

## 2. Jaw range

### 2.1 Quick-change jaws

The quick-change jaws fit all vices with a quick-change jaw connection.

The jaws are tightened via a screw on the side (max. 25 Nm).

You can find dimension sheets for the quick-change jaws at [www.best-spanntechnik.de](http://www.best-spanntechnik.de).

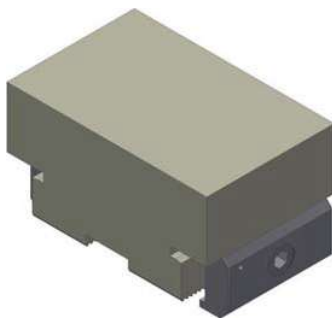
#### 2.1.1 Jaw blanks

**Steel jaw blanks (with quick-change connection):**

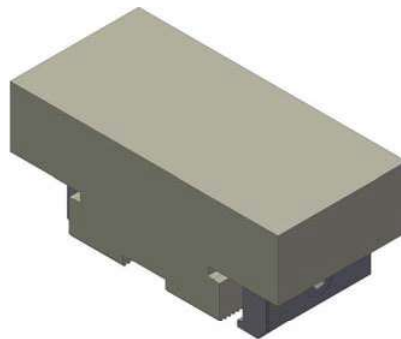
Order number:	Dimensions (WxLxH)
300-0094-002	94 x 60 x 49 mm
300-0125-001	125 x 60 x 49 mm
300-0150-001	150 x 60 x 49 mm

**Material: 40 CrMnMo7**

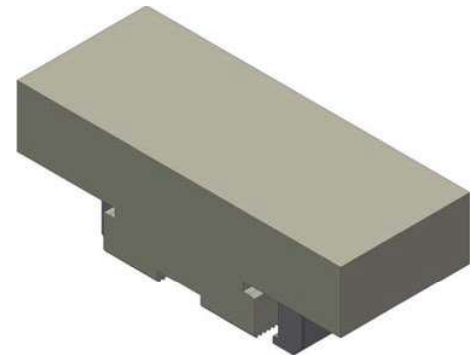
**Application:**  
For in-house production of mould jaws.



300-0094-002



300-0125-001



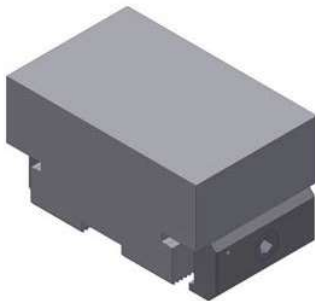
300-0150-001

**Aluminium jaw blanks (with quick-change connection):**

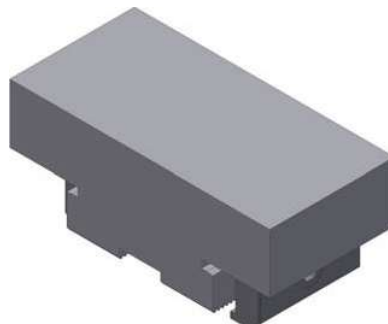
Order number:	Dimensions (WxLxH)
310-0094-001	94 x 60 x 49 mm
310-0125-001	125 x 60 x 49 mm
310-0150-001	150 x 60 x 49 mm

**Material: AlZnMgCu0.5**

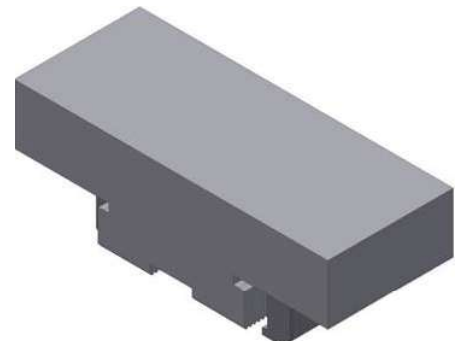
**Application:**  
For in-house production of mould jaws.



310-0094-001



310-0125-001



310-0150-001

## 2.1.2 Stepped jaws

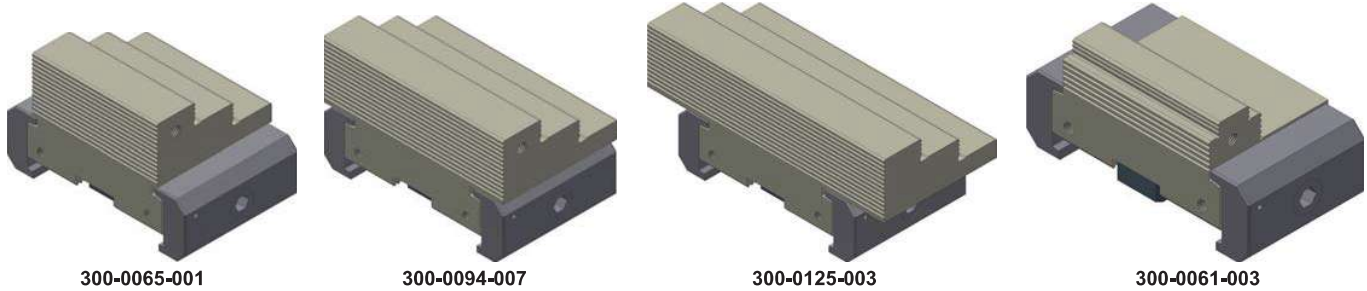
### Stepped jaws, hard (with quick-change connection):

