

HEINRICH KIPP WERK



MULTI-CLAMPING SYSTEM

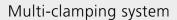
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Multi-clamping system



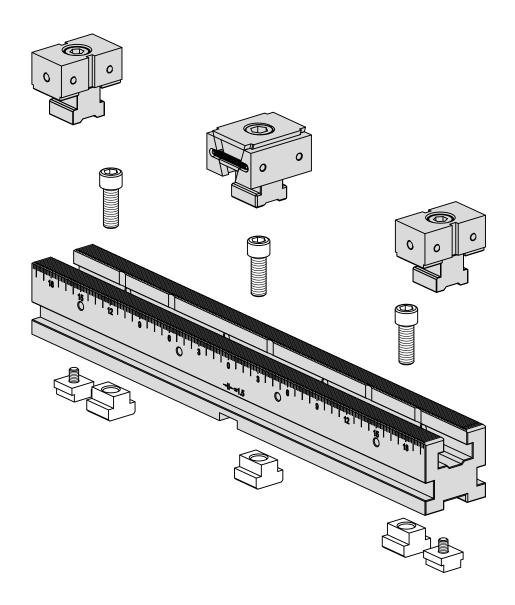
 $\label{lem:multi-clamping} \mbox{ Multi-clamping systems are mainly used for machining large workpiece batches.}$

The system can be optionally set up for one or more workpieces.

Depending on the workpiece size and clamping rail length, several workpieces can thus be clamped simultaneously.

Due to the large component selection of the multiple clamping system (clamping rails, fixed jaws, wedge clamps and accessories) workpieces of different quantities and dimensions can be machined without problems and with optimised set-up times.

The user can choose between single-sided or double-sided types of wedge clamps. The teeth on the clamping rails are precision-ground and guarantee secure and precise fastening of the fixed stops. By mounting several clamping rails along and across the table, the working area and the number of workpieces can be effectively optimised.



Interfaces







Mounting of the multi-clamping system along and across a T-slot machine table is possible.

Alignment with slot keys. Secured using screws or clamping claws.

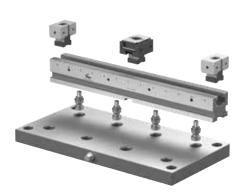


Mounting the multi-clamping system on a grid system. Positioned and fastened using shoulder screws.



Fits on 200 mm gauge size.

Ø25H6 locating hole and M12 fastening screw.



Adaptation of the multi-clamping system to a mechanical zero-point clamping system.

Fits on 96mm gauge size.

Ø16H6 locating hole and M10 fastening screw.

Example of a multi-clamping system





Application of the multi-clamping system with different workpieces.

Wedge clamps used here have the force coming from one side.

Depending on the workpiece size, several workpieces can be clamped using identical clamping rails.

The multi-clamping system can be modified flexibly and quickly.



Multi-clamping system aligned and secured on pallet with T-slots. Multi-clamping system set up for 20 identical workpieces. Space-saving fixed jaws with one mounting screw. Wedge clamps constructed as double-sided clamping element.



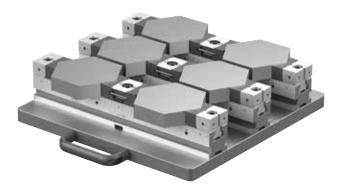
Flexible application of the multi-clamping system on an octagonal workholding tower. With this clamping arrangement, many workpieces can be clamped simultaniously to extend the machine running time.

Example of a multi-clamping system





Mutli-clamping system mounted on an interchangeable pallet for a zero-point clamping system. The workpieces can be reloaded externally to the machine to extend the machine running time. With the double-sided arrangement of the wedge clamps, both plates can be clamped at the simultaneously.



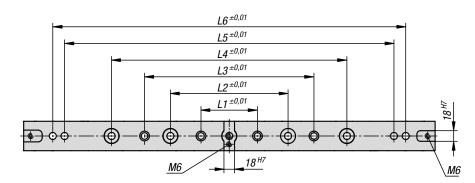
Multi-clamping system mounted on an interchangeable pallet for a zero-point clamping system. Attachment jaws with prisms are screwed onto the fixed jaws of the multi-clamping system. Wedge clamps with machining allowance are used as clamping elements. The workpiece contour is machined into the jaw face.

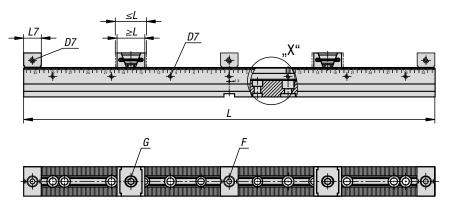


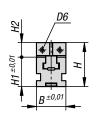
Multi-clamping system double-sided wedge clamps

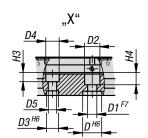


Fixed jaw ES











Material:

Clamping rail and fixed jaw tool steel. Wedge clamp mild steel.

