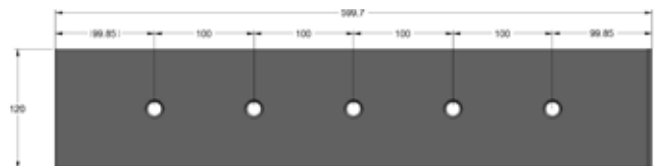


SUITABLE ACCESSORIES

Part No.	Description
WH-MRV-ACC-CLMP	Table clamps set (6 pcs.)



WH-MRV-ACC-CLAMPS



BASE JAW 120

Version:

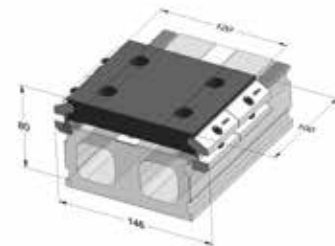
Base jaw width 120 mm.
For mounting the top jaws.

Application:

Mounting of soft top jaws in steel or aluminium, from which profiled jaws can be produced. The component is clamped with a parallel clamping jaw and a facing jaw. Can be used centrally between two parallel clamping jaws for modular clamping.

Note:

Increased flexibility due to the half-size top jaws 1/2, as they can be replaced with other profiled jaws quickly and independently on either side. These can also be used on the pneumatic drive.



Part No.	Description	Weight
WH-MRV120-CB-BJ	Base jaw 120	4.0 kg (8.8 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV120-JAW-M-A	Soft top jaw 120-alu
WH-MRV120-JAW-M-S	Soft top jaw 120-steel



WH-MRV120-JAW-M-A



WH-MRV120-JAW-M-S

Drawings all in metric si units

FIXED BASE JAW 120

Version:

Fixed jaw width 120 mm.

Tapped holes for mounting the facing jaw.

Application:

For clamping blank parts (ideal with a grip or serrated facing jaw) and finished parts (ideal with an carbide facing jaw).

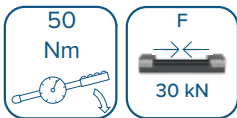
Positive clamping with an aluminium/steel facing jaw (profiled jaw) and with the base jaw with pivot function. The clamping area can be extended using the serrated top jaws.



Part No.	Description	Weight
WH-MRV120-CB-BFIX	Fixed jaw 120	4.1 kg (9.0 lbs)

For suitable accessories see Parallel clamping jaw 120

PULL-DOWN BASE JAW 120



Version:

Pull-down jaw width 120 mm.

The jaw rear face is arranged as a fixed jaw.

Tapped holes for mounting the facing jaw.

Application:

For clamping blank parts (ideal with a grip facing jaw) and finished parts (ideal with an carbide facing jaw). Positive clamping with the base jaw (see WH-MRV120-JAW-PAR).



Part No.	Description	Weight
WH-MRV120-CB-BPD	Pull down jaw 120	4.3 kg (9.5 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-MRV120-JAW-F	Carbide finish facing jaw RV120 (Each)
WH-MRV120-JAW-R3	Grip face jaw RV120 (Each) 3 grip pads



WH-MRV120-JAW-F



WH-MRV120-JAW-R3

Drawings all in metric si units

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STEP BASE JAW 120

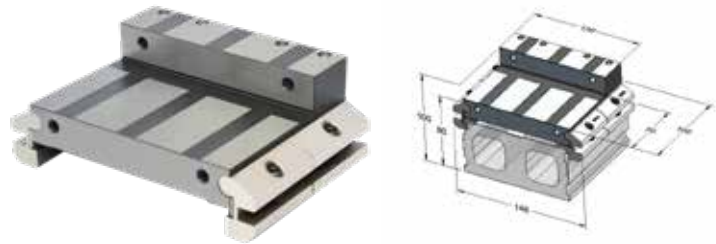
Version:

Step base jaw width 120 mm (4.7 inch).

The jaw rear face is arranged as a fixed jaw.

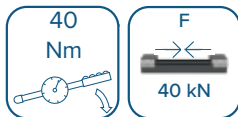
Application:

Fixed jaw increasing the clamping width.



Part No.	Description	Weight
WH-MRV120-CB-BSTP	Stepped jaw 120	4.1 kg (9.0 lbs)

PARALLEL BASE JAW 120



Version:

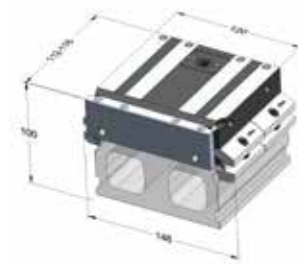
Parallel jaw width 120 mm.

The jaw rear face is arranged as a fixed jaw.

Tapped holes for mounting the facing jaw.

Application:

For clamping blank parts (ideal with a grip or serrated facing jaw) and finished parts (ideal with an carbide facing jaw). Positive clamping with an aluminium/steel facing jaw (profiled jaws). The clamping area can be extended using the serrated top jaws.



