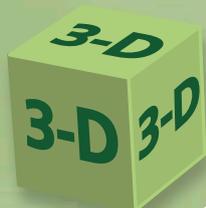
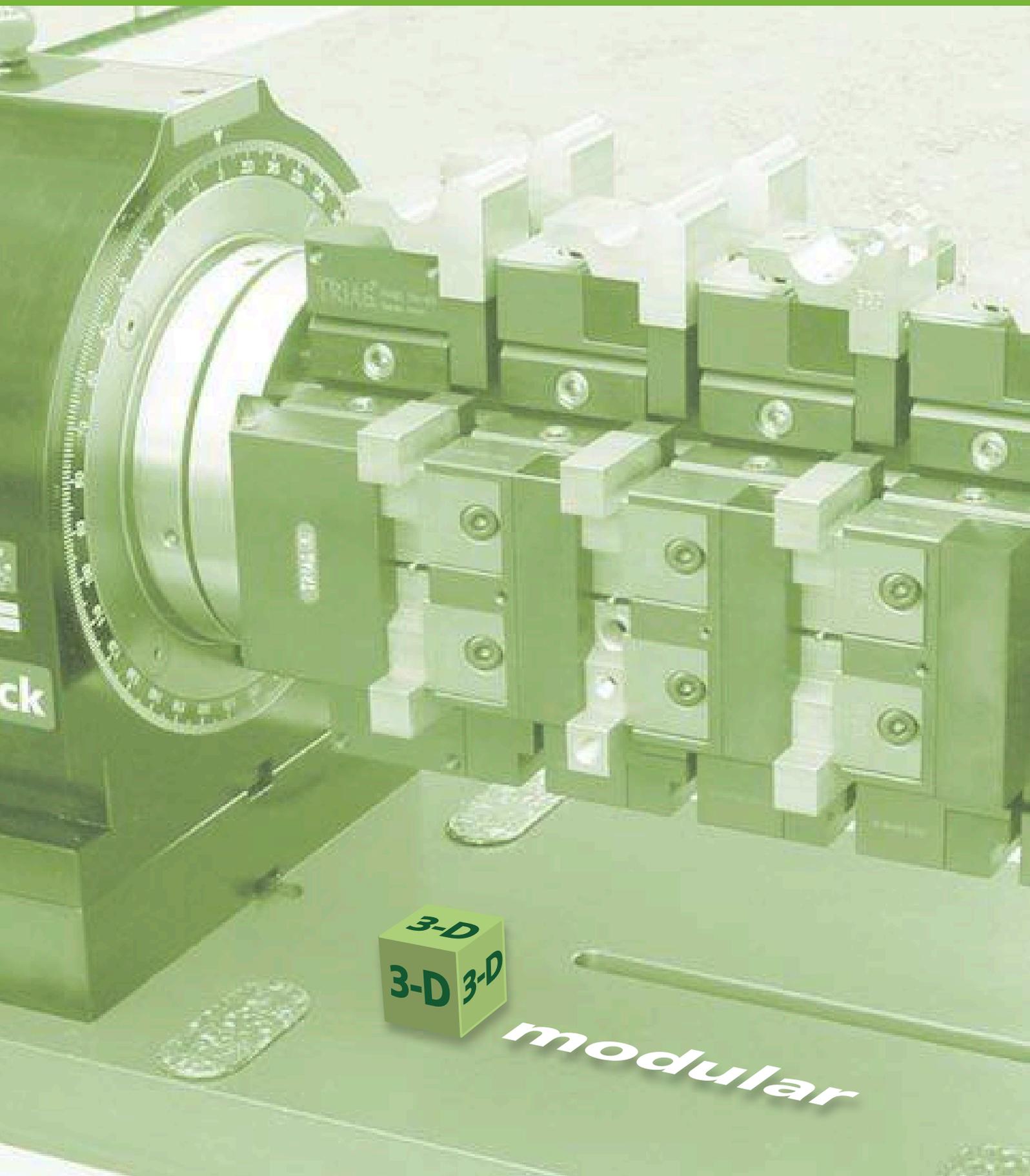
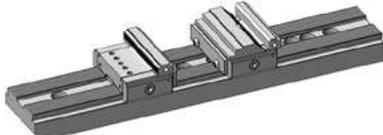
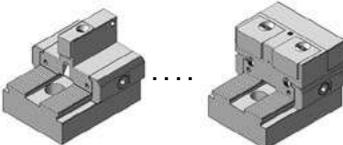
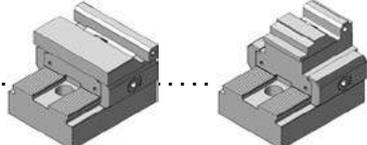
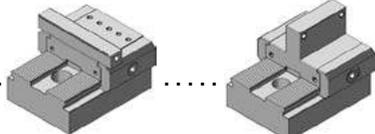
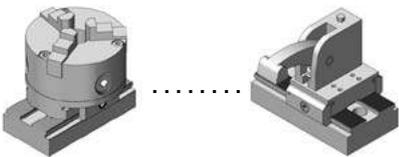
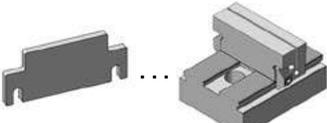


