

Function



UNILOCK was developed specifically for 5-side machining. Ideal for clamping complex workpiece's. They can then be machined completely in a single clamping operation. Even machining from the 6th side is possible. The workpiece's are connected to the 5-axis module system by a screw connection.

System size 80 mm



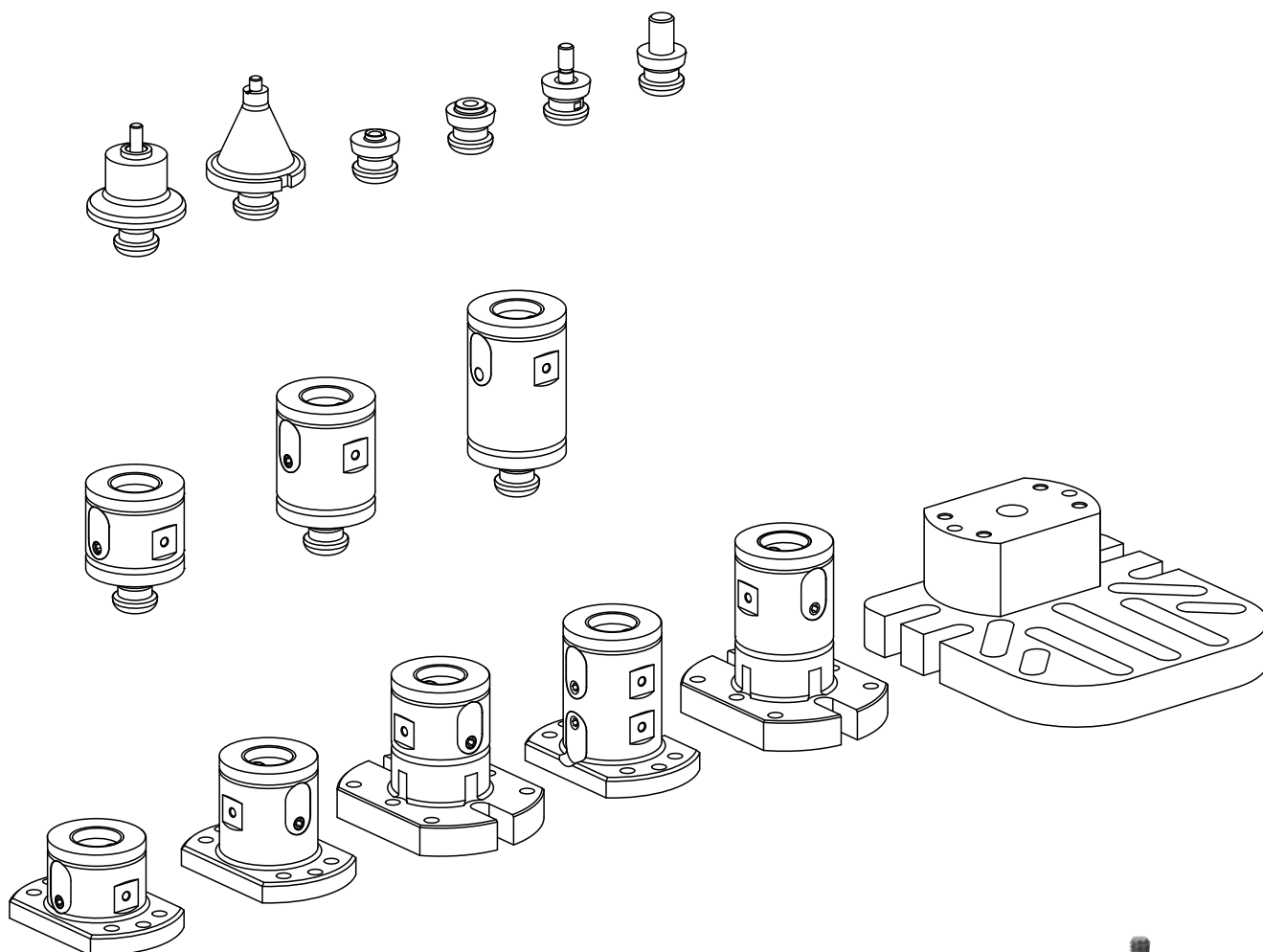
ADVANTAGES:

- 5-side machining with no protruding edges
- Modular construction guarantees maximum flexibility
- Interfaces with commonly used systems
- Variable workpiece fastening
- The workpiece is positively joined to the clamping system
- The workpiece is simply positioned with screws or seating's
- The zero point is transferred to the workpiece
- High module clamping force
- Very high repeat accuracy



Thanks to the modular construction and the variety of modules, the system can be configured individually and recombined for many applications.

More than 70 elements are available: basic modules, add-on modules and accessories.
In combination, they guarantee a variety of heights, docking to interfaces and machining of complex workpiece's.



Flexible stack heights through a wide variety of basic and add-on clamp modules

Setup times



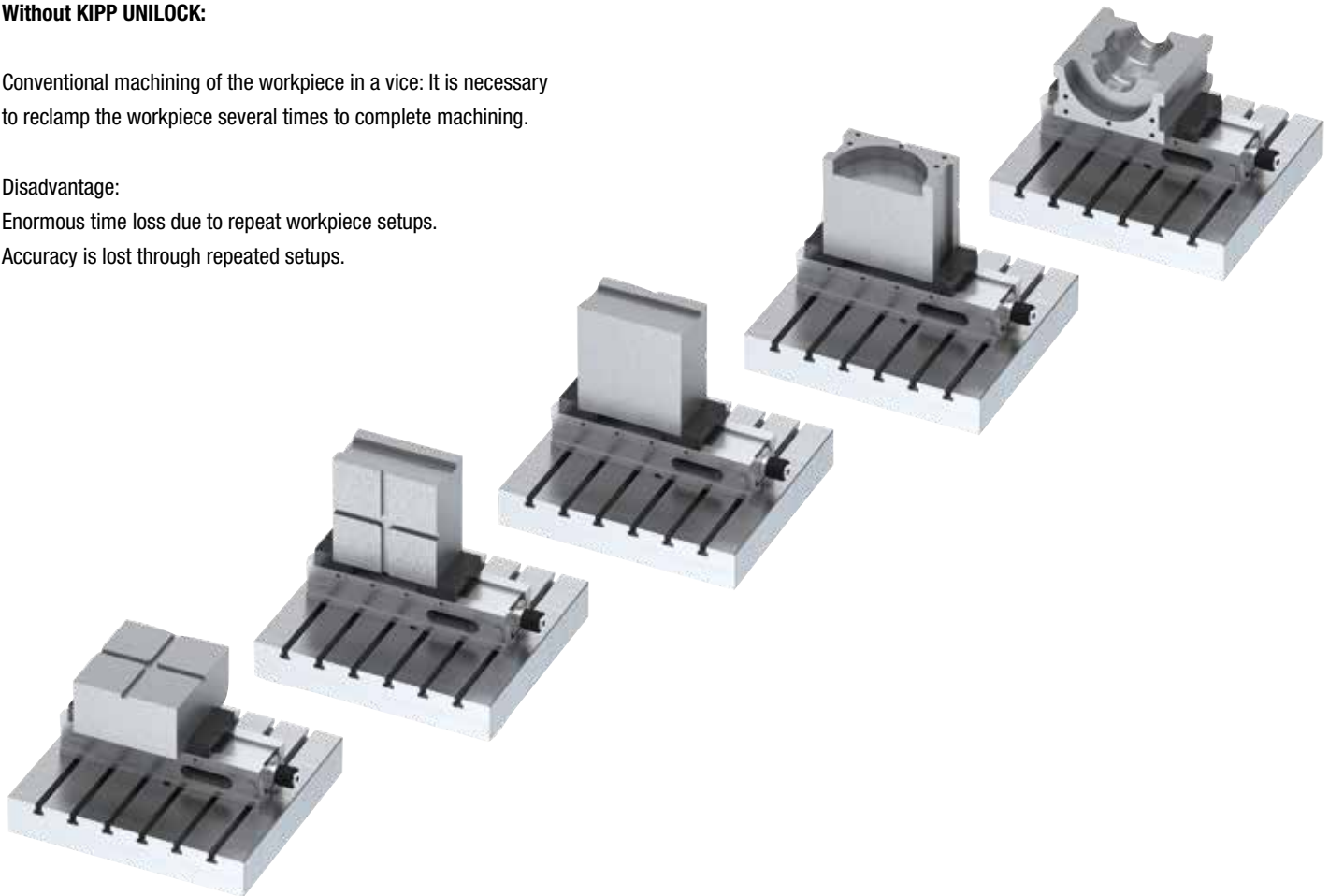
Without KIPP UNILOCK:

Conventional machining of the workpiece in a vice: It is necessary to reclamp the workpiece several times to complete machining.

Disadvantage:

Enormous time loss due to repeat workpiece setups.