Version:

Clamping rail and fixed jaw hardened and ground (HRC 55 \pm 2).

Wedge clamp hardened and black oxidised.

Sample order:

K1828.05040001

Note

The multi-clamping system can be fastened using various interfaces.

- 1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
- 2. Holes for DIN cap screws.
- 3. Ø25 mm locating holes for conventional zeropoint clamping systems with 200 mm spacing.
- 4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
- 5 Three 18H7 alignment slots for crosswise and lengthwise alignment on T- slot tables.
- 6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.



Multi-clamping system double-sided wedge clamps



Fixed jaw ES

Advantages:

Universal and flexible.

For small and large batch sizes.

Large components can also be clamped next to each other on several multiple clamping systems.

Supplied with:

- 1x clamping rail.
- 2x double-sided wedge clamps.
- 3x fixed jaws ES.

T-slot key K0954.

Accessories:

Clamping pin K0967.
Cap screws K0869.10X30.
Cap screws K0869.12X25.
Shoulder screws K0815.12045 / K0815.16055.
Seating ledges K1752.
Attachment jaws with machining allowance K1753.
Attachment jaws with prism K1754.
Workpiece stop K1755.
Spacer K1756.
Clamping claw set K1757.
T-slot nut K1758.

KIPP Multi-clamping system double-sided wedge clamps, fixed jaw ES

Order No. smooth	Order No. serrated	L	В	Н	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
Sillootii	Scriatou				111111.	max.							
K1828.05030001	K1828.05030002	300	50	75	44,5	50,5	96	200	-	-	-	-	30
K1828.05040001	K1828.05040002	400	50	75	44,5	50,5	96	200	288	300	-	-	30
K1828.05050001	K1828.05050002	500	50	75	44,5	50,5	96	200	288	400	-	-	30
K1828.05060001	K1828.05060002	600	50	75	44,5	50,5	96	200	288	400	500	-	30
K1828.05070001	K1828.05070002	700	50	75	44,5	50,5	96	200	288	400	560	600	30

Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	Н3	H4	F Socket head screw DIN 912	G cap screw DIN 912
K1828.05030001	K1828.05030002	300	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05040001	K1828.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05050001	K1828.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05060001	K1828.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05070001	K1828.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25

Maximum workpiece size



Maximum workpiece size

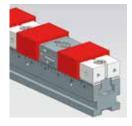
	1 pcs.	2 pcs.					
Clamping rails							
	B=50	B=50					
L=300	193	96					
L=400	292	146					
L=500	394	197					
L=600	493	246					
L=700	592	296					

	3 pcs.	4 pcs.					
Clamping rails							
	B=50	B=50					
L=300	39	29					
L=400	72	54					
L=500	106	79					
L=600	139	104					
L=700	172	129					

	5 pcs.	6 pcs.					
Clamping rails							
	B=50	B=50					
L=300	8	6					
L=400	27	23					
L=500	48	40					
L=600	68	56					
L=700	87	73					

	7 pcs.	8 pcs.					
Clamping rails		namanananananananananananananananananan					
	B=50	B=50					
L=300	-	-					
L=400	9	8					
L=500	23	20					
L=600	37	33					
L=700	51	45					

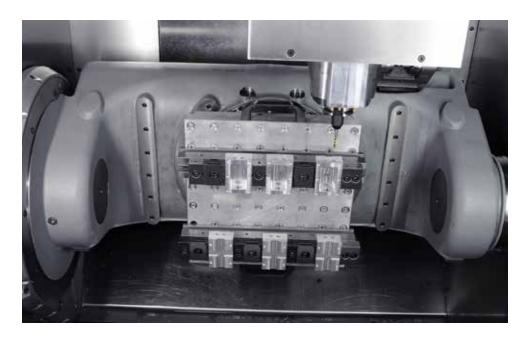




Combination of: Clamping rail for multi-clamping system K1746, Wedge clamp K1748 and Fixed jaw ES for multi-clamping system K1750.

Example of a multi-clamping system





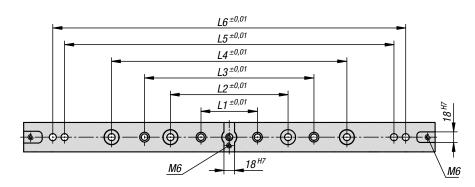
The multi-clamping system mounted on an interchangeable plate with grid system.

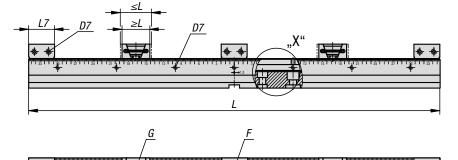


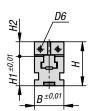
Multi-clamping system double-sided wedge clamps

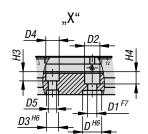


Fixed jaw DS











Material:

Clamping rail and fixed jaw tool steel. Wedge clamp mild steel.