# *power*CLAMP & 5axes



*modular*



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# Warum modular Spannen

## Why modular workholding

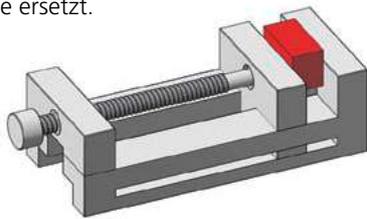
powerCLAMP

Der klassische Maschinenschraubstock ist für gewisse Zerspanungsarbeiten vielfach die richtige Wahl, obwohl man einen Spannstock ohne Mehrkosten auch mit einem Modularsystem aufbauen kann. Er wird durch die ständig erhöhten Anforderungen an die Prozessoptimierung immer mehr durch modulare Spannsysteme ersetzt.

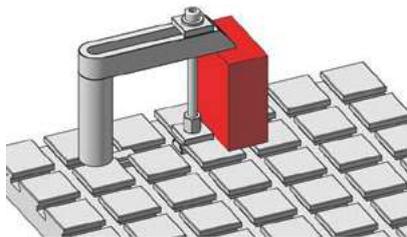
*The classic machine vise is for some application still a good option, on the other hand can you set up the same with a modular clamp system at not higher costs! Because of always increasing demand and high competition you see more modular systems at endusers places, to keep up with productivity.*

Mit den modularen Systemen wird ein hohes Mass an Flexibilität und grosser Spanndichte erreicht. Dies führt auch bei der Einzelteil- und Kleinserienfertigung zur Senkung der kostenintensiven Nebenzeiten, die einen wichtigen Faktor in der Wertschöpfungskette darstellen. Gegenüber Vorrichtungen ist der Vorteil, dass bei einem modularisiertem Aufbau die Aufspannung aus einem Baukastensystem (also standardisierten Einzelbauteilen) besteht, die kostengünstiger sind und für andere Aufspannungen wiederverwendet werden können. Zudem wird für die 3-Seitenbearbeitung eine gute Zugänglichkeit zum Werkstück gewährleistet.

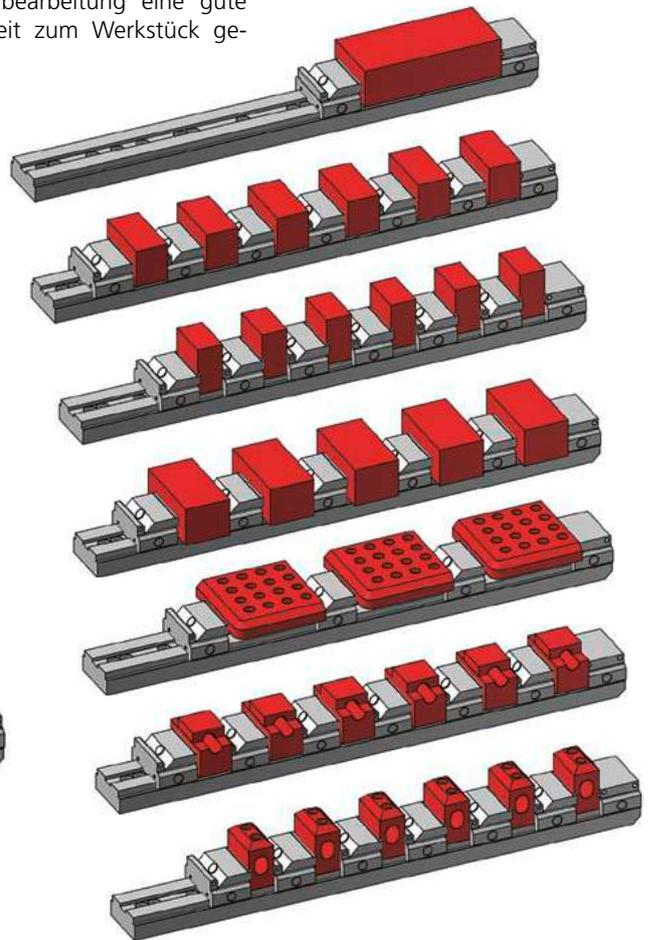
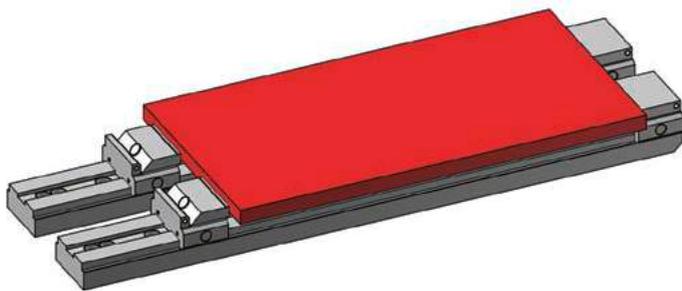
*With modular clamp system you achieve a high flexibility and also high density of holding workpieces. This brings you big advantages also by producing single parts or small quantities! Compared to dedicated fixtures you can use this vises for many different applications.*