Part No.	Description	Weight
WH-MRV120-CB-BPAR	Parallel jaw 120	4.3 kg (9.6 lbs)

Drawings all in metric si units

SUITABLE ACCESSORIES
FIXED AND PARALLEL CLAMPING JAW WH-MRV120-CB-BFIX +
WH-MRV120-CB-BPAR

Part No.	Description
WH-MRV120-JAW-F	Carbide finish facing jaw 120
WH-MRV120-JAW-FIX	Fixed base jaw 120
WH-MRV120-JAW-PDF	Pull down face jaw RV120 carbide coated
WH-MRV120-JAW-PD-F	Pull down face jaw RV120
WH-MRV120-JAW-PIV	Pivot base top jaw RV120 120x50x16mm
WH-MRV120-JAW-PIV3.8	Repositionable insert 3.8mmH rougher
WH-MRV120-JAW-PIV5.5	Repositionable insert 5.5mmH finisher
WH-MRV120-JAW-R	Grip face jaw RV120 4mm step
WH-MRV120-JAW-R2	Grip top jaw RV120 4mm step
WH-MRV120-JAW-R3	Grip face jaw RV120 3 grip pads
WH-MRV120-JAW-SFTA-F	Soft face jaw RV120 aluminum
WH-MRV120-JAW-SFTS-F	Soft face jaw RV120 steel

*All jaws are sold per piece.



Drawings all in metric si units

JAW FOR PIVOT FUNCTION

Version:

Top jaw width 120 mm.

For mounting gripper and clamping inserts.

Application:

Suitable for fixed jaw WH-MRV120-CB-BFIX.

Positive clamping.

For machining blank parts (ideal with gripper inserts) and finished parts (ideal with carbide inserts).

Scope of supply:

Jaw with central securing screw and 2 x gripper insert WH-MRV120-CB-BFIX-I3.8.

Part No.	Description	Weight
WH-MRV120-JAW-PIV	Pivot top jaw	0.8 kg (1.8 lbs)



For suitable accessories see fixed and parallel base jaw.

TOP FIXED BASED JAW

Version:

Top jaw width 120 mm.

For mounting gripper and clamping inserts.

Application:

Suitable for fixed and parallel base clamping jaw (WH-MRV120-CB-BFIX/BPAR).

Positive clamping. For machining blank parts (ideal with gripper inserts) and finished parts (ideal with carbide inserts).

Scope of supply:

Jaw with securing screws and 2x gripper insert (WH-MRV120-JAW-PIV3.8).

Part No.	Description	Weight
WH-MRV120-JAW-FIX	Fixed top jaw	1.4 kg (3.0 lbs)



SUITABLE ACCESSORIES FOR FIXED BASE JAW AND WITH PIVOT FUNCTION

Part No.	Description
WH-MRV120-JAW-PIV3.8	Gripper insert (height 3,8 mm/0.2 inch)
WH-MRV120-JAW-PIV5.5	Clamping insert, smooth, carbide-coated (height 5.5 mm/0.2 inch)



WH-MRV120-JAW-PIV-3.8



WH-MRV120-JAW-PIV-5.5

Blank part clamping

Positive clamping of blank parts with gripper inserts.



MAGNETIC STRIP 114

Version:

Magnetic strip width 120 mm. Positioning via magnets.

Application:

Serves as positional support for workpieces at different clamping depths.



Part No.	WH-MRV120-ACC-MP10	WH-MRV120-ACC-MP20	WH-MRV120-ACC-MP30	WH-MRV120-ACC-MP38
Width /Height	114/10 mm (4.5/0.4 inch)	114/20 mm (4.5/0.8 inch)	114/30 mm (4.5/1.2 inch)	114/38 mm (4.5 /1.5 inch)
Thickness	6 mm (0.2 inch)	6 mm (0.2 inch)	6 mm (0.2 inch)	6 mm (0.2 inch)

PULL-DOWN FACING JAW

Version:

Pull-down facing jaws optionally with or without carbide coating.
Prevents the component lifting off.

Application:

For clamping blank parts and finished parts.
Can be used on fixed and parallel clamping jaws.



Part No.	Description	Weight
WH-MRV120-JAW-PDF	Pull down face jaw 120-carbide coated	0.4 kg (0.9 lbs)
WH-MRV120-JAW-PD-F	Pull down face jaw 120	0.4 kg (0.9 lbs)

STEEL SERRATED TOP JAWS

Version:

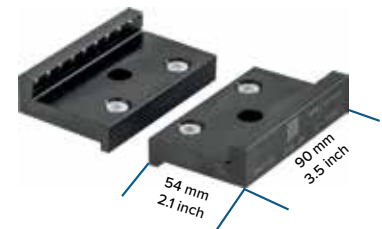
Serrated top jaws to extend the clamping widths.

Application:

For clamping blank parts.
Suitable for fixed jaw WH-MRV120-CB-BFIX and parallel clamping jaw WH-MRV120-CB-BPAR.

Scope of supply:

Pair of top jaws with securing screws.