Order number:	Dimensions (WxLxH)
300-0065-001	65 x 60 x 49 mm 3 levels: each 20 x 10 (LxH)
300-0094-007	94 x 60 x 49 mm 3 levels: each 20 x 10 (LxH)
300-0125-003	125 x 60 x 49 mm 3 levels: each 20 x 10 (LxH)
300-0061-003	61 x 50 x 35 mm 1 level: 4 x 5 (LxH)

The stepped jaws are hardened. The accuracy of the clamping surface relative to the serration is +/- 0.02 mm. For higher precision, the jaws must be ground out on the vice under clamping pressure.

#### Application:

For clamping workpieces which must not suffer damage. The clamping surface is grooved and not serrated. This provides optimum protection when clamping machined workpieces.



## 2.1.3 Grip jaws

### Grip jaws with grip bar (quick-change connection):

Order number:	Dimensions (WxLxH)
300-0094-006	94 x 60 x 34 mm
300-0048-001	48 x 60 x 34 mm

The grip jaw is hardened, and the grip bar grips at a height of 3 mm. The accuracy of the clamping surface relative to the serration is +/- 0.05 mm.

#### Application:

For clamping raw materials under even concentrated load, in particular aluminium, where high surface pressure and thus maximum holding force are expected.



### Grip jaws with master grip inserts (quick-change connection):

Order number:	Dimensions (WxLxH)
300-0094-017	94 x 50 x 40 mm

The grip jaws are hardened. These grip jaws have Mastergrip clamping claws fitted on each side of the clamping step. These claws grip at a height of 5 mm. The standard design features the inserts 6301-0010-001 (see Page 41).

#### Application:

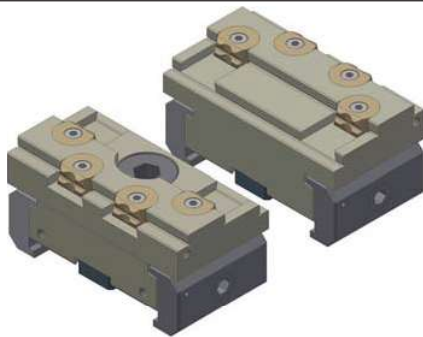
For the clamping of various materials for which three different optional clamping inserts are available. The engagement of the teeth produces a high surface pressure and maximum holding forces. If they become worn, the Mastergrip clamping claws can be replaced quickly and easily (see Spare parts, Page 41). At the same time, these jaws have a smooth side for clamping machined surfaces.

(associated image, see above.)

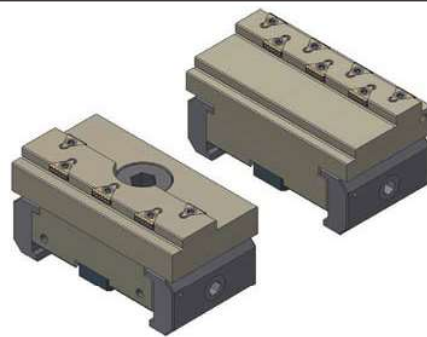
## 2.1.4 Pendulum grip jaws

### Pendulum jaws with KonGrip clamping claws (quick-change connection):

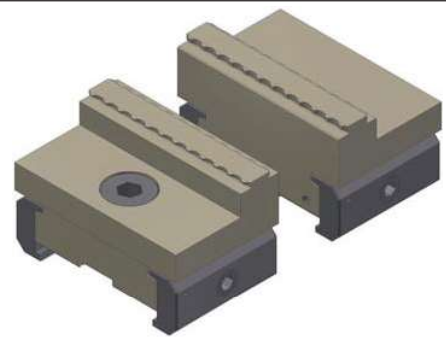
Order number:	Dimensions (WxLxH)
<b>300-0094-010</b>	94 x 50 x 49 mm
These pendulum jaws have two KonGrip clamping claws hardened to 52-54 HRC fitted on each side of the clamping step. These claws grip at a height of 5 mm.	
<b>300-0094-019</b>	94 x 50 x 40 mm
The pendulum jaws are hardened. These pendulum jaws have Mastergrip clamping claws fitted on each side of the clamping step. These claws grip at a height of 5 mm. The standard design features the inserts 6301-0010-001 (see Page 41).	
<b>300-0094-024</b>	94 x 60 x 49 mm
The pendulum jaw is hardened, and the grip bar grips at a height of 3 mm. The accuracy of the clamping surface relative to the serration is +/- 0.05 mm.	
<b>Application:</b> The pendulum jaw sets consist of one fixed and one pendulum jaw. This allows workpieces with two non-parallel sides to be clamped with the pendulum jaw set (up to a bevel of 5°). The grip inserts or grip bar make the jaw sets particularly suitable for rough machining. The engagement of the teeth produces a high surface pressure and maximum holding forces.	