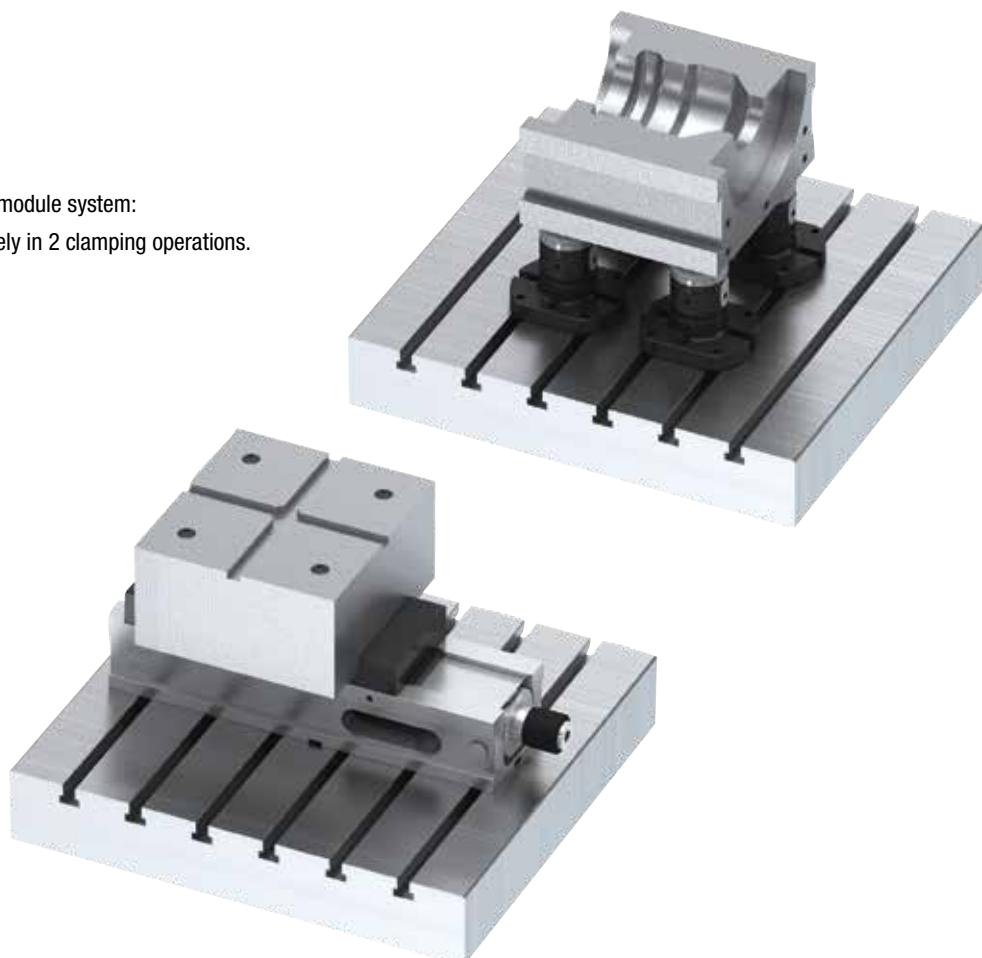
Accuracy is lost through repeated setups.



With KIPP UNILOCK:

Machining with the UNILOCK 5-axis module system:

The workpiece is machined completely in 2 clamping operations.



Interfaces



The 5-axis module system can be mounted on T slot tables, grid systems or directly to machine tables. Moreover, the basic modules can be adapted to most common zero-point clamping systems.

T-slot tables



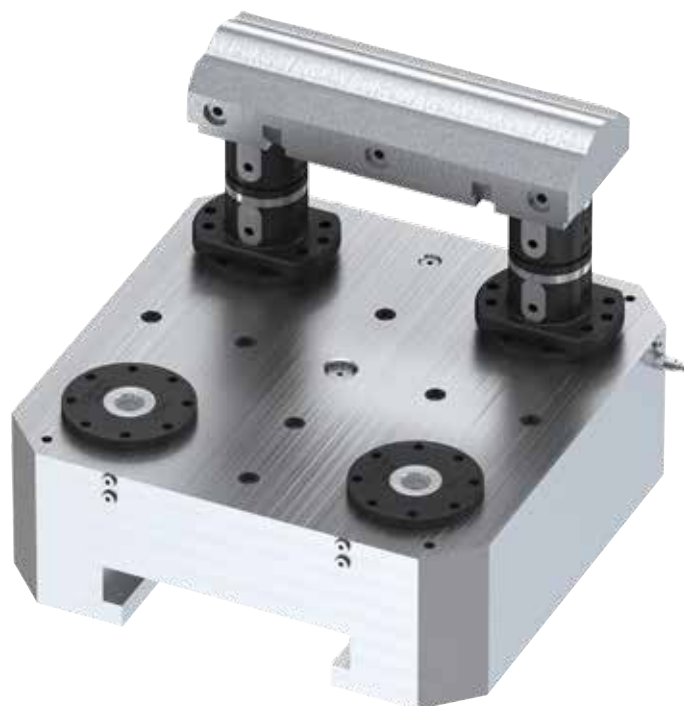
Grid systems



Machine tables



Zero-point clamping systems



Technical information for 5-axis module clamping system 80



Features	Description
Functionality	Functional slides are closed by the manual rotary movement of a threaded spindle with RH/LH threads and lock the clamping pin with frictional force.
Self-locking	After closing, the clamping pin remains in the tensioned clamping module, even if the external tensile force exceeds the retraction force.
Actuation torque	15 Nm
Repeat accuracy: with clamping pin Form A	< 0,005 mm
Short cone centring	Precise centring with radii to ease insertion
Milling application	The clamping modules are generally not approved for turning applications.
Temperature range	+5°C to +60°C

Retraction force in axial direction

Retraction force by 15 Nm actuation torque = 15,000 N



Axial load and retraction path

Axial load $F_{\text{Axial}} = 30,000 \text{ N (3 t)}$

Retraction travel = 0.5 mm

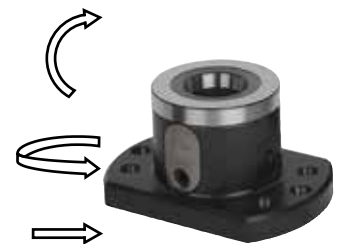


Tilt/torque single module

$M_{\text{tilt module}} = 400 \text{ Nm}$ (empirically determined)

$M_{\text{rotation module}} = 60 \text{ Nm}$

$F_{\text{lateral force}} = 1,500 \text{ N}$ [lateral force without relative movement]*



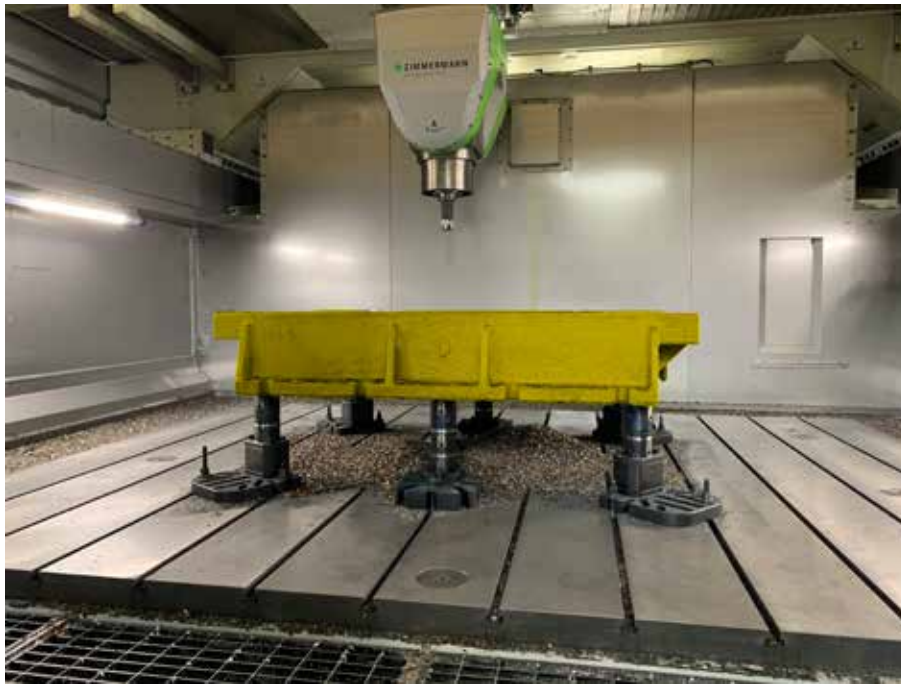
* The correct function of the clamping modules, in particular the repeat accuracy, is guaranteed up to a lateral force of 1,500 N. The failsafe and personal safety of the clamping modules is assured up to a critical lateral force of 14,000 N.

Applications



The workpiece is secured on one, two or more stable module columns. Additional columns can be added easily for large parts. The clamping system is actuated manually without the need for power sources and can be converted very quickly for other workpiece's or fixtures.

Assembling the modules is remarkably simple: position basic module (bolt on from above or below), place add-on clamp modules, position reducer adaptors with bolted-on workpiece and then use a torque wrench to tighten manually. The system is now stable and ready for 5-axis machining.