Part No.	Description	Weight
WH-MRV120-JAW-R2	Steel serrated top jaw 120	0.4 kg (0.9 lbs)

MANUAL SELF-CENTERING VISE M80 AND M120 FOR RAIL SYSTEM

Powerful flexibility

The self-centering vise is the perfect complement to your modular clamping rail system. Components can be centrally clamped using grip jaws, carbide-coated jaws or profiled jaws. Round parts can be clamped using pivot jaws.

Variable range of application

Direct **mounting on the modular clamping rail system**, can be offset by 90°, or on the **zero point clamping system**. Ideal for 5-axis machining on one extension base.

Wide variety of jaws

For blank and finished parts, as well as contour-faithful clamping.

Powerful

Clamping forces up to 17 kN (3800 lbf) - size 80 or 25 kN (5500 lbf) - size 120.

High process reliability

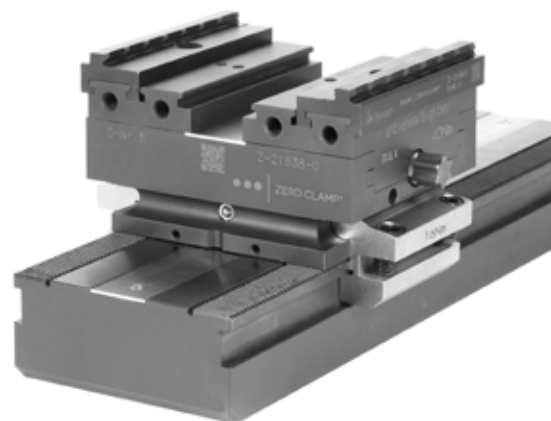
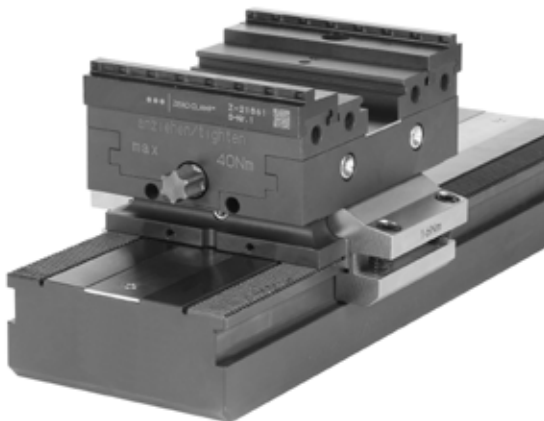
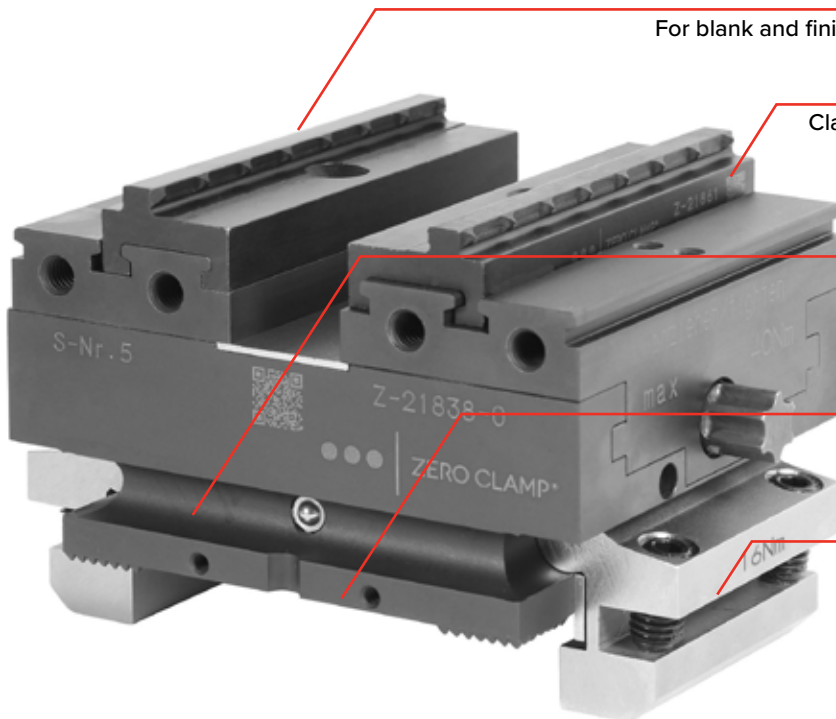
Full enclosure protects against dirt.

Precision

Variable centering
±0.02 mm (0.0007 inch).

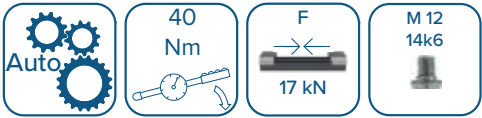
Flexible

Option of mounting on the modular clamping rail system or on an extension base.



The self-centering vise can be rotated by 90° simply, quickly.

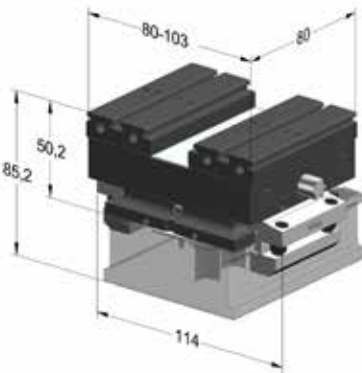
M80 SELF-CENTERING VISE FOR RAIL SYSTEM



Version:
Mechanical self-centering vise with closed clamping mechanism.