300-0094-010



300-0094-019



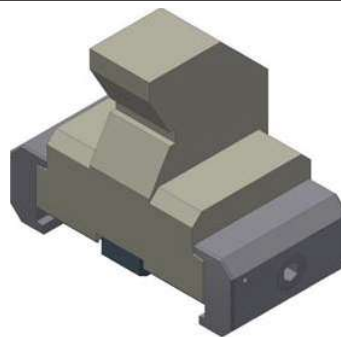
300-0094-024

## 2.1.5 Prism jaws

### Prism jaws (with quick-change connection):

(Please inquire with us, and we will prepare an individual offer for you)

Order number:	Dimensions (WxLxH)
-	on request
The prism jaws with quick-change jaw connection can be used to clamp a wide variety of shafts with diameters ranging from 5 mm to 120 mm. With these jaws, work can be performed without problems both on the end face (e.g. planing, drilling, thread cutting) and the long side (e.g. milling precisely centred pockets). Let us know the diameters of the shafts you need to clamp, and we will inform you which prismatic clamping jaws you require for the desired diameters.	



Additional customer-specific special jaws can be supplied on request. Please let us know the specific data for your application, and we will send you a technical draft together with an offer for the number of items you require.

## 2.2 Tongue and groove jaws

The tongue and groove jaws **fit specific vice models in each case** (see table below).

If you need one of the jaws listed for a different vice, contact us for details. You can find dimension sheets for the tongue and groove jaws at [www.best-spanntechnik.de](http://www.best-spanntechnik.de).

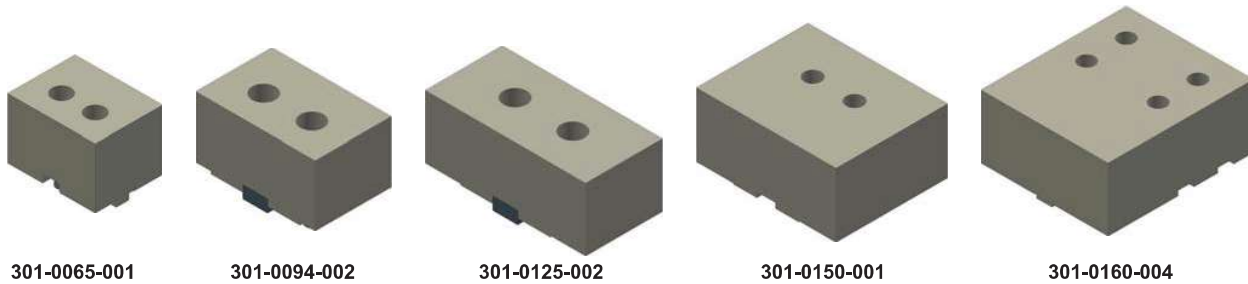
### 2.2.1 Jaw blanks

**Steel jaw blanks (tongue and groove connection):**

Order number:	Fits vice model:	Dimensions (WxLxH)
301-0065-001	BSM-115-KV (see p. 8)	65 x 50 x 45 mm
301-0094-002	BSM-140 (see p. 9)	94 x 60 x 50 mm
301-0125-002	BSM-180 (see p. 10)	125 x 60 x 50 mm
301-0150-001	BSM-250 + BSM-500 (see Pages 11+12)	150 x 120 x 70 mm
301-0160-004	BSMG-500 (see Page 20)	160 x 183 x 80 mm

**Material:** 16 MnCr5

**Application:**  
For in-house production of mould jaws and subsequent clamping of moulded parts where the workpiece surface must be free of clamping marks.

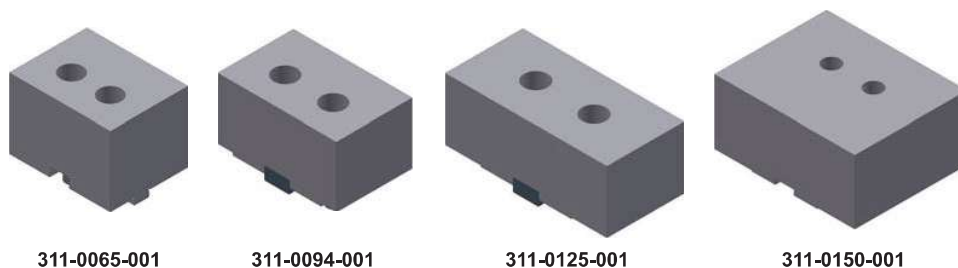


**Aluminium jaw blanks (tongue and groove connection):**

Order number:	Fits vice model:	Dimensions (WxLxH)
311-0065-001	BSM-115-KV (see p. 8)	65 x 50 x 45 mm
311-0094-001	BSM-140 (see p. 9)	94 x 60 x 50 mm
311-0125-001	BSM-180 (see p. 10)	125 x 60 x 50 mm
311-0150-001	BSM-250 + BSM-500 (s. p. 11+12)	150 x 120 x 70 mm

**Material:** high-strength aluminium

**Application:**  
For in-house production of mould jaws and subsequent clamping of moulded parts where the workpiece surface must be free of clamping marks.