Version

Clamping rail and fixed jaw hardened and ground (HRC 55 \pm 2).

Wedge clamp hardened and black oxidised.

Sample order:

K1829.05040001

Note:

The multi-clamping system can be fastened using various interfaces.

- 1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
- 2. Holes for DIN cap screws.
- 3. Ø25 mm locating holes for conventional zeropoint clamping systems with 200 mm spacing.
- 4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
- 5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T- slot tables.
- 6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.



Multi-clamping system double-sided wedge clamps



Fixed jaw DS

Advantages:

Universal and flexible.

For small and large batch sizes.

Large components can also be clamped next to each other on several multiple clamping systems.

Supplied with:

- 1x clamping rail.
- 2x double-sided wedge clamps.
- 3x fixed jaws DS.

T-slot key K0954.

Accessories:

Clamping pin K0967.
Cap screws K0869.10X30.
Cap screws K0869.12X25.
Shoulder screws K0815.12045 / K0815.16055.
Seating ledges K1752.
Attachment jaws with machining allowance K1753.
Attachment jaws with prism K1754.
Workpiece stop K1755.
Spacer K1756.
Clamping claw set K1757.
T-slot nut K1758.

KIPP Multi-clamping system double-sided wedge clamps, fixed jaw DS

Order No. smooth	Order No. serrated	L	В	Н	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1829.05030001	K1829.05030002	300	50	75	44,5	50,5	96	200	-	-	-	-	44
K1829.05040001	K1829.05040002	400	50	75	44,5	50,5	96	200	288	300	-	-	44
K1829.05050001	K1829.05050002	500	50	75	44,5	50,5	96	200	288	400	-	-	44
K1829.05060001	K1829.05060002	600	50	75	44,5	50,5	96	200	288	400	500	-	44
K1829.05070001	K1829.05070002	700	50	75	44,5	50,5	96	200	288	400	560	600	44

Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	Н3	H4	F Socket head screw DIN 912	G cap screw DIN 912
K1829.05030001	K1829.05030002	300	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05040001	K1829.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05050001	K1829.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05060001	K1829.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05070001	K1829.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25

Maximum workpiece size



Maximum workpiece size

	1 pcs.	2 pcs.				
Clamping rails						
	B=50	B=50				
L=300	164	82				
L=400	263	131				
L=500	365	182				
L=600	464	232				
L=700	563	281				

	3 pcs.	4 pcs.					
Clamping rails		menguangnangnangnangnangnangnangnangnangna					
	B=50	B=50					
L=300	24	18					
L=400	57	43					
L=500	91	68					
L=600	124	93					
L=700	157	118					

	5 pcs.	6 pcs.					
Clamping rails							
	B=50	B=50					
L=300	-	-					
L=400	16	13					
L=500	36	30					
L=600	56	47					
L=700	76	63					

	7 pcs.	8 pcs.
Clamping rails		
	B=50	B=50
L=300	-	-
L=400	-	-
L=500	13	11
L=600	27	24
L=700	41	36





Combination of: Clamping rail for multi-clamping system K1746, Wedge clamp K1748 and Fixed jaw DS for multi-clamping system K1751.

Example of a multi-clamping system





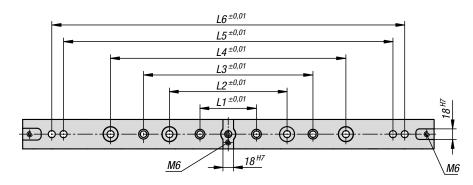
The multi-clamping system with wedge clamps double-sided and various fixed jaws combined.

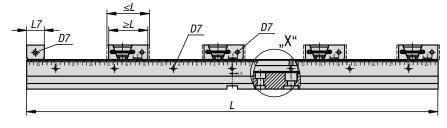


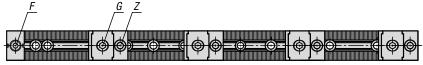
Multi-clamping system single-sided wedge clamps

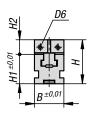


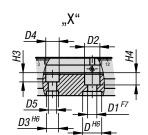
Fixed jaw ES













Material:

Clamping rail and fixed jaw tool steel. Wedge clamp mild steel.

Version

Clamping rail and fixed jaw hardened and ground (HRC 55 \pm 2).

Wedge clamp hardened and black oxidised.

Sample order:

K1830.05050001

Note:

The multi-clamping system can be fastened using various interfaces.

- 1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
- 2. Holes for DIN cap screws.
- 3. Ø25 mm locating holes for conventional zeropoint clamping systems with 200 mm spacing.
- 4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
- 5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T- slot tables.
- 6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.