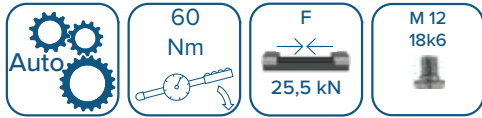
Application:
For centrally clamping blank parts (ideal with grip top jaw set) and finished parts (ideal with an carbide top jaw set).
Suitable for clamping rail SL080.

Note:
The top jaws are dependent on size and are the same for all types.
During continuous operation, the product requires weekly lubrication with the high pressure lubrication HPL-15* using the lubricating nipples on the side.



Part No.	Description	Weight
WH-ZV-M80R	ZeroVise® M80R	2.7 kg (6.9 lbs)

M120 SELF-CENTERING VISE FOR RAIL SYSTEM



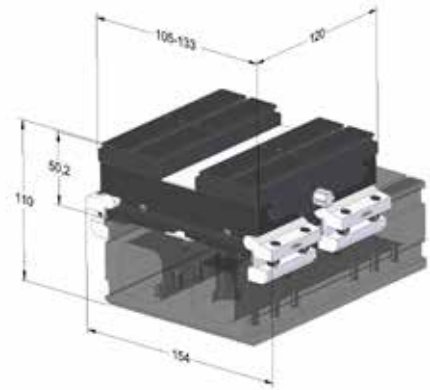
Version:

Mechanical self-centering vise with closed clamping mechanism.

Application:

For centrally clamping blank parts (ideal with grip top jaw set) and finished parts (ideal with an carbide top jaw set).

Suitable for clamping rail SL120.



Part No.	Description	Weight
WH-ZV-M120R	ZeroVise® M120R	6.8 kg (15.1 lbs)

MANUAL SELF-CENTERING VISE M80 AND M120 FOR T-SLOTS

Specialized and precise

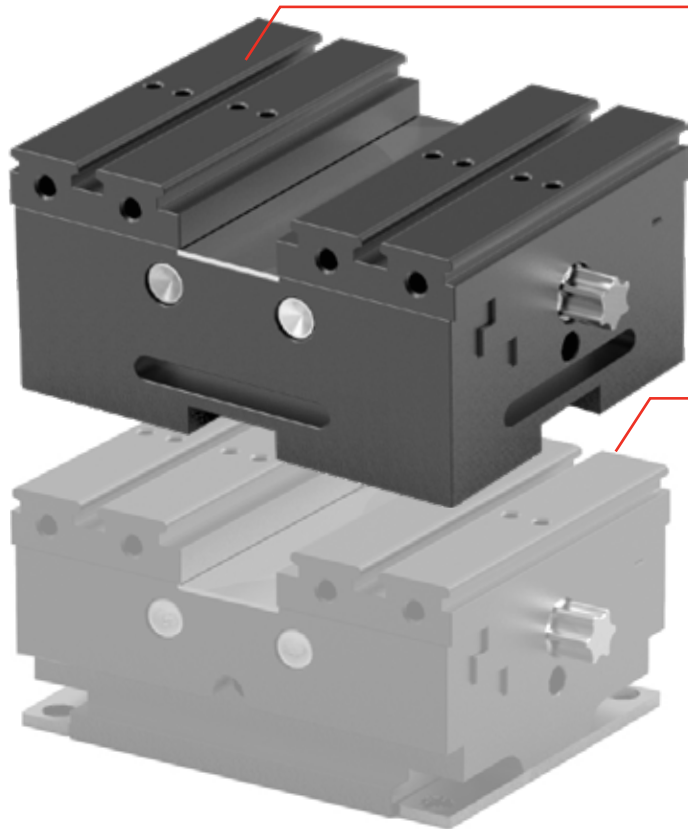
Components can be centrally clamped using grip jaws, carbide-coated jaws, profiled jaws or prism jaws. Reliable application, thanks to the fully enclosed clamping mechanism.

Choose the ideal accompaniment for your production

You can choose between two versions of the self-centering vise fixture which are ideally tailored to your requirements.

The T-slot self-centering vise is suitable for the construction of your own clamping fixtures on pallets or on the machine table.

The automated centering clamping fixture, on the other hand, is suitable for fast operation on the zero point clamping system, e.g. for automation.



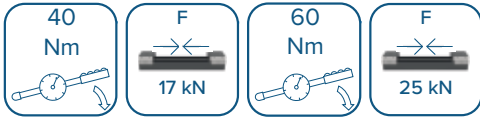
T-slots self-centering vise

Easy and flexible use on T-slot tables, grid plates, or extension bases using universal alignment slots.

Automation self-centering vise

The self-centering vise is used directly on the zero point clamping system.

M80 AND M120 VISE FOR T-SLOTS



Version:

Mechanical self-centering vise with closed clamping mechanism.