## 2.2.2 Stepped jaws

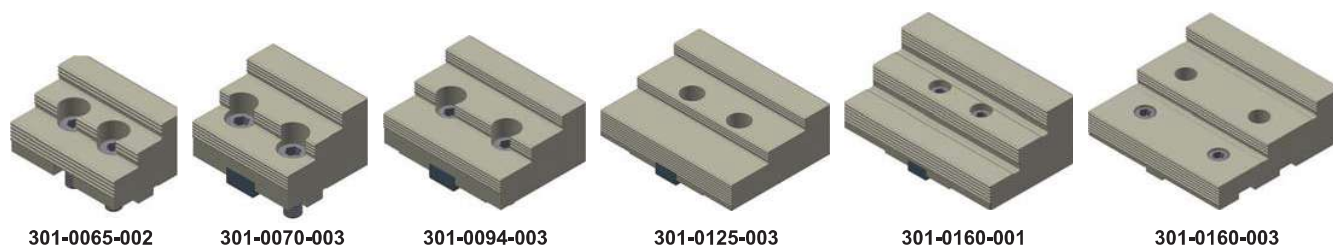
### Stepped jaws, hard (tongue and groove connection):

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0065-002	BSM-115-KV (see p. 8)	65 x 45 x 32 mm 3 levels: each 15 x 8 (LxH)	4-92 mm
301-0070-003	BSM-140 (see p. 9)	70 x 60 x 42 mm 3 levels: each 20 x 10 (LxH)	2-130 mm
301-0094-003	BSM-180 (see p. 10)	94 x 70 x 42 mm 3 levels: each 25 x 10 (LxH)	4-172 mm
301-0125-003	BSM-250 + BSM-500 (see Pages 11+12)	125 x 95 x 42 mm 3 levels: each 35 x 10 (LxH)	BSM 250: 2-210 mm BSM 500: 2-456 mm
301-0160-001	BSM-250 + BSM-500 (see Pages 11+12)	160 x 93 x 65 mm 3 levels: each 31 x 20 (LxH)	BSM 250: 2-194 mm BSM 500: 2-440 mm
301-0160-003	BSMG-500 (s. p.20)	160 x 151.2 x 55 mm 3 levels: each 60 x 15 (LxH)	2-490 mm

The stepped jaws are hardened. For high precision, the jaws must be ground out on the vice under clamping pressure.

#### Application:

For clamping workpieces which must not suffer damage. The clamping surface is grooved and not serrated. This provides optimum protection when clamping machined workpieces.



## 2.2.3 Grip jaws

### Grip jaws with grip bar (tongue and groove connection):

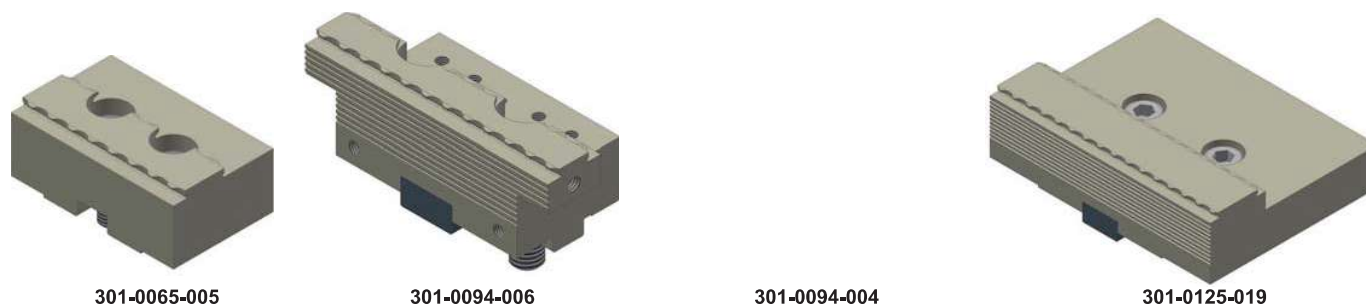
Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0065-005	BSM-115-KV (see p. 8)	65 x 40 x 26 mm	10-70 mm
301-0094-006	BSM-140 (see p. 9)	94 x 40 x 34 mm	10-95 mm
301-0094-004	BSM-180 (see p. 10)	94 x 50 x 34 mm	12-78 mm; 90-157 mm
301-0125-019	BSM-250 + BSM-500 (see Pages 11+12)	125 x 95 x 34 mm	BSM 250: 10-80; 140-210 mm BSM 500: 10-460 mm

The grip jaws are hardened.

The grip bar grips at a height of 3 mm.

#### Application:

For clamping raw materials under even concentrated load, in particular aluminium, where high surface pressure and thus maximum holding force are expected.