Multi-clamping system single-sided wedge clamps



Fixed jaw ES

Advantages:

Universal and flexible. For small and large batch sizes.

Large components can also be clamped next to each other on several multiple clamping systems.

Supplied with:

- 1x clamping rail.
- 3x single-sided wedge clamps.
- 1x fixed jaw ES.

Accessories:

Clamping pin K0967.

Cap screws K0869.10X30.

Cap screws K0869.12X25.

Shoulder screws K0815.12045 / K0815.16055.

Seating ledges K1752.

Attachment jaws with machining allowance K1753.

Attachment jaws with prism K1754.

Workpiece stop K1755.

Spacer K1756.

Clamping claw set K1757.

T-slot nut K1758.

T-slot key K0954.

KIPP Multi-clamping system single-sided wedge clamps fixed jaw ES

Order No. smooth	Order No. serrated	L	В	Н	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1830.05040001	K1830.05040002	400	50	75	64	70	96	200	288	300	-	-	30
K1830.05050001	K1830.05050002	500	50	75	64	70	96	200	288	400	-	-	30
K1830.05060001	K1830.05060002	600	50	75	64	70	96	200	288	400	500	-	30
K1830.05070001	K1830.05070002	700	50	75	64	70	96	200	288	400	560	600	30

Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	НЗ	H4	F Socket head screw DIN 912	G cap screw DIN 912	Z cap screw DIN 912
K1830.05040001	K1830.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05050001	K1830.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05060001	K1830.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05070001	K1830.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30

Maximum workpiece size



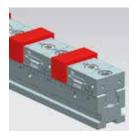
Maximum workpiece size

	1 pcs.	2 pcs.
Clamping rails		
	B=50	B=50
L=300	203	68
L=400	302	118
L=500	404	169
L=600	503	218
L=700	602	268

	3 pcs.	4 pcs.
Clamping rails		
	B=50	B=50
L=300	23	-
L=400	56	26
L=500	90	51
L=600	123	76
L=700	156	101

	5 pcs.	6 pcs.
Clamping rails	nzuenenentinanen mittaanen	
	B=50	B=50
L=300	-	-
L=400	7	-
L=500	27	12
L=600	47	28
L=700	67	45

	7 pcs.	8 pcs.
Clamping rails		
	B=50	B=50
L=300	-	-
L=400	-	-
L=500	-	-
L=600	15	5
L=700	29	17



Combination of: Clamping rail for multi-clamping system K1746, Wedge clamp with fixed jaw for multi-clamping system K1749 and 1x Fixed jaw ES for multi-clamping system K1750.

Example of a multi-clamping system





Wedge clamps with fixed jaw of the multi-clamping system System width 50.



Workpiece clamping with fixed jaw (right) and wedge clamps with fixed jaw (left).



Clamping rails

for multi-clamping system





Material:

Tool steel.

Version:

Hardened and ground (HRC 55 \pm 2).

Sample order:

K1746.050300

Note:

The clamping rails can be fastened using various methods.

- 1. Lateral edge for claw clamp set. Claw clamps can be fastened at any desired position.
- 2. Holes for DIN cap screws.
- Ø25H6 mm locating holes for conventional zeropoint clamping systems with 100 mm system spacing.
- 4. Ø16H6 mm locating holes for zero-point clamping systems with 96 mm system spacing.
- 5. Three 18H7 alignment slots for T-slot tables.
- 6. Ø12F7 and Ø16F7 reamed holes for 40 mm and 50 mm grid systems.

Application:

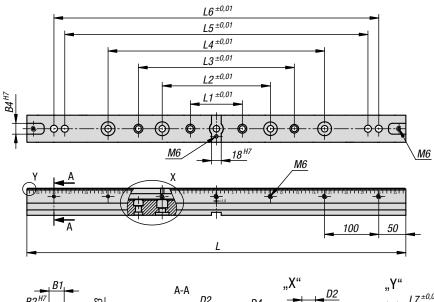
Several clamping rails with different lengths can be mounted one behind the other or next to each other. The precision toothing enables very accurate positioning of the fixed jaws. Due to the scale on the side of the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

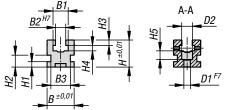
Advantages:

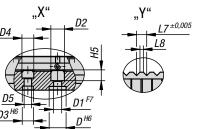
Universal and flexible.

For small and large batch sizes.

Large components can also be clamped beside each other on a number of clamping rails.









KIPP Clamping rails for multi-clamping system

Order No.	suitable for system width	L	В	Н	L1	L2	L3	L4	L5	L6	L7	L8	B1	B2	В3	B4	H1	H2	НЗ	H4	H5	D	D1	D2	D3	D4	D5
K1746.050300	50	300	50	50	96	200	-	-	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050400	50	400	50	50	96	200	288	300	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050500	50	500	50	50	96	200	288	400	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050600	50	600	50	50	96	200	288	400	500	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050700	50	700	50	50	96	200	288	400	560	600	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11



Clamping rails, short

for multi-clamping system







Material:

Tool steel.