Applications



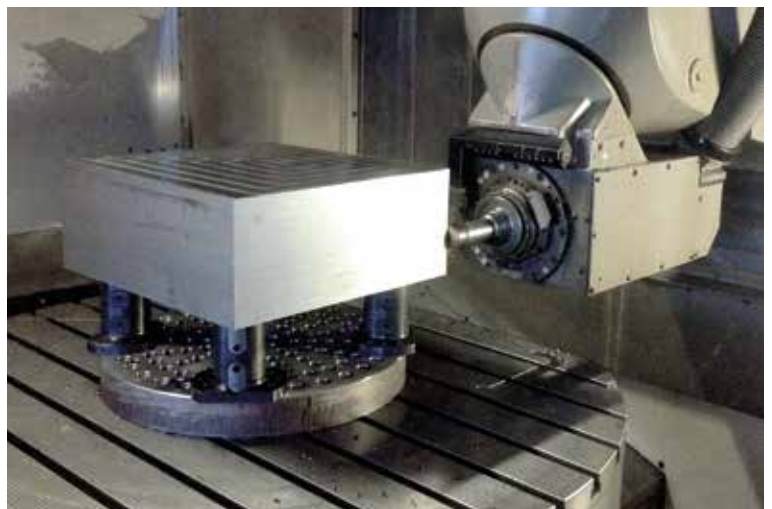
4 basic modules H=100 positioned directly on the machine table. The 4 reducers H=50 on top facilitate optimum access to workpieces.

Clamping height 150 mm



4 double clamp basic modules positioned on a tooling plate. Optimum 5-side machining is possible.

Clamping height 125 mm



Applications



Solid workpiece mounted on 4 basic modules and 4 add-on modules.

Clamping height 150 mm



2 basic modules with a centring clamp adapted directly to a zero-point clamping system.

Clamping height 125 mm



Loading procedure for mounting a long and heavy workpiece on 3 basic modules. Clamp spigots are mounted directly on the workpiece. The workpiece is positioned during clamping.

Clamping height 100 mm



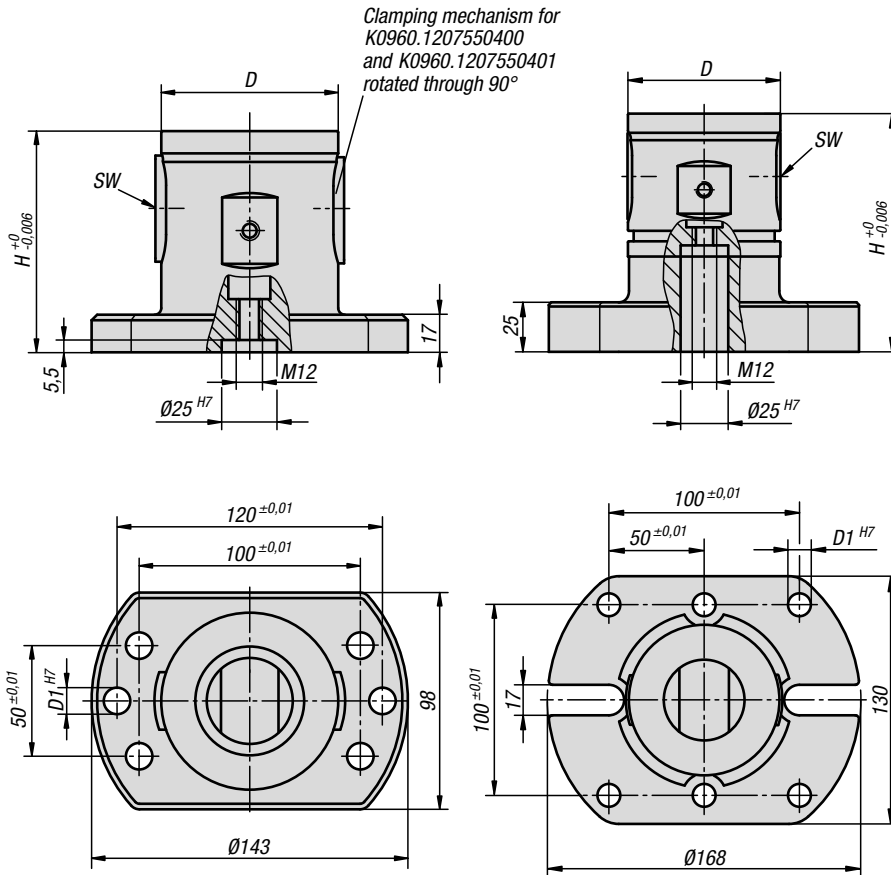
UNILOCK 5-axis basic module

system size 80 mm



foot without elongated hole

foot with elongated hole



Material:
Carbon steel.

Version:
Main body oxidised.
Contact faces hardened and ground.

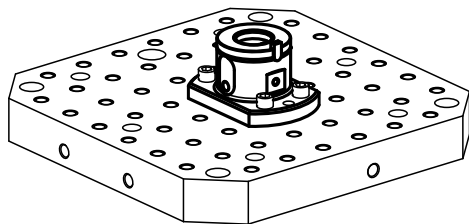
Sample order:
K0960.1207550400

Note:
The UNILOCK 5-axis basic module can be adapted directly to subplates with grid holes or T-slots or to tooling plates with a hole pitch of 40/50 mm system size M12. Suitable for UNILOCK zero point clamping system with UNILOCK clamping bolts. Can also be used on the conventional zero point clamping systems by mounting an appropriate adapter clamping bolt.

The following clamping forces are possible with the UNILOCK clamping pin in conjunction with M10, M12, M16 fastening screws:
- Clamping force (M10) 35,000 N
- Clamping force (M12) 50,000 N
- Clamping force (M16) 75,000 N
Clamping force with DIN EN ISO 4762 -12.9 cap screws

Clamping pins may only be clamped in conjunction with a mounted interchangeable unit in the clamping module.

On request:
With rotation lock



KIPP UNILOCK 5-axis basic module

Order No.	Version 2	Form	Form-Type	H	D	D1	SW	Tightening torque max. Nm	weight kg
K0960.1207550400	foot without elongated hole	A	without rotation lock	75	80	12	6	15	3,64
K0960.1210050400	foot without elongated hole	A	without rotation lock	100	80	12	6	15	4,6
K0960.12125500	foot with elongated hole	A	without rotation lock	125	80	12	6	15	6,8
K0960.12150500	foot with elongated hole	A	without rotation lock	150	80	12	6	15	7,8
K0960.12175500	foot with elongated hole	A	without rotation lock	175	80	12	6	15	9,26
K0960.16125500	foot with elongated hole	A	without rotation lock	125	80	16	6	15	6,55
K0960.16150500	foot with elongated hole	A	without rotation lock	150	80	16	6	15	7,6
K0960.16175500	foot with elongated hole	A	without rotation lock	175	80	16	6	15	8,45

UNILOCK 5-axis basic module double clamp

size 80 mm



Material:
Carbon steel.

Version:
Main body oxidised.
Contact faces hardened and ground.

Sample order:
K0961.1212550400

Note:
The UNILOCK 5-axis basic module can be adapted directly to subplates with grid holes or T-slots or to tooling plates with a hole pitch of 40/50 mm system size M12. Suitable for UNILOCK zero point clamping system with UNILOCK clamping bolts. Can also be used on the conventional zero point clamping systems by mounting an appropriate adapter clamping bolt. The basic module without base is particularly suitable for space-saving set-ups.

The following clamping forces are possible with the UNILOCK clamping pin in conjunction with M10, M12, M16 fastening screws:

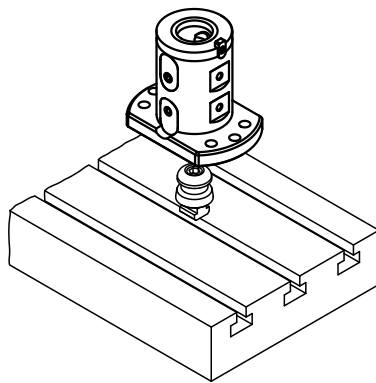
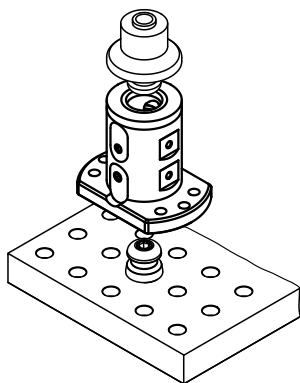
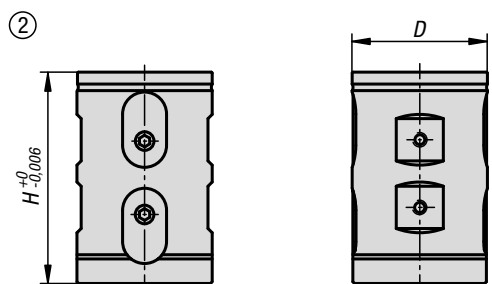
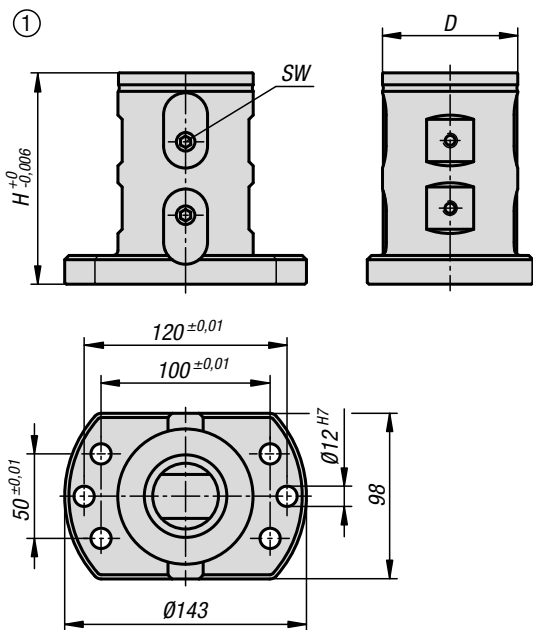
- Clamping force (M10) 35,000 N
- Clamping force (M12) 50,000 N
- Clamping force (M16) 75,000 N

Clamping force with DIN EN ISO 4762 -12.9 cap screws

Clamping pins may only be clamped in conjunction with a mounted interchangeable unit in the clamping module.