**Grip jaws with master grip inserts (tongue and groove connection):**

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0065-004	BSM-115 (see p. 8)	65 x 47.5 x 20 mm	8-52 mm
301-0094-012	BSM-140 (see p. 9)	94 x 50 x 34 mm	10-37 mm; 60-107 mm
301-0094-011	BSM-180 (see p. 10)	94 x 50 x 40 mm	12-149 mm
301-0125-020	BSM-250 + BSM-500 (see Pages 11+12)	125 x 95 x 34 mm	BSM 250: 10-80; 140-210 mm BSM 500: 10-460 mm

**Material: Nitro steel**

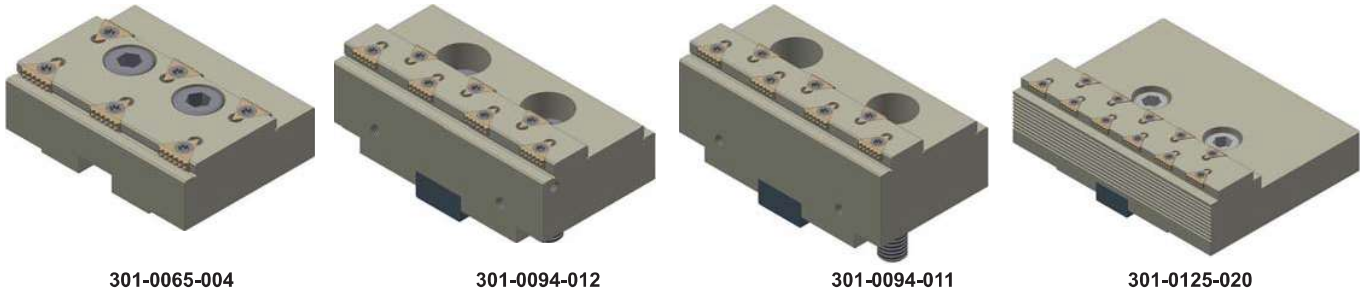
Grip jaws are nitrogen-hardened to a depth of approx. 0.2 mm. These grip jaws have Mastergrip clamping claws fitted on each side of the clamping step. The standard design features the inserts 6301-0010-001 (see Page 41).

**Application:**

For clamping sawing cuts, raw materials with a scaled surface and cast parts with the same concentrated load.

The engagement of the teeth produces a high surface pressure and maximum holding forces. If they become worn, the Mastergrip clamping claws can be replaced quickly and easily (see Spare parts, Page 38).

At the same time, these jaws have a smooth side for clamping machined surfaces.



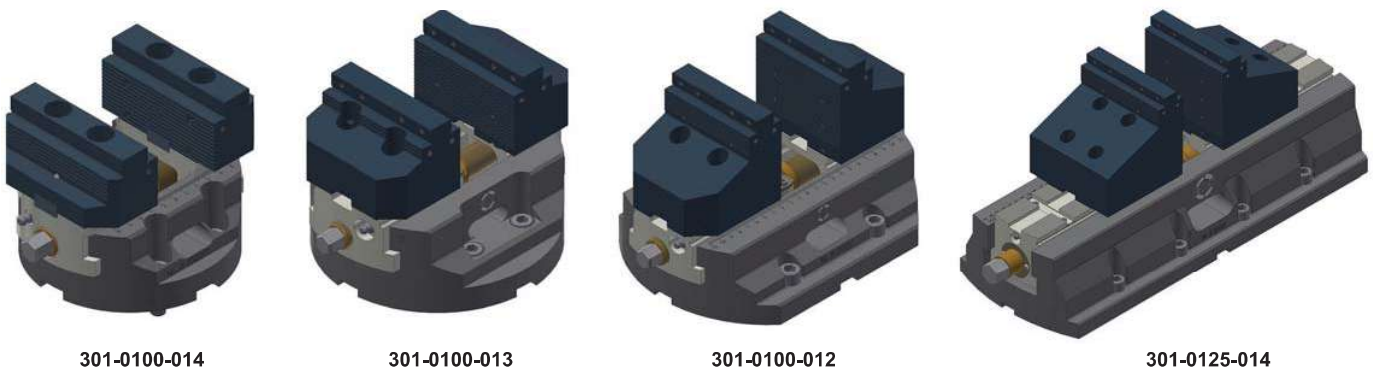
**2.2.4 5-axis jaws**

**5-axis jaws (tongue and groove connection):**

(Please inquire with us, and we will prepare an individual offer for you)

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0100-014	BSM-140 (see p. 9)	100 x 50 x 50 mm	20-90 mm
301-0100-013	BSM-180 (see p. 10)	100 x 69 x 65 mm	20-75 mm 80-150 mm
301-0100-012	BSM-250 (see Page 11)	100 x 95 x 95 mm	20-85 mm 135-200 mm
301-0125-014	BSM-500 (see Page 12)	125 x 120 x 120 mm	18-448 mm

The 5-axis jaws provides you with the optimal accessibility to your workpiece. We will be happy to match the jaws to your required clamping range.