Version:

Hardened and ground (HRC 55 ±2).

Sample order:

K1747.050130

The clamping rails can be fastened using various

- 1. Lateral edge for claw clamp set. Claw clamps can be fastened at any desired position.
- 2. Holes for DIN cap screws.
- 3. One 18H7 alignment slot for T-slot tables.
- 4. Ø12F7 and Ø16F7 reamed holes for 50 mm grid systems.

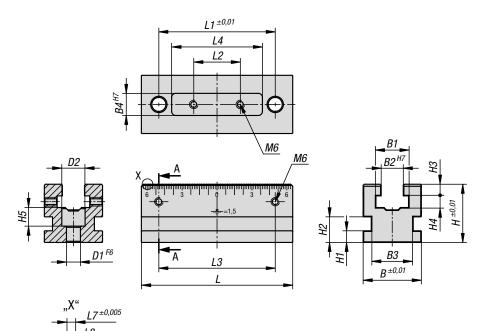
Application:

With the short clamping rails, clamping tasks can be implemented with low space requirements. The precision toothing enables very accurate positioning of the fixed jaws. Due to the scale on the side of the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Advantages:

Universal and flexible application.

A number of short clamping rails can also be used to adapt flexibly to different clamping situations.



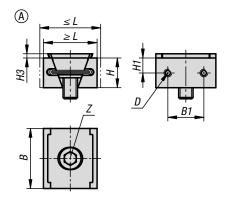
KIPP Short clamping rails for multi-clamping system

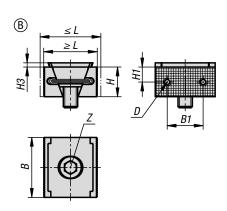
Order No.	suitable for system width	L	В	Н	L1	L2	L3	L4	L7	L8	B1	B2	В3	B4	H1	H2	Н3	H4	H5	D1	D2
K1747.050130	50	130	50	50	100	40	100	77	1,5	0,5	28	19	36	18	10	22	10	10	16	12	20

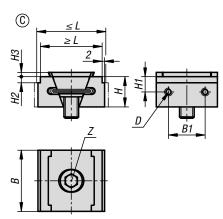
Wedge clamps

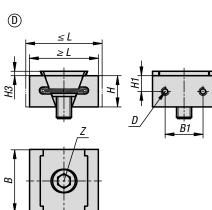


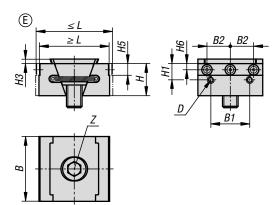












The functioning principle make the wedge clamps ideal for multi-clamping.

The wedge shape creates high clamping forces. The wedge clamps can be used for clamping in conjunction with the clamping rail or mounted in tapped holes or T-slots.

Tightening the clamping screw moves the two clamping segments outwards and press the work-pieces against the fixed jaws of the machining fixture.

The double wedge has an elongated hole allowing for movement and to compensate for tolerances. Displacement: $M12 = \pm 1$ mm.

Material:

Wedge and jaw segments carbon steel.

Version:

Double wedge and clamping segments hardened, black oxidised.

Sample order:

K1748.05002

Note:

The two screw-on holes in the clamping faces also enable seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Supplied with:

Wedge clamps. Fastening screw.

Drawing reference:

Form A: Smooth jaw face

Form B: Serrated jaw facet

Form C: With step

Form D: With machining allowance

Form E: With jaw pins



Wedge clamps



KIPP Wedge clamps

Order No.	Form	L min.	L max.	В	Н	B1	B2	H1	H2	Н3	H5	H6
K1748.0500112	Α	44,5	50,5	50	25	30	-	12,5	-	3,5	-	-
K1748.0500212	В	44,5	50,5	50	25	30	-	12,5	-	3,5	-	-
K1748.0502312	С	50,5	56,5	50	25	30	-	12,5	2	3,5	-	-
K1748.0505312	С	50,5	56,5	50	25	30	-	12,5	5	3,5	-	-
K1748.0500412	D	54,5	60,5	50	25	30	-	12,5	-	3,5	-	-
K1748.0500512	E	54	60	50	25	30	18	12,5	-	3,5	9	4,75

Order No.	Form	D Internal thread	Z cap screw DIN 912	Clamping force max. kN	Tightening torque max. Nm
K1748.0500112	Α	M5	M12x25	30	85
K1748.0500212	В	M5	M12x25	30	85
K1748.0502312	С	M5	M12x25	30	85
K1748.0505312	С	M5	M12x25	30	85
K1748.0500412	D	M5	M12x25	30	85
K1748.0500512	E	M5	M12x25	30	85