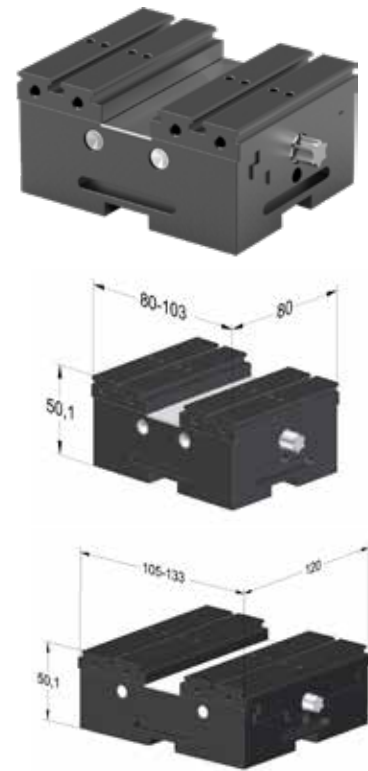
Application:

Centered clamping of blank parts (ideal with the grip top jaw set) and finished parts (ideal with the carbide top jaw set).

Centering clamping fixture can be fastened individually using the side clamps. For the construction of clamping fixtures and for conventional fastening on a T-slot machine table or a grid pallet.

Note:

The top jaws are dependent on size and are the same for all types. During continuous operation, the product requires weekly lubrication with the high pressure lubrication HPL-15* using the lubricating nipples on the side.



Part No.	Description	Clamping Force	Weight
WH-ZV-M80S	ZeroVise® M80S	17 kN (3800 lbf)	3.4 kg (7.5 lbs)
WH-ZV-M120S	ZeroVise® M120S	25 kN (5500 lbf)	6.0 kg (12 lbs)

SUITABLE ACCESSORIES

Part No.	Description
WH-ZV-ACC-TCLMP	Table clamps set (2 pcs.)
WH-ZV-45PYRM-400	3-side extension base



WH-ZV-ACC-TCLMP

5-axis Pyramid Base

Self-centering vise fastened on a 3-pot extension base with side clamps.



Part No. WH-ZV-45PYRM-400 (without centering clamping fixtures)

Drawings all in metric si units

SELF-CENTERING VISE M80 AND M120 FOR ZERO POINT SYSTEM (AUTOMATION READY)

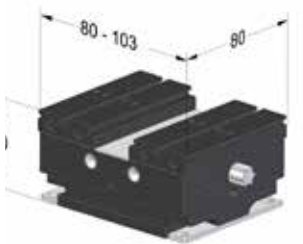


Version:
Mechanical self-centering vise with closed clamping mechanism.

Application:
Centered clamping of blank parts (ideal with the grip top jaw set) and finished parts (ideal with the carbide top jaw set).
The centering clamping fixture is ideal for automation, as it can be fastened quickly and securely on the underside using a clamping stud.

Note:
The top jaws are dependent on size and are the same for all types.
Clamping stud is available as an option. During continuous operation, the product requires weekly lubrication with the high pressure lubrication using the lubricating nipples on the side.

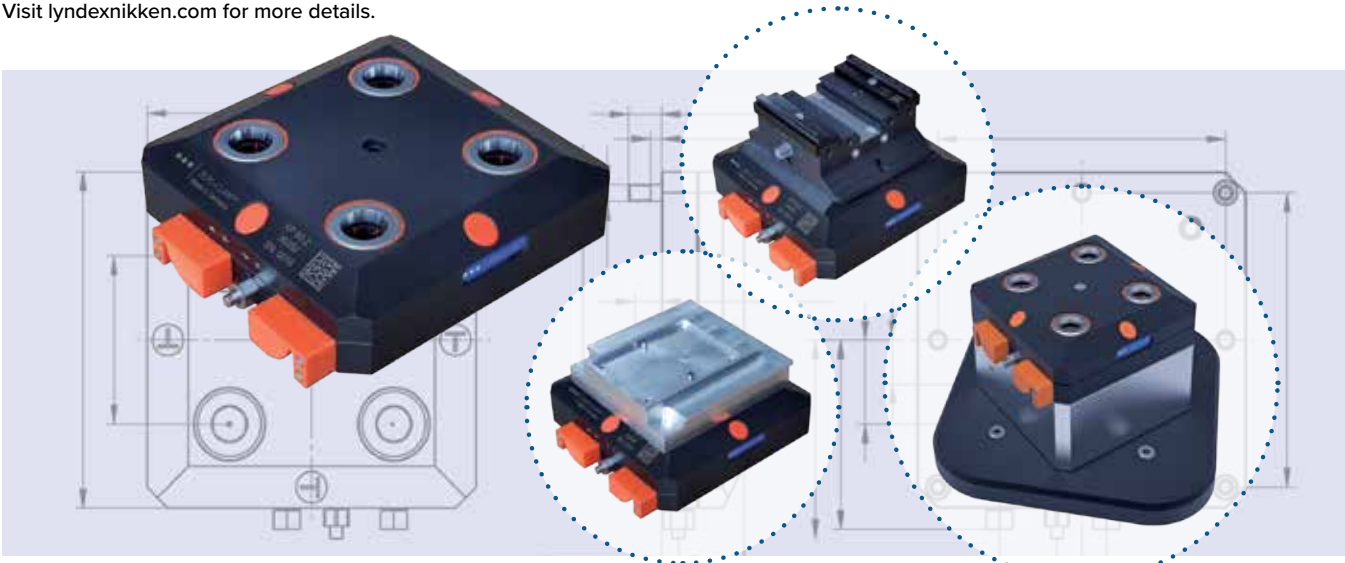
Part No.	Description	Clamping Force	Weight
WH-ZV-M80A	ZeroVise® M80A	17 kN (3800 lbf)	2.5 kg (7.66 lbs)
WH-ZV-M120A	ZeroVise® M120A	25 kN (5500 lbf)	5.1 kg (12.5 lbs)