## 2.2.5 Prism jaws

### Prism jaws (tongue and groove connection):

(Please inquire with us, and we will prepare an individual offer for you)

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0120-003	BSM-180 (see p. 10)	70 x 60 x 110 mm	∅ 19-45 mm horizontal ∅ 30-70 mm horizontal ∅ 60-116 mm horizontal
301-0125-005	BSM-180 (see p. 10)	125 x 60 x 87 mm	∅ 45-95 mm horizontal
301-0250-004	BSM-250 (see Page 11)	70 x 80 x 105 mm	∅ 79-110 mm horizontal
301-0025-001	BSM-250 (see Page 11)	70 x 81 x 49 mm	∅ 25-40 mm vertical

The prism jaws with tongue and groove connection can be used to clamp shafts with diameters ranging from 5 mm to 300 mm.

With these jaws, work can be performed without problems both on the end face (e.g. planing, drilling, thread cutting) and the long side (e.g. milling precisely centred pockets).

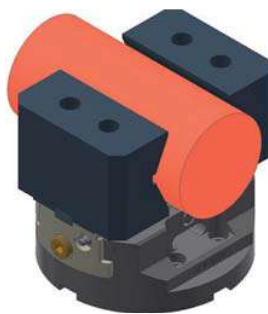
Let us know the diameters of the shafts you need to clamp, and we will inform you which prismatic clamping jaws you require for the desired diameters.



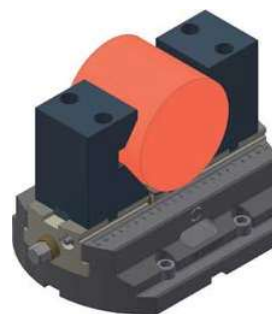
301-0120-003 (1)



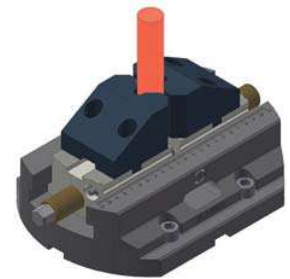
301-0120-003 (2)



301-0125-005



301-0250-004



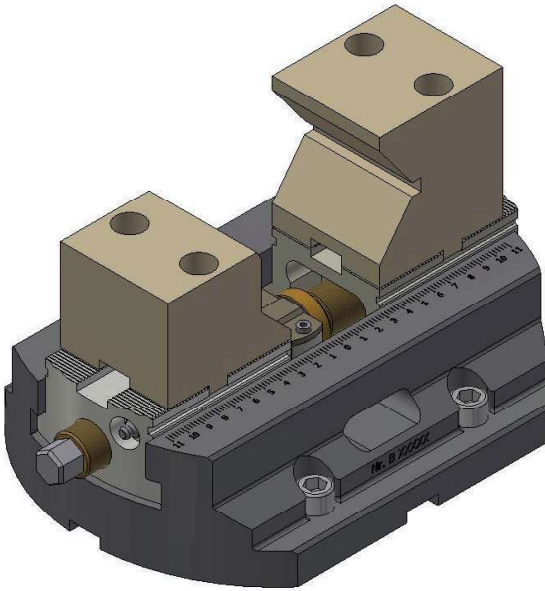
301-0025-001

Additional customer-specific special jaws can be supplied on request. Please let us know the specific data for your application, and we will send you a technical draft together with an offer for the number of items you require.



Special prism jaw 301-0020-001  
for BSM-115-KV clamping range  
6-20 mm horizontal and vertical

### Shaft vice with three-point prism jaws:



### Shaft vice technical data:

The dimensions are identical to the standard Vice model BSM-250 (200-0250-010, p. 11)

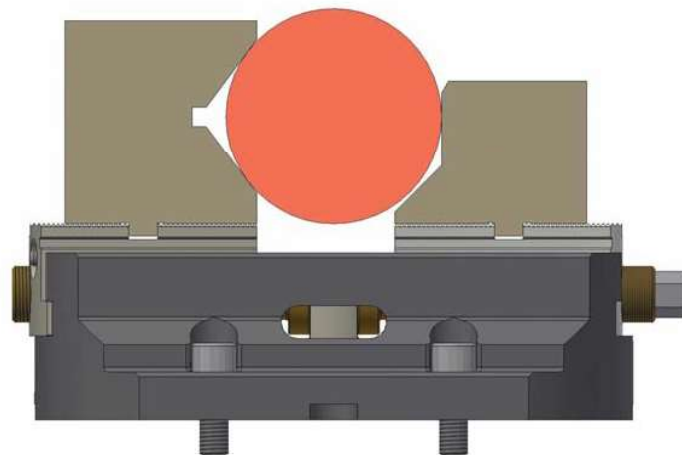
Order number:	201-0250-002
Designation:	BSM-250-WS
Installation length:	Ø 250 mm
Installation height:	82 mm
Weight:	19 kg
Clamping range:	Ø 10–130 mm
Total stroke:	75 mm
Max. torque:	250 Nm
Max. clamping force:	98 kN
Jaw connection:	Tongue and groove

### Three-point prism jaws (tongue and groove connection):

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
301-0250-008	BSM-250-WS	70 x 80/85 x 45/50 mm	Ø 10-40 mm
301-0250-009	BSM-250-WS	70 x 80 x 60/85 mm	Ø 40-90 mm
301-0250-010	BSM-250-WS	70 x 93.5/95 x 100/145 mm	Ø 90-130 mm

### Principle of function:

- Safe clamping with three-point system
- Jaws are open at the top, meaning a larger clamping area can be covered per jaw set
- A lower stroke is needed per workpiece extraction
- Workpieces can be easily removed upwards
- Every diameter is clamped centrally when using the shaft vice



The displayed jaws including vice model are a solution example.