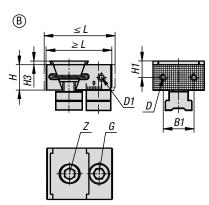
Wedge clamps with fixed jaw

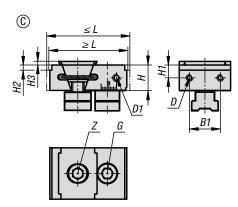
for multi-clamping system

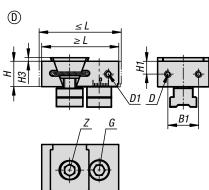


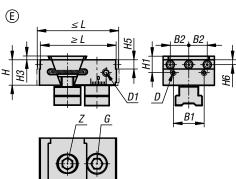


(A)









The functioning principle make the wedge clamps ideal for multi-clamping. The wedge shape creates high clamping forces. Tightening the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaws. The wedge has a slightly elongated hole allowing for movement to compensate for tolerances. Displacement: $M12 = \pm 1 \text{ mm}$.

Material:

Wedge and jaw segments carbon steel.

Double wedge and clamping segments hardened, black oxidised.

Sample order:

K1749.05002

Note:

These wedge clamps can only be used in conjunction with the clamping rail K1746 for multiple clamping. The lateral fastening holes are used to fasten workpiece stops.

The two screw-on holes in the clamping faces also enable seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Advantages:

The lateral scale on the clamping rail and the fixed jaw guarantees a very high repeat clamping accuracy.

Supplied with:

Wedge clamps Fastening screws. Slot keys.

Drawing reference:

Form A: Smooth jaw face Form B: Serrated jaw facet

Form C: With step

Form D: With machining allowance

Form E: With jaw pins



Wedge clamps with fixed jaw







KIPP Wedge clamps with fixed jaw for multi-clamping system

Order No.	Form	L min.	L max.	В	Н	B1	B2	H1	H2	Н3	H5	Н6
K1749.0500112	Α	64	70	50	25	30	-	12,5	-	3,5	-	-
K1749.0500212	В	64	70	50	25	30	-	12,5	-	3,5	-	-
K1749.0502312	С	71	77	50	25	30	-	12,5	2	3,5	-	-
K1749.0505312	С	71	77	50	25	30	-	12,5	5	3,5	-	-
K1749.0500412	D	75	81	50	25	30	-	12,5	-	3,5	-	-
K1749.0500512	E	74,5	80,5	50	25	30	18	12,5	-	3,5	9	4,75

Order No.	Form	D Internal thread	G cap screw DIN 912	Z cap screw DIN 912	Clamping force max. kN	Tightening torque max. Nm
K1749.0500112	Α	M5	M12x30	M12x25	30	85
K1749.0500212	В	M 5	M12x30	M12x25	30	85
K1749.0502312	С	M 5	M12x30	M12x25	30	85
K1749.0505312	С	M 5	M12x30	M12x25	30	85
K1749.0500412	D	M 5	M12x30	M12x25	30	85
K1749.0500512	Е	M 5	M12x30	M12x25	30	85

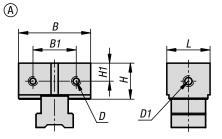


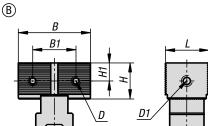
Fixed jaws ES

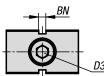
for multi-clamping system

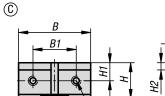


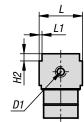


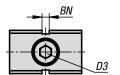


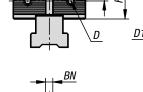












Material:

Tool steel.

Version:

Hardened and ground (HRC 55 \pm 2).

Sample order:

K1750.0503001

Note:

There are three different fixed jaw versions to choose

- Smooth version Form A for pre-machined workpieces.
- Serrated version Form B for raw parts.
- Offset jaws Form C for clamping with a small clamping edge.

The lateral fastening holes are used to fasten workpiece end stops. The two screw-on holes on the clamping surfaces also allow seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Application:

The ES fixed jaws are positioned on the clamping rails according to the clamping situation. When the fastening screw is tightened, the toothing allows a form-fit connection to be created. This allows high retaining forces to be carried through the clamping elements. With its slim design, the ES fixed jaw is especially suitable for clamping processes with smaller workpieces and large batch sizes. This also means that large production batches can be processed economically.

Advantages:

The lateral scale on the clamping rails and the fixed jaws allows precise positioning of the fixed stops.

Supplied with:

ES fixed jaw. Fastening screw. Slot key.