Note: Vise includes 4 studs

Automation ready

Vises designed for use with P80Z pneumatic Zero Point vise console.
Visit lyndexnikken.com for more details.



*M120A vise and Zero Point console are available in 80mm and 96mm bolt patterns.

TOP JAWS FOR M80 AND M120 VISE

Version:

Top jaws in various sizes and designs.

Application:

Gripper jaws ideal for clamping blank parts. Jaws with carbide coating are suitable for clamping finished parts.

Soft blank jaws are for bespoke production of profiled jaws.

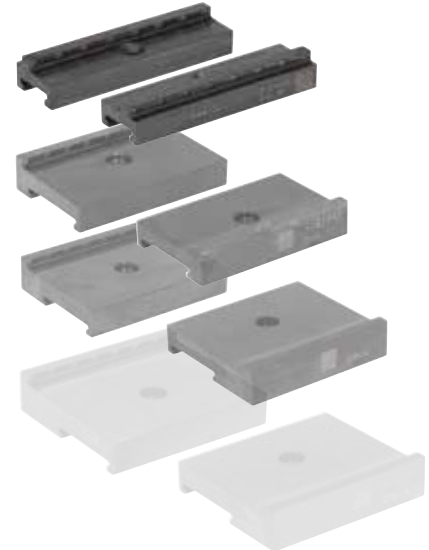
Prism jaws for horizontal and vertical clamping of round workpieces.

Scope of supply:

Pair of jaws with securing screws.

Note:

Top jaws can be used for all three centering clamping fixture variants in the same size.

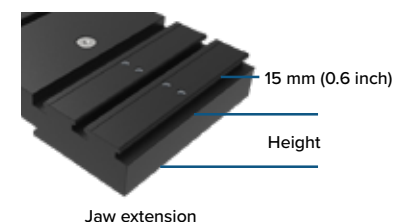
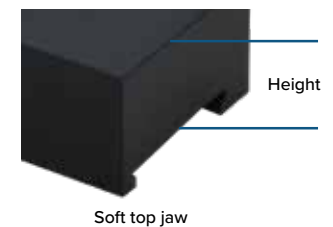
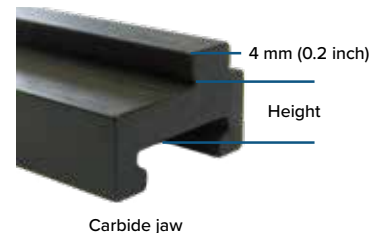
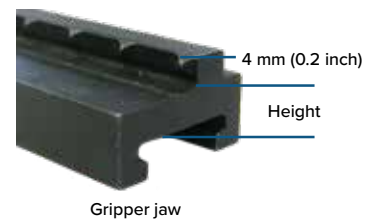


TOP JAWS FOR M80 VISE (ALSO USE ON P100 PNEUMATIC VISE)

Part No.	Clamping Range	Description
WH-ZV80-JAWS-F107	87 - 107 mm (3.4 - 4.2 inch)	Pair of gripper top jaws 107*
WH-ZV80-JAWS-F87	7 - 88 mm (0.3 - 3.5 inch)	Pair of gripper top jaws 88*
WH-ZV80-JAWS-M153-A	100 - 153 mm (3.9 - 6.0 inch)	Pair of Aluminum machinable top jaws
WH-ZV80-JAWS-M153-S	100 - 153 mm (3.9 - 6.0 inch)	Pair of steel machinable top jaws
WH-ZV80-JAWS-R107	87 - 107 mm (3.4 - 4.2 inch)	Pair of gripper top jaws 107
WH-ZV80-JAWS-R87	6 - 87 mm (0.2 - 3.4 inch)	Pair of gripper top jaws 87
WH-ZV80-JAWS-EXT	87 - 167 mm (3.43 - 6.57 inch)	Pair of jaws extensions 167

Top jaws can be used on centering clamping fixture 80, T-slot centering clamping fixture 80, and automated centering clamping fixture 80.

*Use for ZV80 & P100 vise.