On request:
With rotation lock

Drawing reference:
1) with foot
2) without foot



KIPP UNILOCK 5-axis basic module double clamp

Order No.	Product type	Form	Form-Type	D	H	SW	Tightening torque max. Nm	weight kg
K0961.1212550400	with foot	A	without rotation lock	80	125	6	15	4,96
K0961.12500	without foot	A	without rotation lock	80	125	6	15	4,31

UNILOCK 5-axis basic module VARIO

system size 80 mm



Material:

Carbon steel.

Version:

Main body oxidised.
Contact faces hardened and ground.

Sample order:

K1868.135981250

Note:

The UNILOCK 5-axis basic module VARIO enables flexible positioning when clamping workpieces and fixtures.
The basic module VARIO can be mounted via one or two UNILOCK clamping pins located in the rail in the base. If two clamping pins are used, the rail is guided between the clamping pins and can only be moved forwards or backwards along the direction of the clamping pins. When using only one UNILOCK clamping pin, the VARIO basic module can be freely rotated. The position is secured using the hex head screw at the rear. Variable gauge sizes can thus be achieved. This basic module is often used as a third or fourth clamping point.

The following clamping forces are possible with the UNILOCK clamping pin in conjunction with M10, M12, M16 fastening screws:

- Clamping force (M10) 35,000 N
- Clamping force (M12) 50,000 N
- Clamping force (M16) 75,000 N

Clamping force with DIN EN ISO 4762 -12.9 cap screws

Clamping pins may only be clamped in conjunction with a mounted interchangeable unit in the clamping module.

A consistent clamping bolt size by the 5-axis module clamping system 80 and compatibility to pneumatic zero-point clamping systems guarantee diverse combinations of application possibilities.

Advantages:

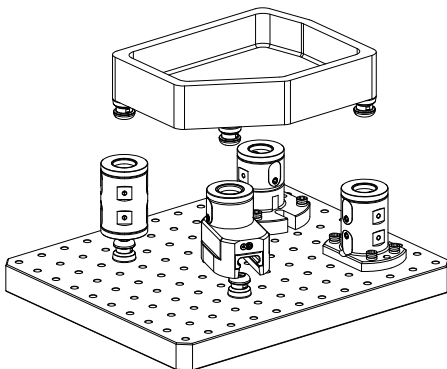
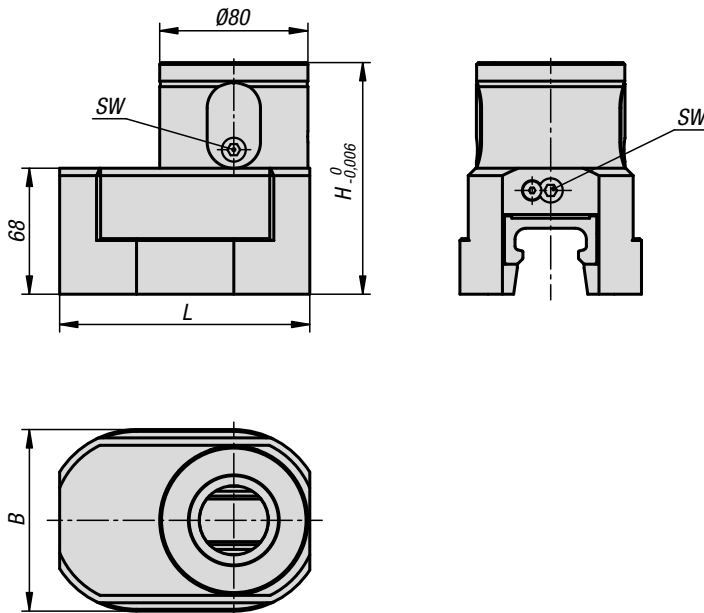
- Adjustable, flexible basic module.
- Mechanical actuation.
- Positioning via short taper.
- High traction force.
- Setup time optimisation.

Accessories:

Clamping pins K0967, K0968, K0969, K1471.

Technical data:

- Traction force 15 kN.
- Tightening torque 15 Nm.
- Repeat accuracy ≤ 0.005 mm.



KIPP UNILOCK 5-axis basic module VARIO system size 80 mm

Order No.	L	B	H	SW	Tightening torque max. Nm	Retraction force kN
K1868.135981250	135	98	125	6	15	15



Graph paper grid area.



UNILOCK 5-axis basic module DUO

system size 80 mm



Material:
Carbon steel.

Version:
Main body oxidised.
Contact faces hardened and ground.

Sample order:
K1867.12100500

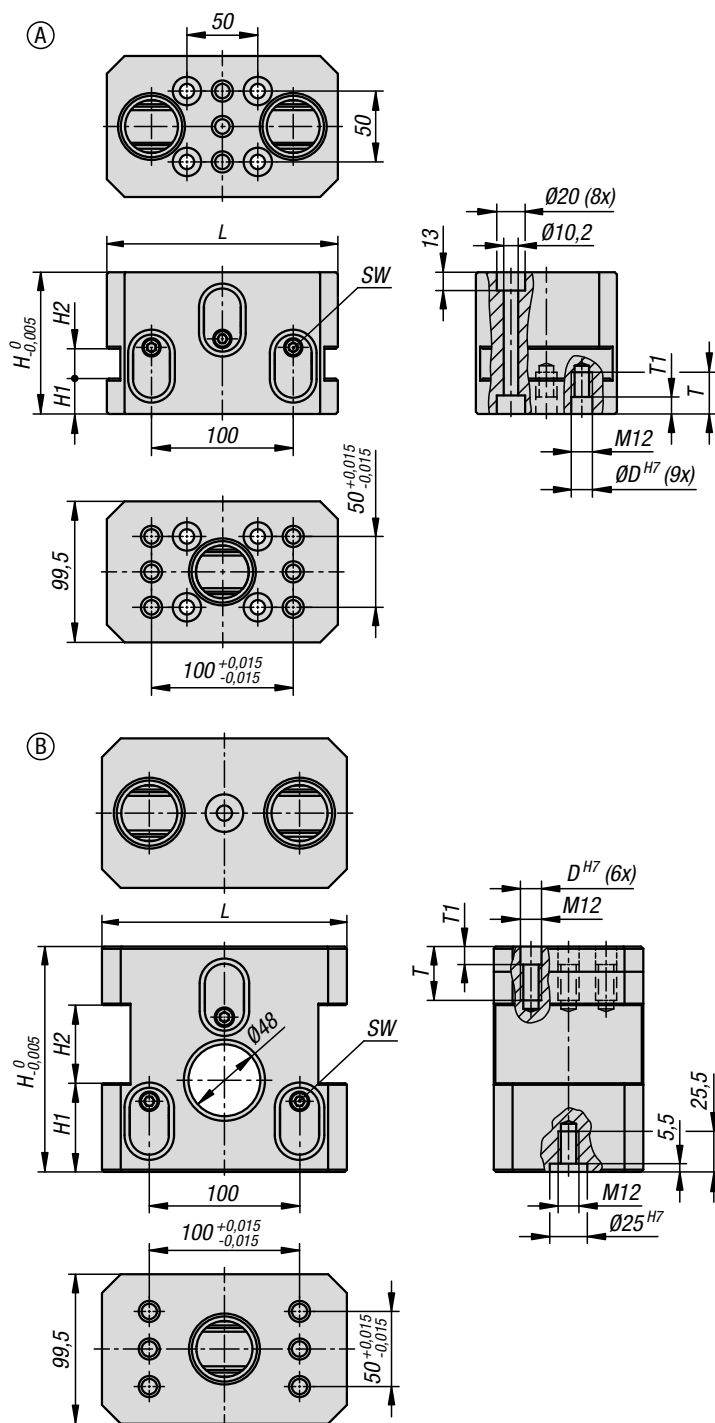
Note:
The UNILOCK 5-axis basic modules DUO with their three interfaces for clamping pins are used for robust, elevated set-ups with heavy workpieces. Compared to round basic modules, the larger sizes provide a larger contact surface. The DUO basic modules can be used with the double interface positioned downwards or upwards. The through holes on both sides of Form A enable additional fastening with cap screws. The Form B version can also be fastened downwards via a clamping bolt on the double interface side. Clamping claws can be used on the lateral clamping edge. The reamed bores enable additional positioning.

For stable vice elevation, two UNILOCK 5-axis basic modules DUO are mounted on the machine table with the double interface facing downwards. The vices are attached to the upwards facing single interface.

The following clamping forces are possible with the UNILOCK clamping pin in conjunction with M10, M12, M16 fastening screws:
- Clamping force (M10) 35,000 N
- Clamping force (M12) 50,000 N
- Clamping force (M16) 75,000 N
Clamping force with DIN EN ISO 4762 -12.9 cap screws

Clamping pins may only be clamped in conjunction with a mounted interchangeable unit in the clamping module.