The shaft vice version is also possible with other vice sizes.

Let us know what your requirements are and we will be happy to work out a solution for you.



## 2.2.6 Vario jaws

### Vario jaws with tongue and groove connection:

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
303-0200-001	BSM-500 (see Page 12)	200 x 130 x 30 mm	□ 12-414 mm, ∅ 72-445 mm
303-0200-004	BSM-250 (see Page 11) BSM-500 (see Page 12)	200 x 130 x 30 mm	□ 32-262 mm, ∅ 53-267 mm □ 32-510 mm, ∅ 53-516 mm

The Vario jaws can be used to clamp cylindrical and cubic workpieces.

The clamping inserts can be positioned at various points on the jaw, allowing clamping of a wide range of parts with one jaw set.

Both raw parts and workpieces for finishing can be clamped by changing the clamping inserts. When ordering jaws, please state the application for which you require them.

The clamping inserts must be ordered separately (see Page 41).

Additional sizes possible upon request.



303-0200-001  
Exterior clamping



303-0200-001  
Interior clamping

### Vario jaws with tongue and groove connection (one pendulum jaw):

Order number:	Fits vice model:	Dimensions (WxLxH)	Clamping range:
303-0160-001	BSM-180 (see p. 10)	160 x 86 x 22 mm	□ 8-180 mm, ∅ 116-216 mm
303-0160-002	BSM-250 (see Page 11) BSM-500 (see Page 12)	160 x 101 x 22 mm	□ 14-205 mm, ∅ 130-263 mm □ 14-450 mm, ∅ 116-466 mm

The Vario jaws can be used to clamp cylindrical and cubic workpieces. One jaw is designed as pendulum, for this reason nonparallel workpieces can not be clamped.

The clamping inserts can be positioned at various points on the jaw, allowing clamping of a wide range of parts with one jaw set.

By changing the clamping inserts, blanks as well as workpieces for finishing can be clamped. When ordering jaws, please state the application for which you require them.

The clamping inserts must be ordered separately (see Page 41).

Additional sizes possible upon request.



303-0160-002  
With tool



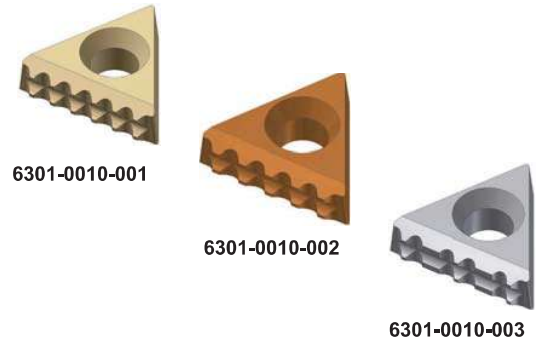
303-0160-002

**Additional customer-specific special jaws can be supplied on request. Please let us know the specific data for your application, and we will send you a technical draft together with an offer for the number of items you require.**

## 2.3 Spare parts and accessories

### Mastergrips clamping inserts:

Order number:	Designation
6301-0010-001	Mastergrip inserts for steel
6301-0010-002	Mastergrip inserts for hardened steel (up to 50-54 HRC) and titanium
6301-0010-003	Mastergrip inserts for aluminium
Spare parts matching jaws 300-0094-017 (see Page 33) and 301-0065-004, 301-0094-011, 301-0094-012 and 301-0125-020 (see Page 37).	



### Mastergrips clamping insert accessories:

Order number:	Designation
6301-0010-100	VTX30 screws for MasterGrip inserts
6301-0050-002	3D HM special cutter Form cutter for jaw sets of MasterGrip inserts



### Vario clamping inserts:

Order number:	Designation
6304-0029-001	Smooth clamping insert for Vario jaws Dimensions: 29 x 24 mm (diam. x H)
6304-0029-002	Gripper clamping insert for Vario jaws Dimensions: 29 x 24 mm (diam. x H)
6304-0029-003	Smooth clamping insert for Vario jaws Dimensions: 29 x 11 mm (diam. x H)
6304-0029-004	Gripper clamping insert for Vario jaws Dimensions: 29 x 11 mm (diam. x H)
6304-0029-005	Smooth clamping insert for Vario jaws Dimensions: 29 x 19 mm (diam. x H)
6304-0029-006	Gripper clamping insert for Vario jaws Dimensions: 29 x 19 mm (diam. x H)
6304-0029-007	Gripper clamping insert for Vario jaws Dimensions: 29 x 35 mm (diam. x H)
Fits Vario jaws, see Page 40. Also available in other sizes on request.	