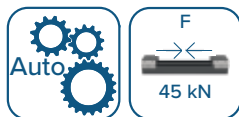
TOP JAWS FOR M120 VISE

Part No.	Clamping Range	Description
WH-ZV120-JAWS-F107	6 - 107 mm (0.2 - 4.2 inch)	Pair of carbide top jaws 107*
WH-ZV120-JAWS-F132	106 - 132 mm (4.2 - 5.2 inch)	Pair of carbide top jaws 132
WH-ZV120-JAWS-M183-A	125 - 153 mm (5.0 - 6.0 inch)	Pair of Aluminum machinable top jaws
WH-ZV120-JAWS-M183-S	125 - 153 mm (5.0 - 6.0 inch)	Pair of steel machinable top jaws
WH-ZV120-JAWS-R107	6 - 107 mm (0.2 - 4.2 inch)	Pair of gripper top jaws 107*
WH-ZV120-JAWS-R132	107 - 132 mm (4.1 - 5.2 inch)	Pair of gripper top jaws 132
WH-ZV120-JAWS-EXT	107 - 207 mm (4.21 - 8.15 inch)	Pair of jaws extensions 207

Top jaws can be used on centering clamping fixture 120, T-slot centering clamping fixture 120, and automated centering clamping.

*The top jaw can be positioned and turned flexibly on the centering clamping fixture.

PNEUMATIC SELF-CENTERING VISE P100 AND P160



Version:

Pneumatic Self-Centering Vise. ZeroVise® P100/P160 5-Axis Self Centering Vise.

Pneumatically actuated by 2 side ports or 2 bottom ports.

Sealed design, with 2 quick change jaw positions.

Centering accuracy ± 0.01 mm/ 0.0004" adjustable. 5 mm/ 0.200" per jaw adjustability.

P100 Dimensions: 100x100x95 mm/ 3.94x3.94x3.74", wt. 10.2 lbs.

P160 Dimensions 160x160x99.2 mm/ 6.3x6.3x3.91", wt. 26.7 lbs.

Includes 2 cap screws and 2 shoulder screws. Without top jaws, order separately.

Application:

Self-centered clamping of components on 5 axis. Suitable for automated operation

via 4-channel clamping pots to actuate air clamp/unclamp, but also via lateral

connections. Applicable for use with rotary tables, trunnions and automation systems.

Requires a constant air supply.



P160 with base plate

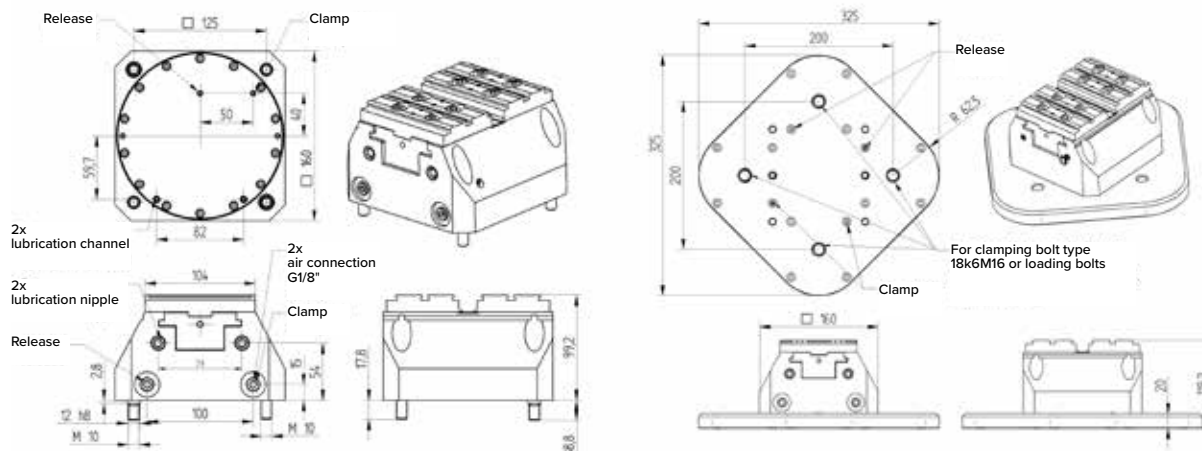
Part No.	Description	Stroke	Centering Accuracy	Clamp Force*	Clamp Range**
WH-ZV-P100	Pneumatic self-centering vise P100	6mm/0.236"	± 0.01 mm/0.0004"	12kN/2,700lbs	10-90mm/0.393-3.54"
WH-ZV-P160	Pneumatic self-centering vise P160	8.5mm/0.335"	± 0.01 mm/0.0004"	48kN/10,800lbs	10-130 mm/ 0.393-5.120"

*Linear force @3-9 bar / 33-130 psi. **Increase range by use of extension jaw.

SUITABLE ACCESSORIES

Part No.	Description*
WH-ZV-P100-ZBP	P100 vise with base plate for Zero Point
WH-ZV-P160-ZBP	P160 vise with base plate for Zero Point

*Base plate has 4 diagonal M16x200 mm/ 7.874" CC holes for ZP120/ZP138 or direct mounting using (4) M12 and T-nuts.