A consistent clamping bolt size by the 5-axis module clamping system 80 and compatibility to pneumatic zero-point clamping systems guarantee diverse application possibilities.



KIPP UNILOCK 5-axis basic module DUO system size 80 mm

Order No.	Form	L	H	D	H1	H2	SW	T	T1	Tightening torque max. Nm	Retraction force kN
K1867.12075500	A	149,5	75	12	25	25	6	16,5	5,5	15	15
K1867.12100500	A	162,5	100	12	25	21	6	30	12	15	15
K1867.12150500	B	162,5	150	12	59	52	6	35	12	15	15

UNILOCK 5-axis basic module DUO

system size 80 mm

**Advantages:**

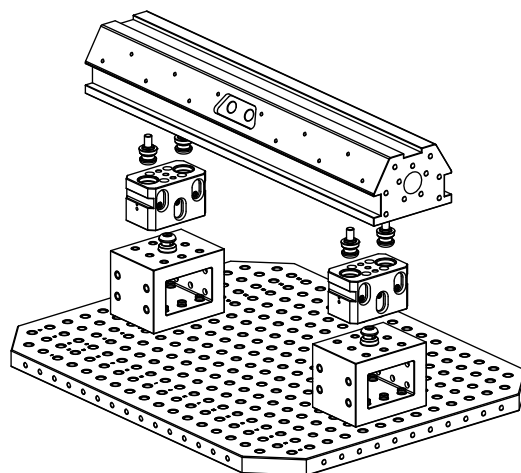
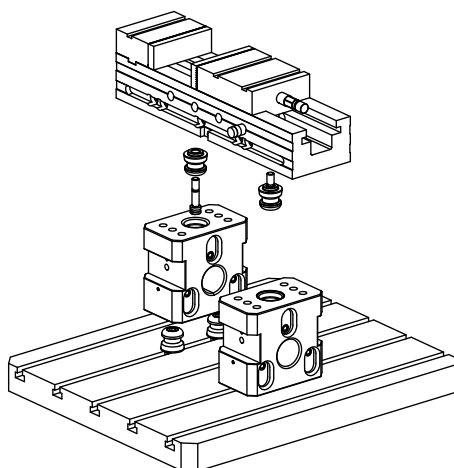
- Robust basic module.
- Three interfaces for clamping pins.
- Flexible fastening possibilities.
- Mechanical actuation.
- Positioning via short taper.
- High traction force.
- Setup time optimisation.

Accessories:

Clamping pins K0967, K0968, K0969, K1471.

Technical data:

- Traction force 15 kN.
- Tightening torque 15 Nm.
- Repeat accuracy ≤ 0.005 mm.



UNILOCK 5-axis base plate

for general clamping, system size 80 mm



Material:

Steel.

Version:

Main body oxidised.

Contact faces case-hardened and ground.

Sample order:

K0962.25027005021

Note:

The UNILOCK 5-axis baseplates for general clamping fit onto machine tables with grid hole systems or in T-slots, or onto grid hole tooling plates. Due to their robust construction, these elevated devices are ideal as a base supports for large and heavy workpieces. The arrangement of the fastening slots facilitates flexible adaptation to the workpiece and the machine table. Wider T-slot spacings can be achieved with the larger version.

In the small version, the fastening slots are open for improved chip evacuation.

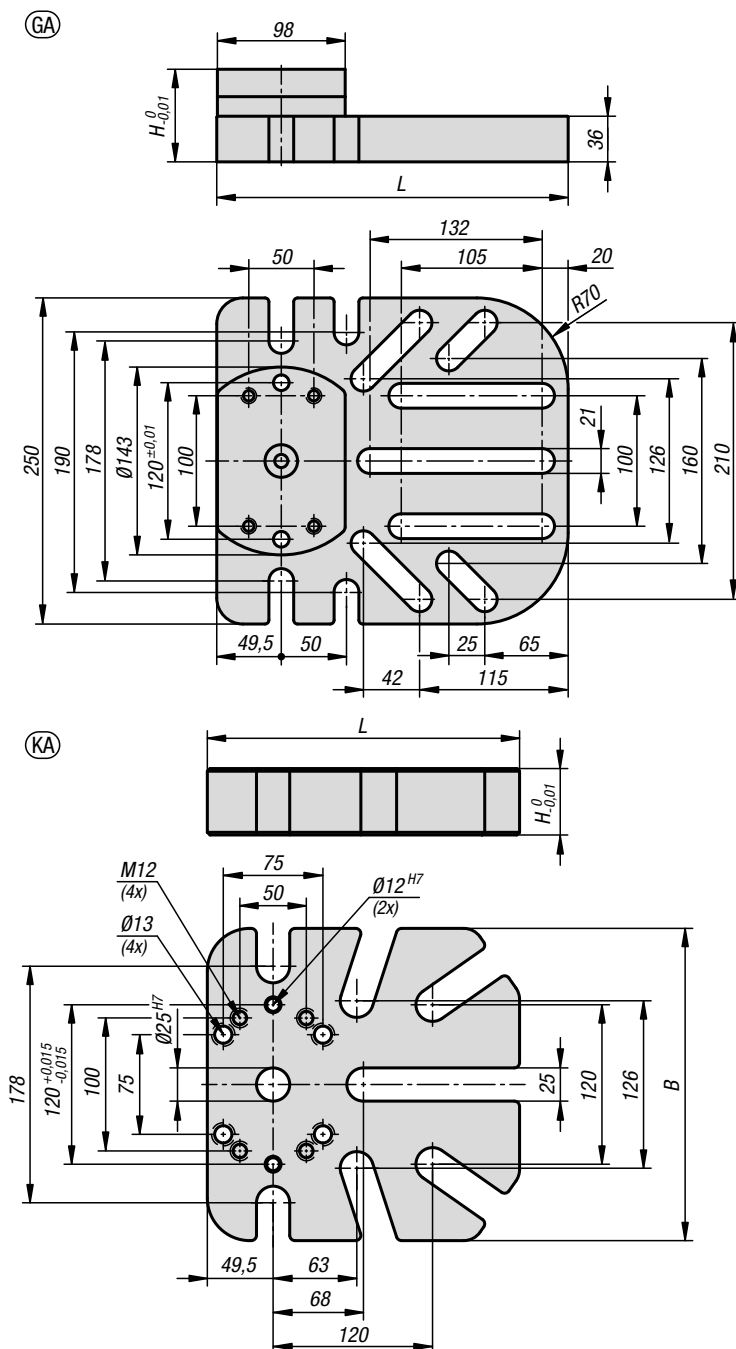
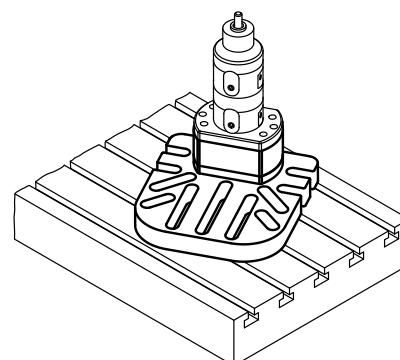
Advantages:

Stable base structure for mounting the 5-axis basic modules for clamping large and heavy workpieces. Rapid fastening of the base plates onto a machine table due to a large number of fastening slots. Flexible positioning of the workpieces on the machine table.

Drawing reference:

Form GA: large version

Form KA: small version

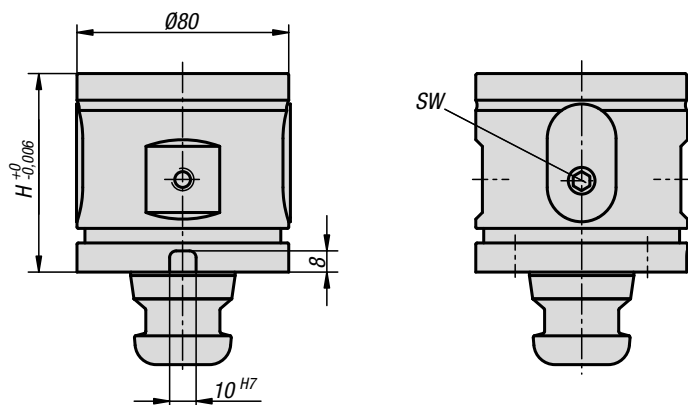


KIPP UNILOCK 5-axis base plate for general clamping

Order No.	Version 2	L	B	H	Fastening hole	weight kg
K0962.25027005021	large version	269,5	250	50	max. M20	14,7
K0962.23523505025	small version	235	235	50	max. M24	15,3

UNILOCK 5-axis add-on clamping module

size 80 mm

**Material:**

Body Q&T steel.
Clamping pin mild steel.

Version:

Body and clamping pin oxidised.
Contact faces hardened and ground.

Sample order:

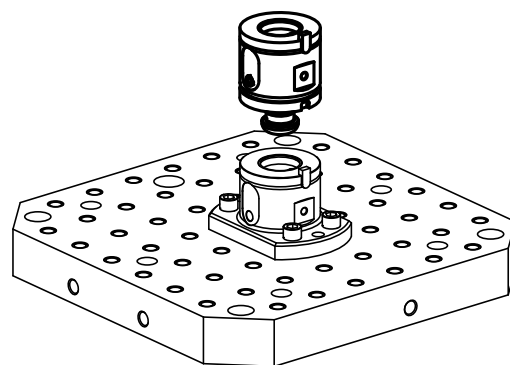
K0963.120750

Note:

The UNILOCK 5-axis add-on modules are used for raising basic modules and mounting base. Depending on the clamping situation, optimum assembly height can be achieved using a combination of the basic module and add-on module.