Fixed jaws ES

for multi-clamping system





KIPP Fixed jaws ES for multi-clamping system

Order No.	suitable for system width	Form	Form-Type	L	В	Н	L1	B1	H1	H2	D Internal thread	D1 internal thread	D3	BN=Slot width
K1750.0503001	50	Α	smooth	30	50	25	-	30	12,5	-	M5	M6	M10x30	5
K1750.0503002	50	В	serrated	30	50	25	-	30	12,5	-	M5	M6	M10x30	5
K1750.0503023	50	С	stepped	30	50	25	2	30	12,5	2	M5	M6	M10x30	5
K1750.0503053	50	С	stepped	30	50	25	2	30	12,5	5	M5	M6	M10x30	5

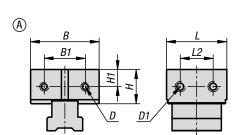


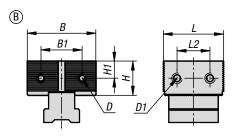
Fixed jaws DS

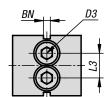
for multi-clamping system



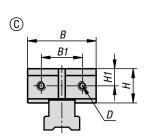


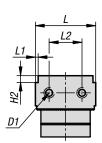


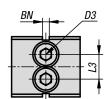












Material:

Tool steel.

Version:

Hardened and ground (HRC 55 ±2).

Sample order:

K1751.0504401

Note:

There are three different fixed jaw versions to choose from:

- Smooth version Form A for pre-machined workpieces.
- Serrated version Form B for raw parts.
- Offset jaws Form C for clamping with a small clamping edge.

The lateral fastening holes are used to fasten workpiece end stops. The two screw-on holes on the clamping surfaces also allow seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Application:

The DS fixed jaws are positioned on the clamping rails according to the clamping situation. When the fastening screw is tightened, the toothing allows a form-fit connection to be created. Fixed jaws with two fastening screws are to be preferred where higher machining forces are to be applied.

Advantages:

The lateral scale on the clamping rails and the fixed jaws allows precise positioning of the fixed stops.

Supplied with:

DS fixed jaw. Fastening screw. Slot key.



Fixed jaws DS

for multi-clamping system





KIPP Fixed jaws DS for multi-clamping system

Order No.	suitable for system width	Form	Form-Type	L	В	Н	L1	L2	L3	B1	H1	Н2	D Internal thread	D1 internal thread	D3	BN=Slot width
K1751.0504401	50	Α	smooth	44	50	25	-	24	18	30	12,5	-	M5	M6	M10x30	5
K1751.0504402	50	В	serrated	44	50	25	-	24	18	30	12,5	-	M5	M6	M10x30	5
K1751.0504423	50	С	stepped	44	50	25	2	24	18	30	12,5	2	M5	M6	M10x30	5
K1751.0504453	50	С	stepped	44	50	25	2	24	18	30	12,5	5	M5	M6	M10x30	5



Screw-on seating ledges

for multi-clamping system









Tool steel.

Version:

Hardened and ground (HRC 55 \pm 2).

Sample order:

K1752.050175

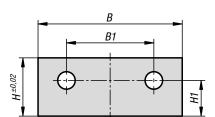
The seating ledges allow different workpiece clamping depths to be set.

Application:

The seating ledges can be screwed together with the ES and DS fixed jaws and with the wedge clamps.

Advantages:

Quick setup of workpieces on the multiple clamping system. Uniform clamping depth of the workpieces with the ground support surface height.





KIPP Screw-on seating ledges for multi-clamping system

Order No.	suitable for system width	L	В	Н	B1	H1	D
K1752.050175	50	5	49,5	17	30	12,3	6
K1752.050205	50	5	49,5	20	30	12,3	6
K1752.050223	50	3	49,5	22	30	12,3	6



Attachment jaws machinable

for fixed jaws DS and ES





Material:

Tool steel.

Version:

tempered (HRC32).

Sample order:

K1753.05017

Note:

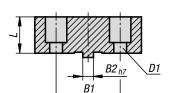
Attachment jaws are used to incorporate customerspecific workpiece contours.

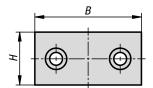
Application:

The attachment jaws are screwed onto the ES and DS fixed stops.

Advantages:

Machined attachment jaws can be re-used for later series productions.





KIPP Machinable attachment jaws for DS and ES fixed jaws

Order No.	suitable for system width	L	В	Н	B1	B2	D1 for screw to DIN 912
K1753.05017	50	17	50	25	30	5	M5
K1753.05027	50	27	50	25	30	5	M5



Attachment jaws with prism

for fixed jaws DS and ES





Material:

Tool steel.

Version:

Hardened and ground (HRC 55).

Sample order:

K1754.05070

Note:

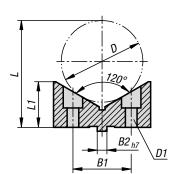
Attachment jaws with prism are used for clamping round workpieces. With the longitudinal slot on the back, they can be aligned exactly on the ES and DS fixed jaws.