*The clamping force is the arithmetic sum of the individual forces occurring at the clamping jaws.

Note: All images and drawings are of P160. For P100, please visit lyndexnikken.com.

TOP JAWS FOR P160 PNEUMATIC VISE

Version:

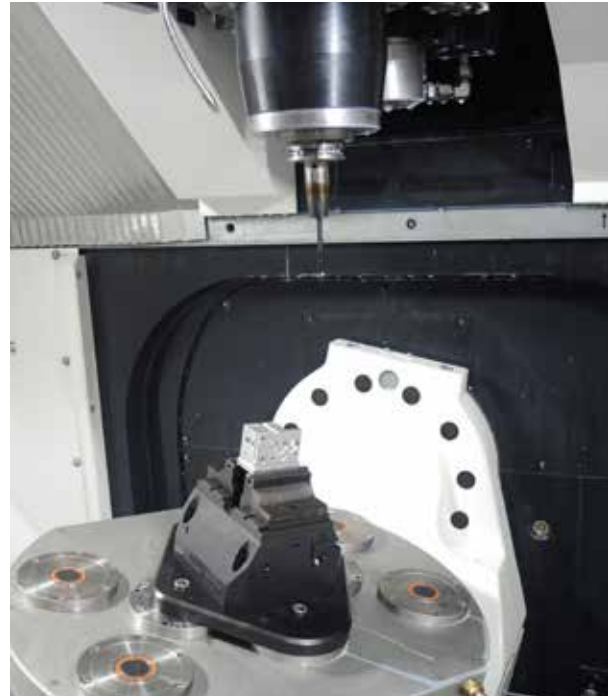
A pair of grip jaws can be used as reversible jaws, hardened. Jaws with a height of 40 mm (1.6 inch) are 80 mm (3.1 inch) wide and cover two clamping areas. Jaws with a height of 15 mm (0.6 inch) are 120 mm (4.7 inch) wide and cover four clamping areas.

Application:

For clamping blank parts (ideal with grip jaws).
Soft jaws (base jaw WH-ZV160-JAWS-BASE needed for top jaws) are used to produce bespoke profiled jaws.

Scope of supply:

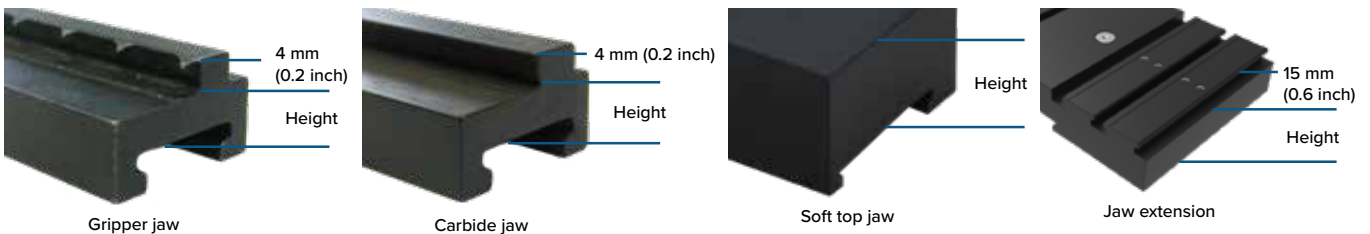
Pair of jaws with securing screws.



TOP JAWS FOR P160 VISE (FOR P100 JAWS USE M80 PG45)

Part No.	Description	Clamping Range
WH-ZV160-JAWS-EXT	Pair of jaws extensions 250	130 - 250 mm (5.12 - 9.84 inch)
WH-ZV160-JAWS-F130-SET3	3 pairs of carbide top jaws	10 - 130 mm (0.4 - 5.1 inch)
WH-ZV160-JAWS-M156-A	Pair of Aluminum machinable top jaws	40-156 mm (0-6.14 inch)
WH-ZV160-JAWS-M156-S	Pair of steel machinable top jaws	40-156 mm (0-6.14 inch)
WH-ZV160-JAWS-R130-H15-S3	3 pairs of gripper top jaws	10 - 130 mm (0.4 - 5.1 inch)
WH-ZV160-JAWS-R130-H40-S6	6 pairs of gripper top jaws	10 - 130 mm (0.4 - 4.7 inch)

*Set consisting of all jaws with the height 40 mm or 15 mm.



ADVISORY SERVICE



INDIVIDUAL SOLUTION CONCEPTS

- Assembly kit system with standard components.
- Tailor-made clamping solutions, even for automation.
- Extends beyond standard products.

AFTER SALES



YOU WILL NOT BE ON YOUR OWN AFTER IMPLEMENTATION – WE WILL BE THERE FOR YOU

- Customer-oriented sales force.
- Maintenance and service contracts.
- Fast responses to questions or problems.

ABOUT US

At Lyndex-Nikken, we have made it our mission to provide the two most important points to keep you ahead of the competition: advanced technology and the innovation to keep it moving forward. In addition to manufacturing the best machine tool accessories available on the market, our team of highly experienced technicians and product specialists offers unmatched customer service and engineering support to our customers worldwide.

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