On request:

With rotation lock

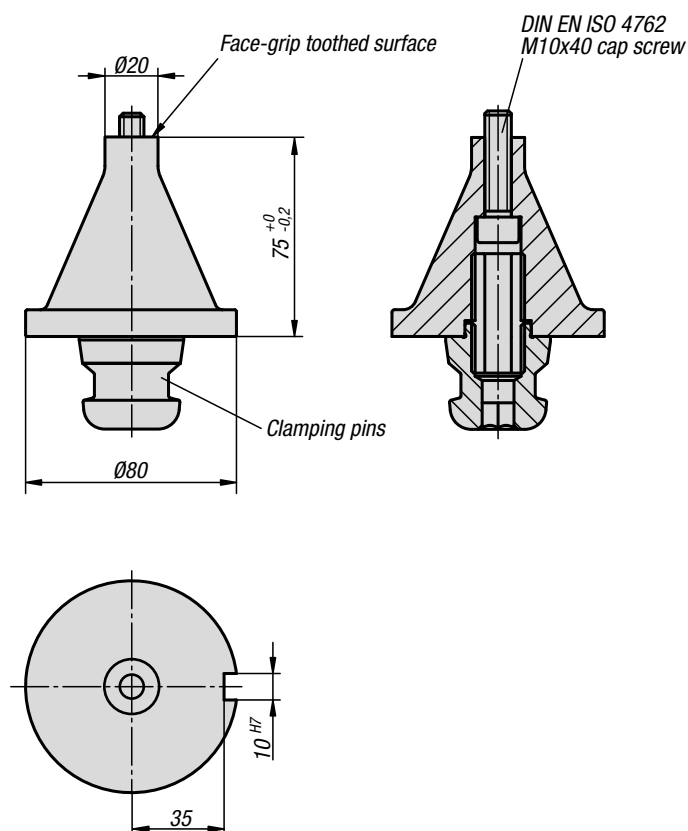


KIPP UNILOCK 5-axis add-on clamping module

Order No.	Form-Type	H	SW	Tightening torque max. Nm	weight kg
K0963.120750	without rotation lock	75	6	15	2,64
K0963.121000	without rotation lock	100	6	15	3,78
K0963.121250	without rotation lock	125	6	15	4,625

UNILOCK 5-axis face-grip adapter

size 80 mm

**Material:**

Body rust-free tool steel.

Clamping pin low carbon steel.

Version:

Contact faces on the body hardened and ground.

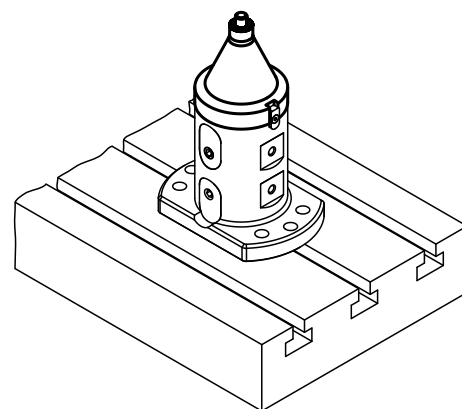
Clamping pin oxidised. Contact faces hardened and ground.

Sample order:

K0965.2007510

Note:

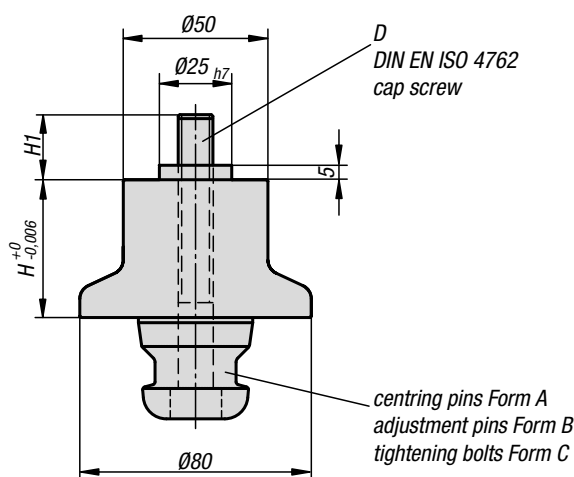
The UNILOCK 5-axis face-grip adapters are suitable for clamping workpieces, which must be machined on all sides. The workpieces are freely accessible without interfering edges from the clamping elements. The workpieces are attached from below using a socket head screw to pull them onto the face-grip toothed surface. The face-grip adapters can be directly mounted on the basic module with rotation lock or on the add-on module H 75 mm with rotation lock.

**KIPP UNILOCK 5-axis face-grip adapter**

Order No.	Dimensions
K0965.2007510	see drawing

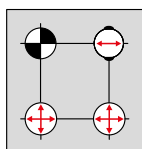
UNILOCK 5-axis reducer adapter

size 80 mm



-  Centring pins = Form A
-  Adjustment pins = Form B
-  Tightening bolts = Form C

fixes in x and y axis (reference point)
fixes the free axis (bayonet pin)
Pins with undersize (no centring function,
clamping only)



Material:

Body rust-free tool steel.
Clamping pin low carbon steel.

Version:

Contact faces on the body hardened and ground.
Clamping pin oxidised. Contact faces hardened and ground.

Sample order:

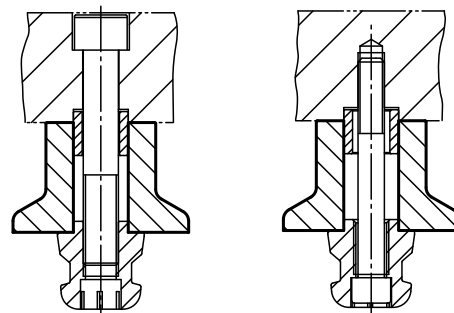
K0966.501120

Note:

The UNILOCK 5-axis reducer adapter is suitable for clamping and positioning workpieces. Reducer adapters can be screwed onto the workpiece and mounted on the basic module or add-on module. Reducer adapters are available as hardened versions.

On request:

- Soft version
- Height 25 mm

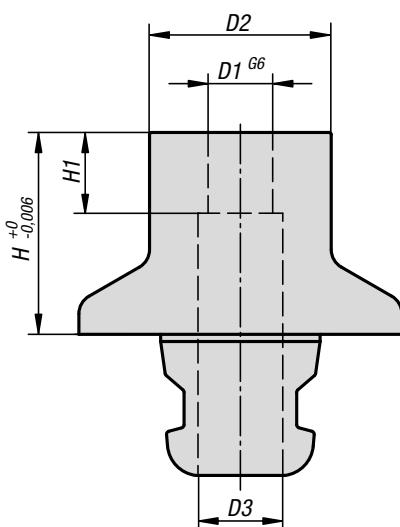


KIPP UNILOCK 5-axis reducer adapter

Order No.	Form	Form-Type	D	H	H1
K0966.501101	A	Centring Pin	M10 x 100	50	25,5
K0966.502101	B	Adjustment pin	M10 x 100	50	25,5
K0966.503101	C	Clamping Pin	M10 x 100	50	25,5
K0966.501121	A	Centring Pin	M12 x 100	50	27,5
K0966.502121	B	Adjustment pin	M12 x 100	50	27,5
K0966.503121	C	Clamping Pin	M12 x 100	50	27,5

UNILOCK 5-axis reducer adapter

size 80 mm

**Material:**

Rust resistant tool steel.

Version:

One-piece.

Contact faces hardened and ground.

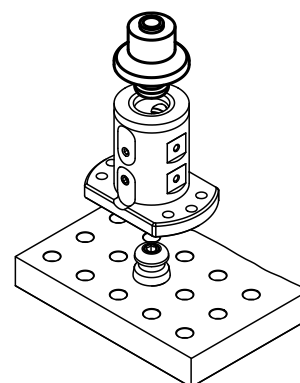
Sample order:

K0966.5011611

Note:

The UNILOCK 5-axis reducer adaptors are suitable for clamping and positioning workpieces.

The workpiece is positioned and screwed to the reducer adapter using the UNILOCK shoulder screw for workpiece fastening.



KIPP UNILOCK 5-axis reducer adapter

Order No.	D1	D2	D3	H	H1
K0966.5011611	16	40	21	50	20

UNILOCK T-slot centring clamp bolt

size 80 mm

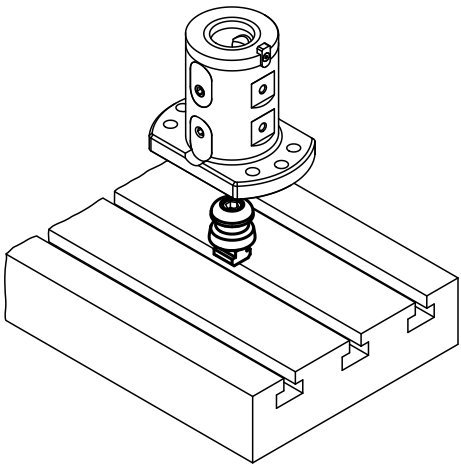
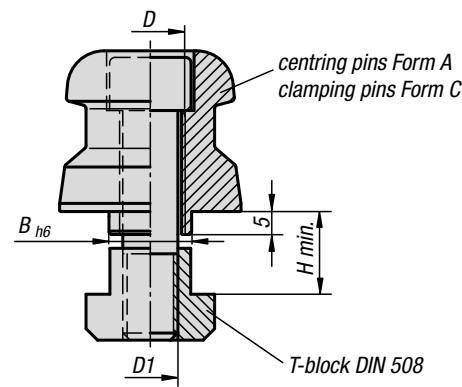


Material:
Steel.