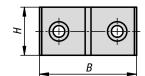
Application:

The attachment jaws with prism are screwed onto the ES and DS fixed stops.

Advantages:

The attachment jaws with prism ensure repeat accuracy when clamping workpieces.





KIPP Attachment jaws with prism for DS and ES fixed jaws

Order No.	suitable for system width	L	В	Н	L1	B1	B2	D	max. clamping diameter	D1 for screw to DIN 912
K1754.05070	50	54,98	50	25	23,5	30	5	42	D=70	M5



Workpiece stops

for multi-clamping system





Material:

Carbon steel.

Version:

Tempered and flat faces ground (HRC 32).

Sample order:

K1755.05045

Note:

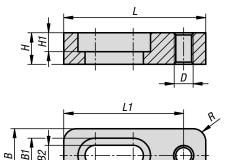
Workpieces can be positioned laterally using the workpiece stops for multi-clamping systems.

Application:

The end stop can be mounted laterally on both surfaces of the fixed jaws.

Advantages:

Flexible adjustment with the elongated hole.



KIPP Workpiece stops for multi-clamping system

Order No.	suitable for system width	L	В	Н	L1	L2	L3	B1	B2	H1	R	D Internal thread
K1755.05045	50	45	17	10	38	10	12	11	6,5	6	4	M6



Spacers

for multi-clamping system workpiece stop





Material:

Carbon steel.

Version:

Tempered and flat faces ground (HRC 32).

Sample order:

K1756.05010

Note:

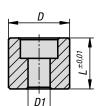
The spacer for the workpiece stop is used to extend the lateral stop dimension.

Application:

The spacer is screwed onto the side of the fixed jaw together with the workpiece stop.

Advantages:

Increases the adjustment range of the lateral end stop.





KIPP Spacers for multi-clamping system workpiece stops

Order No.	suitable for system width	L	D	D1 for screw to DIN 912
K1756.05010	50/72	10	18	M6
K1756.05015	50/72	15	18	M6
K1756.05023	50/72	23	18	M6



Clamping claw sets

for multi-clamping system





Material:

Carbon steel.

Version:

Tempered. Support faces ground (HRC 32).

Sample order:

K1757.05012

Note:

Using these clamping claw sets, the clamping rails can be secured at any position on the machine table.

Application:

The clamping claw set is inserted into the T-slot on the machine table and slid along to the desired position on the clamping rail. Tightened using a cap screw.

Advantages:

The clamping claw set can also be used for other types of mounting in the multi-clamping system.

Supplied with:

4x claw clamps.

4x DIN 912 cap screws.

4x DIN 508 T-slot nuts.

KIPP Clamping claw sets for multi-clamping system

Order No.	suitable for system width	L	В	Н	B1	B2	H1	D for screw DIN 912	Slot width
K1757.05012	50	38	36	20	20	6	10	M12	14
K1757.07216	72/100	40	50	28	27	8	14	M16	18

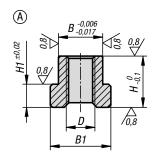


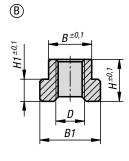
T-slot keys

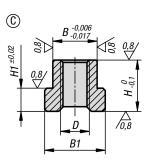
for wedge clamps

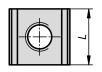




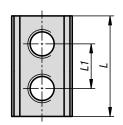












Material:

Carbon steel.

Version:

Tempered. Guide faces ground (HRC 38).

Sample order:

K1758.05010241

Note:

T-slot keys are matched to the multiple clamping system.

Form A/C are used for fixed stops.

Form B is for operating the clamping wedge of the clamping wedge segments.

Application:

The T-slot keys are inserted into the clamping rail at the appropriate position. The cap screw is used to screw the T-slot keys to the fixed stops and wedge clamps.

Advantages:

With Form A/C, the T-slot key has very little play in the clamping rail, so the fixed stops can also be inserted from the side.

KIPP T-slot keys for wedge clamps

Order No.	suitable for system width	Suitable for	Form	L	L1	В	Н	B1	H1	D Internal thread
K1758.05010241	50	fixed jaw single-sided	Α	24	-	19	22	26	9,95	M10
K1758.05010361	50	fixed jaw double-sided	С	36	18	19	22	26	9,95	M10
K1758.05012241	50	wedge clamp with fixed jaw	Α	24	-	19	22	26	9,95	M12
K1758.05012262	50	double-sided wedge clamp	В	26	-	18,5	18	26	9,5	M12

Example of a multi-clamping system





Fixed jaw of the multi-clamping system with workpiece stop.



Multi-clamping system with support bars and lateral workpiece stop for the workpiece.





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