### Clamping step, pendulum:

Order number:	Designation
5222-0020-001	Clamping step, pendulum:
Spare part matches jaws 300-0094-010 (see Page 34). Diam. 20 mm	





6301-0016-002

**KonGrip clamping claw:**

Order number:	Designation
6301-0016-002	KonGrip clamping claw
Spare part for KonGrip jaws (diam. 16 mm) (No longer in current standard jaw delivery program)	



6302-0060-001



6302-0090-001



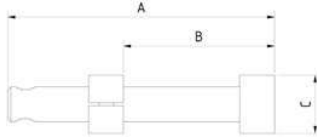
6302-0090-002

**Clamping tips:**

Order number:	Designation
6302-0060-001	60° tip, eccentric, diameter 4 mm
6302-0090-001	90° tip, centric, diameter 4 mm
6302-0090-002	90° tip, eccentric, diameter 4 mm
Spare part for grip jaws with tip (no longer in current standard jaw delivery program)	



5062-0020-001

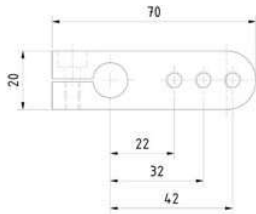


**Magnetic connection points:**

Order number:	A mm	B mm	C mm	Holding force:
5062-0020-001	92	10-80	Ø 20	45 N (~4,5 kg)
5062-0020-002	95	10-80	Ø 25	80 N (~8,0 kg)
5062-0020-003	95	11-80	24x47.5	120 N (~12,0 kg)



5062-0020-004



**Screw stop:**

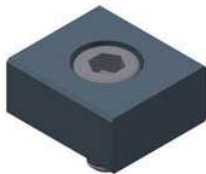
Order number:	A mm	B mm	C mm	Holding force:
5062-0020-004	95	10-80	Ø 12	Mounted with M6



320-0083-001

**Screw stop (flexible adjustment):**

Order number:	Adjustment range:			Holding force:
	X mm	Y mm	Z mm	
320-0083-001	23	38	40	Mounted with M6



6904-0020-002

**Flat slot nut:**

Order number:	Designation
6904-0020-022	Flat slot nut incl. screw M6x12
Dimensions: 20 x 10 x 22 mm (LxWxH) Spare part for tongue and groove jaws (alignment)	

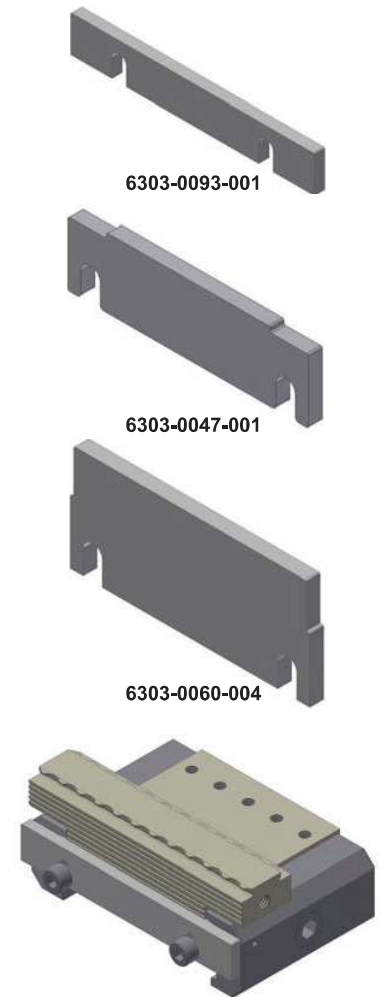
**Spare parts quick-change system:**

Order number:	Designation
5600-0050-001	Claw, left-hand thread, 50 mm wide
5600-0050-002	Claw, right-hand thread, 50 mm wide
5600-0060-001	Claw, left-hand thread, 60 mm wide
5600-0060-002	Claw, right-hand thread, 60 mm wide
5742-0014-001	Spindle for quick-change jaws
6904-0020-050	Feather key for quick-change jaws
Spare parts matching all quick-change jaws (see Pages 32 to 34).	



**Parallel bases:**

Order number:	Height in mm	Width (total) in mm	Width (support) in mm
6303-0047-001	20	69	47
6303-0047-002	24	69	47
6303-0047-003	29	69	47
6303-0047-004	31	69	47
6303-0047-005	34	69	47
6303-0047-006	39	69	47
6303-0047-007	44	69	47
6303-0047-008	46	69	47
6303-0060-001	20	69	60
6303-0060-002	24	69	60
6303-0060-003	29	69	60
6303-0060-004	31	69	60
6303-0093-001	14	94	93
6303-0093-002	20	94	93
6303-0093-003	24	94	93
6303-0093-004	29	94	93
6303-0093-005	31	94	93
6303-0093-006	34	94	93
6303-0093-007	39	94	93
6303-0093-008	44	94	93
6303-0093-009	46	94	93
6303-0093-010	47	94	93
Additional sizes available upon request.			



Application example: parallel bases

**Magnetic pendulum jaws:**

Order number:	Designation
6303-0094-001	Pendulum jaws
For clamping non-parallel workpieces Attaches magnetically to steel jaw Dimensions: 94 x 30 x 22 mm Version: tool steel / 62 Rockwell hardened	