Version:
Hardened and black oxidised.
Contact faces ground.

Sample order:
K0969.114

Note:
The UNILOCK T-slot centring clamp bolt is suitable for clamping and positioning the basic module with double manual clamping. T-slot centring clamp bolts are positioned and fastened on the T-slot machine table.

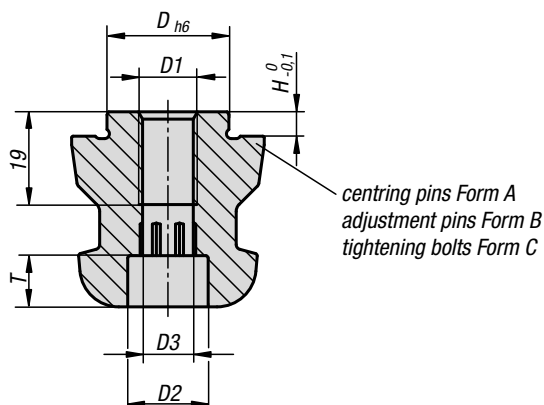
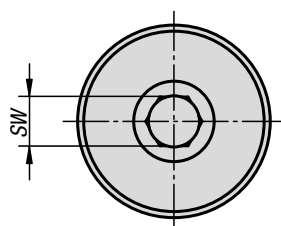


KIPP UNILOCK T-slot centring clamp bolt

Order No.	Form	D	D1	B	H min.
K0969.114	A	M12	M10	14	14
K0969.118	A	M16	M12	18	18

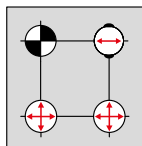
UNILOCK clamping pins

size 80 mm



centring pins Form A
adjustment pins Form B
tightening bolts Form C

- Centring pins = Form A fixes in x and y axis (reference point)
- Adjustment pins = Form B fixes the free axis (bayonet pin)
- Tightening bolts = Form C Pins with undersize (no centring function, clamping only)



Material:
Steel.

Version:
Hardened and black oxidised.
Contact faces ground.

Sample order:
K0967.140160512

Note:
The UNILOCK clamping pin is suitable for clamping and positioning workpieces and fixtures. Clamping pins are screwed onto the exchange element and adapted to the various basic modules.

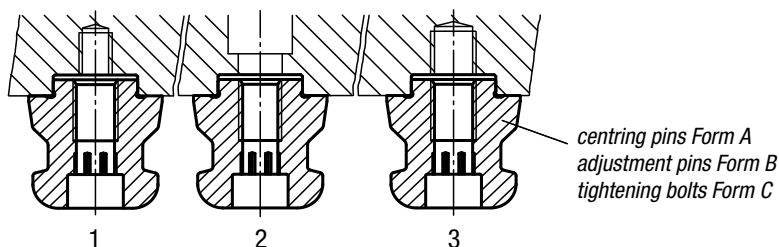
The following retaining forces are possible when the UNILOCK clamping pins are used together with M10, M12 or M16 fastening screws:

- Retaining force (M10) 35,000N
- Retaining force (M12) 50,000N
- Retaining force (M16) 75,000N

Clamping force with DIN EN ISO 4762 -12.9 cap screws.

Other clamping pins in the same system size are available under K1471, K0968 and K0967 with threaded pin.

- 1 = fastening with DIN 912 screw through the tightening bolt
- 2 = fastening with DIN 912 screw through the fixture or workpiece
- 3 = fastening with grub screw DIN 913



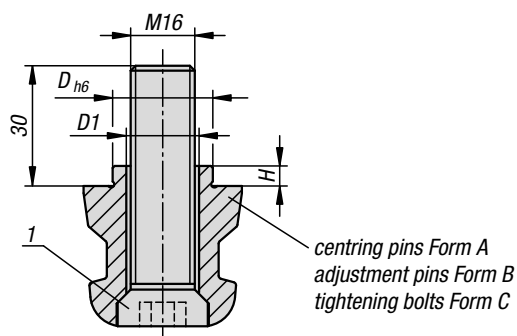
centring pins Form A
adjustment pins Form B
tightening bolts Form C

KIPP UNILOCK clamping pins

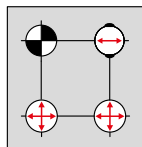
Order No. Form A	Order No. Form B	Order No. Form C	D	D1	D2	D3	H	T	SW
K0967.140160512	K0967.240160512	K0967.340160512	16	M12	16,5	10,3	5	10,5	10
K0967.140180512	K0967.240180512	K0967.340180512	18	M12	16,5	10,3	5	10,5	10
K0967.140220516	K0967.240220516	K0967.340220516	22	M16	18,5	14,2	5	12,5	17
K0967.140250512	K0967.240250512	K0967.340250512	25	M12	16,5	10,3	5	10,5	10
K0967.140250516	K0967.240250516	K0967.340250516	25	M16	18,5	14,2	5	12,5	17

UNILOCK clamping pins

with through hole, system size 80 mm



-  Centring pins = Form A fixes in x and y axis (reference point)
-  Adjustment pins = Form B fixes the free axis (bayonet pin)
-  Tightening bolts = Form C Pins with undersize (no centring function, clamping only)



Material:

Steel.

Version:

Hardened and black oxidised.

Contact faces ground.

Swivel fastening screw M16x65, tempered and black oxidised.

Sample order:

K1471.140250516

Note:

The UNILOCK clamping pin is suitable for clamping and positioning workpieces and fixtures. Clamping pins are screwed onto the exchange element and adapted to the various basic modules.

Drawing reference:

- 1) Swivel fastening screw M16x65.
Grade 10.9.

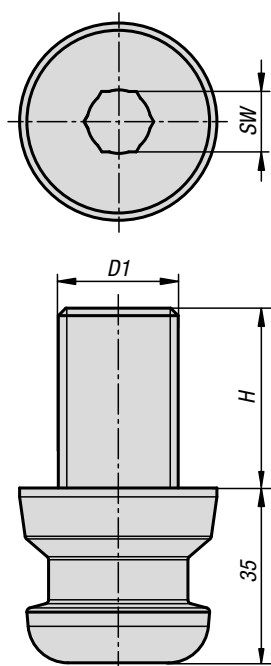


KIPP UNILOCK clamping pins with through hole

Order No.	Form	D	D1	H	Tightening torque max. Nm
K1471.140250516	A	25	16,5	5	120
K1471.240250516	B	25	16,5	5	120
K1471.340250516	C	25	16,5	5	120

UNILOCK clamping pin

with threaded pin size 80 mm


Material:

Steel.

Version:

Hardened and black oxidised.
Contact faces ground.

Sample order:

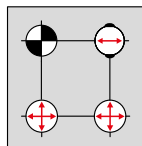
K0967.140003020

Note:

The UNILOCK clamping pin is suitable for clamping and positioning workpieces and fixtures. Clamping pins are screwed onto the exchange element and adapted to the various basic modules.

-  Centring pins = Form A
-  Adjustment pins = Form B
-  Tightening bolts = Form C

fixes in x and y axis (reference point)
fixes the free axis (bayonet pin)
Pins with undersize (no centring function, clamping only)

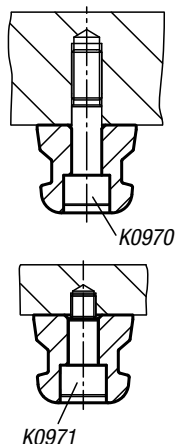
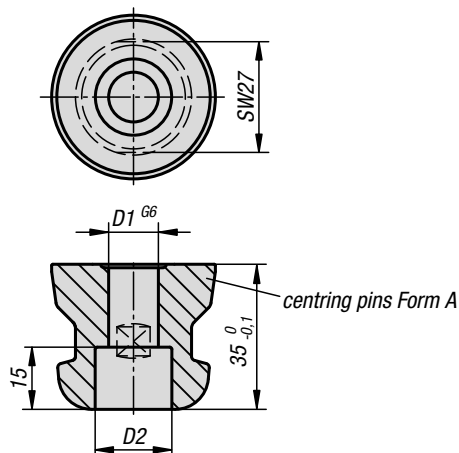


KIPP UNILOCK clamping pin with threaded pin

Order No.	Form	D1	H	SW
K0967.140002416	A	M16	24	17
K0967.140003020	A	M20	30	17
K0967.140003624	A	M24	36	17

UNILOCK 5-axis clamping bolts

for fastening to workpieces size 80 mm



Material:
Steel.

Version:
Hardened and black oxidised.
Contact faces ground.

Sample order:
K0968.12

Note:
The UNILOCK clamping bolt is suitable for clamping and positioning the workpiece. Clamping bolts are screwed onto the workpiece and positioned on the basic module or add-on module. Using the locating bolts (K0970, K0971), the clamping bolts are screwed onto the workpiece.