Spannen mit dem Spannstock  
Clamping with the machine vise

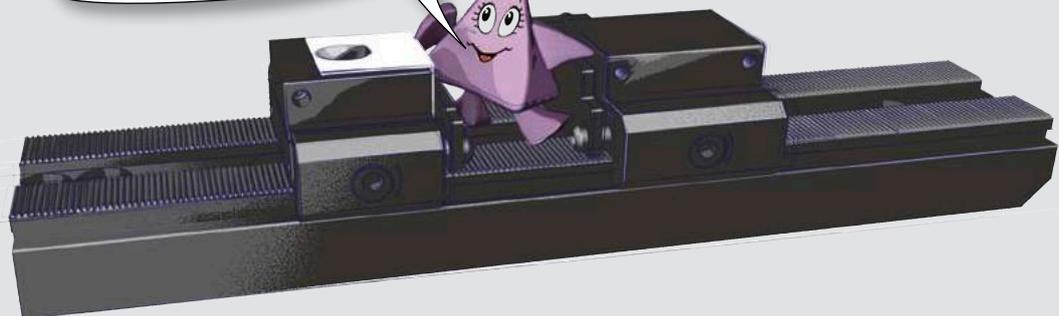


Spannen mit Spannpratzen  
Clamps in operation



**Ausserdem / And:**

Ich bin auch ein Spannstock!  
I'm also a vise!