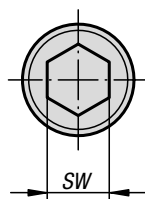
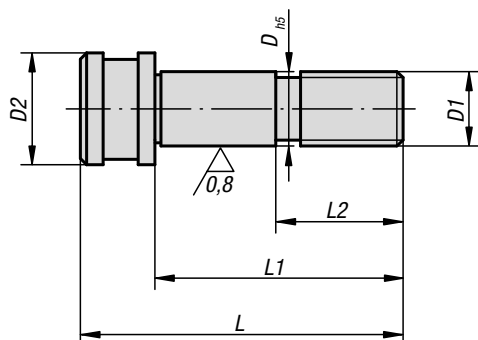
KIPP UNILOCK 5-axis clamping bolts for fastening to workpieces

Order No.	Form	D1	D2
K0968.12	A	12	18,4
K0968.16	A	16	21,1

K0970

UNILOCK 5-axis shoulder screws

size 80 mm



Material:
Carbon steel.

Version:
Hardened surface.
ground locating seat.

Sample order:
K0970.12050

Note:
The UNILOCK 5-axis locating bolts are suitable for clamping and positioning the clamping bolts for fastening to workpieces. They are also used for positioning and fastening the basic module.

KIPP UNILOCK 5-axis shoulder screws

Order No.	D	D1	D2	L	L1	L2	SW
K0970.12050	12	M12	18	62	50	22	10
K0970.16055	16	M16	20,9	71	55	25	14

UNILOCK 5-axis shoulder screws

for fastening to workpieces, size 80 mm



Material:

Carbon steel.

Version:

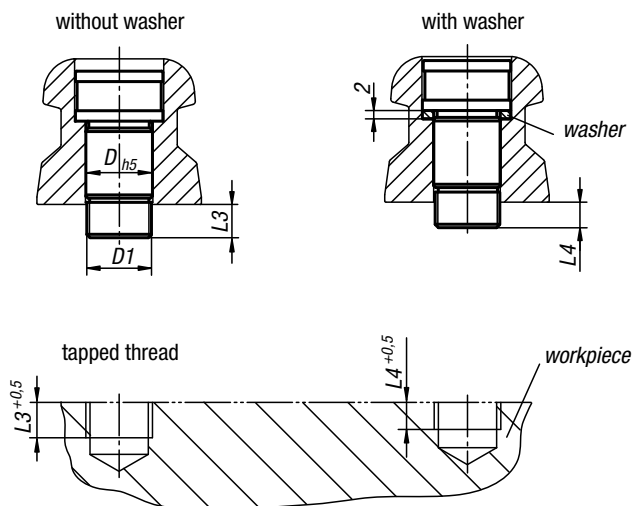
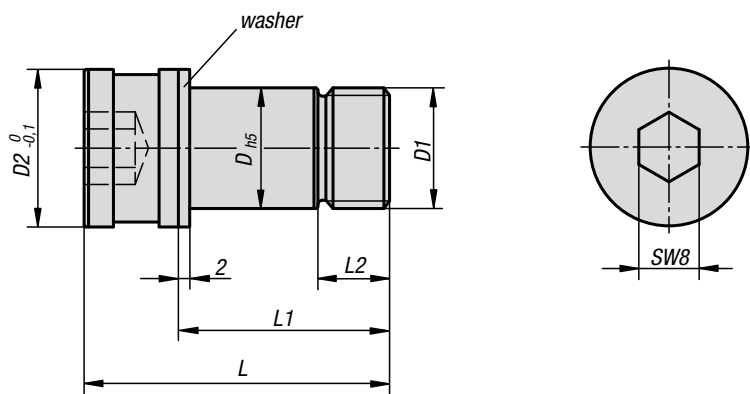
Hardened surface.
ground locating seat.

Sample order:

K0971.16121040

Note:

The UNILOCK 5-axis locating bolts for fastening to workpieces are suitable for clamping and positioning workpieces. These locating bolts are passed through the clamping bolts for fastening to workpieces, screwed directly into the workpiece and positioned on the basic module or add-on module. The thread is used for fastening and positioning the workpiece.

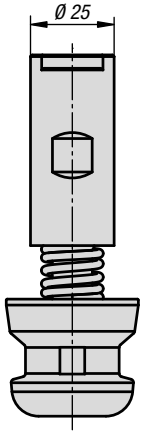


KIPP UNILOCK 5-axis shoulder screws for screwing clamping bolt to workpiece

Order No.	Version	D	D1	D2	L	L1	L2	L3	L4	Tightening torque max. Nm
K0971.16101040	without washer	16	M10x1,5	20,9	40,5	28	9,5	8	6	47
K0971.16121040	with washer	16	M12x1,75	20,9	40,5	28	9,5	8	6	63
K0971.16121049	without washer	16	M12x1,75	20,9	50	37,5	18	17,5	15,5	80
K0971.16161055	without washer	16	M16x2	20,9	56	43,5	24	23,5	21,5	100

UNILOCK centring clamping bolt

size 80 mm


Material:

Steel.

Version:

Hardened and black oxidised.
Contact faces ground.

Sample order:

K1012.1240

Note:

The centring clamping bolts can be used to position basic modules on machine tables.
Centring clamping bolts can be clamped in collet holders. The position of the module is defined via the machine's spindle/control unit.

Can be used in Weldon, Whistle Notch and collet holders.

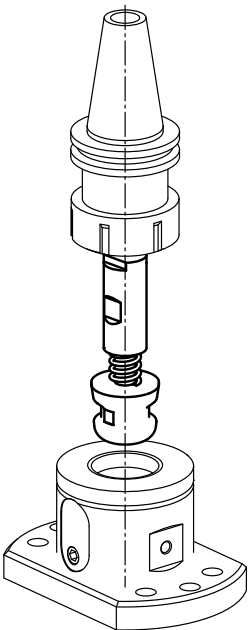
Repeat accuracy: < 0.021mm

Positioning accuracy: < 0.049mm

Shock absorber function to protect the machine spindle

Cushioning travel: 5.4mm

Caution: Exceeding the cushioning travel of 5.4mm may damage the machine.



KIPP UNILOCK centring clamping bolt, size 80 mm

Order No.

Dimensions

K1012.1240

see drawing

Torque wrench

for 5-axis module clamping system


Material:

Steel.

Version:

Surface: hard chromed

Sample order:

K1488.01

Note:

Torque wrench 4-40 set:

Release precision +/- 2% of the scale value (in direction of actuation)

High-precision premium metrology instrument – for highest demands

Robust and tough hard chrome-plated steel construction in a slim model

Secure: - haptic (shortcut release)

- acoustic (buckling element)

User-friendly reversible ratchet.

Service-friendly (ratchet repair sets for customer-oriented self-assembly)

Integrated switch lever

Setting of the desired torque value fast and securely through turning of the handle

Twist knob for additional locking of the setting

Ergonomically shaped handle with collar reduces danger of slipping or injury

Exact, fine scale gradation

With serial number and calibration certificate

Hard chrome-plated surface

DIN EN ISO 6789-2:2017, square acc. to DIN 3120, ISO 1174-1

Details of plug-in reversible ratchet:

20 teeth, max. 40Nm

Output 6.3 = 1/4 inch

Square acc. to DIN 3120, ISO 1174-1

Drop forged

Chromed surface

Note for plug-in reversible ratchet:

Through fast insertion of the plug-in reversible ratchet into the torque wrench, the precision of 2% in both directions can be guaranteed.

Screwdriver bit:

Surface TiN

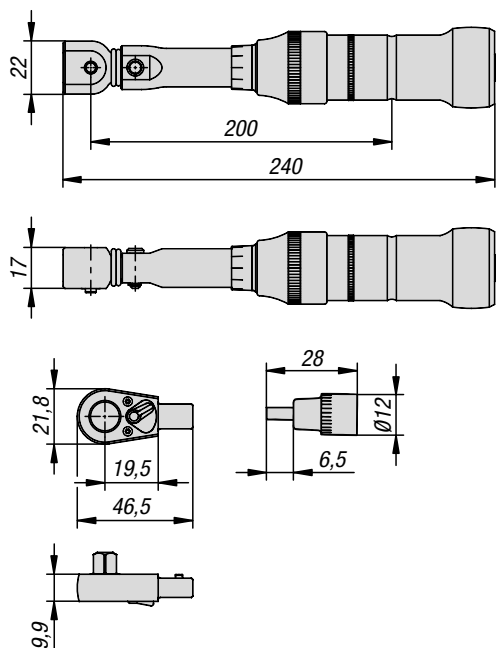
DIN 7422

Square 1/4 inch

Suitable for reversible ratchet

Recommendation:

Annual check interval for torque wrenches, in which the upper limit is 5,000 load cycles.


Supplied with:

Set comprising:

Torque wrench

Plug-in reversible ratchet

Screwdriver insert SW4

Screwdriver insert SW6

Screwdriver insert SW8

Functional principle:

Operating principle of torque wrench handles

To unlock, pull handle back approximately 8 mm.

Continue to turn handle up to the desired torque.

Then turn the handle back a bit to lock it.

Suitable for:

5-axis module clamping system 80

5-axis module clamping system 50

5-axis module clamping system 138

KIPP Torque wrench for 5-axis module clamping system

Order No.	Item	Version 1	Product type	Torque Nm
K1488.01	Torque Wrench	set	revolving grip	4 - 40



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