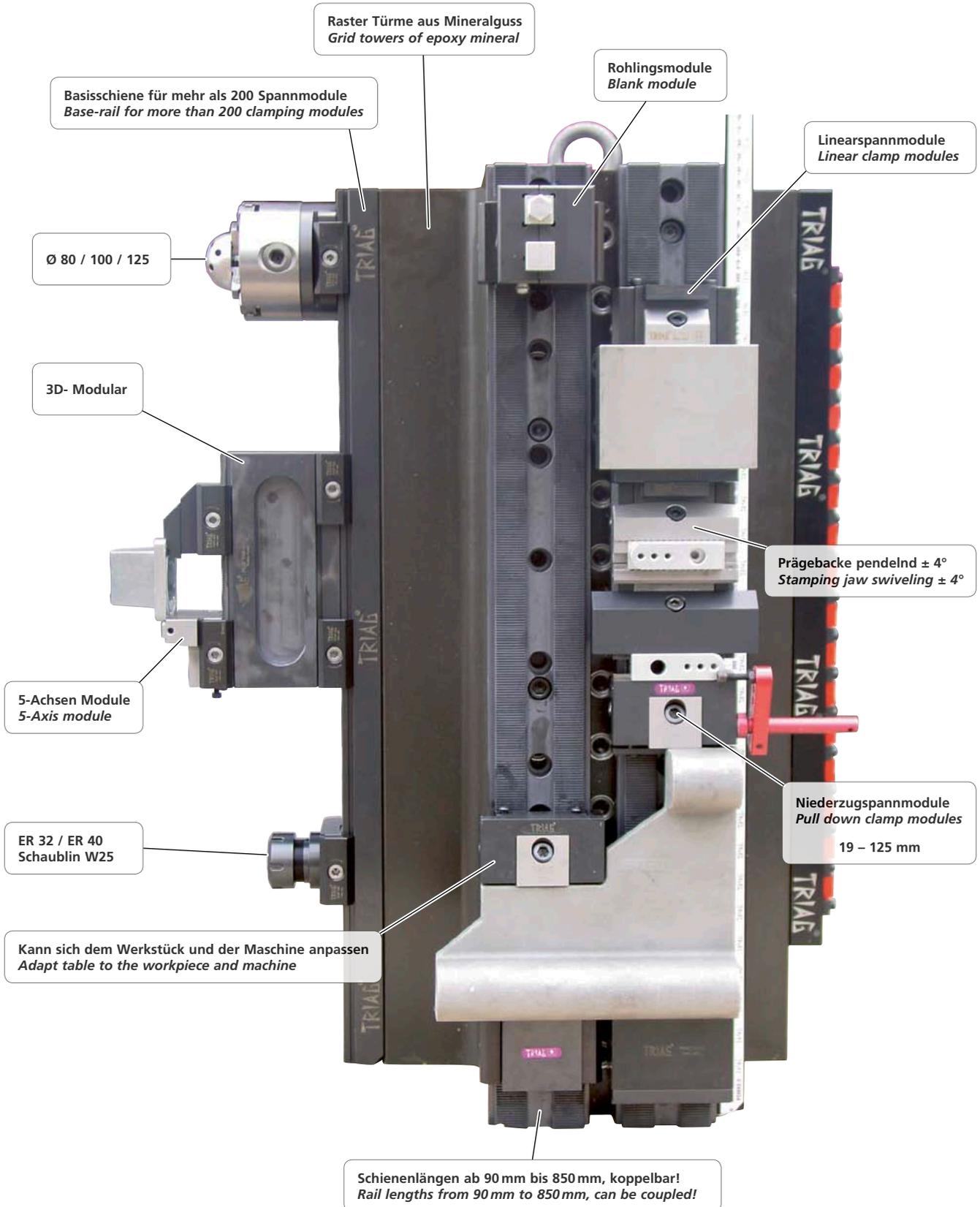




# Die Idee des modularen Spannens

## The idea of modular workholding

powerCLAMP



**Modulares Spannen = Einzelspannung, Mehrfachspannung sowie auch das Spannen von kleinen, grossen oder unförmigen Werkstücken. Chaotisches, gemischtes spannen!**

**Modular workholding = Single clamping, multiple clamping small parts and large workpieces can be clamped, also shaped parts are possible to clamp. Mixed setups in chaotical clamp situation!**



Mit dem Spannsystem Power Clamp hat die Triag International ein Produkt entwickelt, welches die Vorteile des klassischen Maschinenschraubstocks mit der Modularität eines innovativen Spannsystems in einer optimalen Art und Weise kombiniert und eine enorme Vielseitigkeit bietet. Einfache Spannungen sind genauso möglich wie Mehrfachspannungen und Spannungen von schwierigen Werkstücken.

*With Power Clamp Triag has developed a product which includes the advantages of a classical vise and has the features of an advanced modular system. It can be used to clamp single parts (small and big) or multiple workholding as well as difficult to clamp parts.*

## Schnelligkeit / Quickness



1

**Eine Schraube lösen**  
*Loosen a screw*



2

**Abheben und neu platzieren**  
*lift and change position*



3

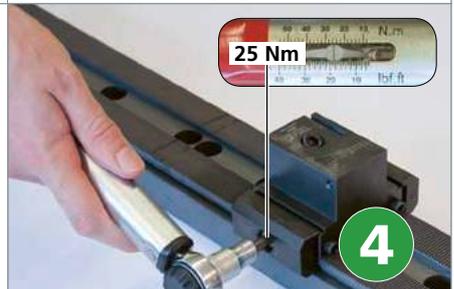
**Eine Schraube anziehen**  
*fasten one screw*

Mit nur einer Schraubspindel, welche von beiden Seiten her zugänglich ist, werden die positionierten Module in einem patentierten Prätzensystem zuverlässig geklemmt.

Die Module können an jeder Stelle der Trägerschienen aufgesetzt werden. Verglichen mit dem üblichen axialen Aufchieben beschleunigt das den Aufbau von Mehrfachspannern und ermöglicht, diese Spannsysteme auch bei beengten Platzverhältnissen komfortabel zu rüsten.

*With only one bolt screw (left and right hand thread) the clamp modules can be lifted and change position in 2mm steps.*

*This patented system is unique and fast, as well as accurate.*



4

**Drehmoment beachten**  
*Observe the torque*

## Gerignes Gewicht Low weight



**= Einfaches Handling**  
**= Easy handling**

Das Modul kann mit zwei Fingern abgehoben werden.

*The clamp module can be moved by two fingers.*



Darum haben wir dieses Symbol gewählt:  
*Thats why we have chosen this symbol:*



## Einfache Reinigung Easy cleaning

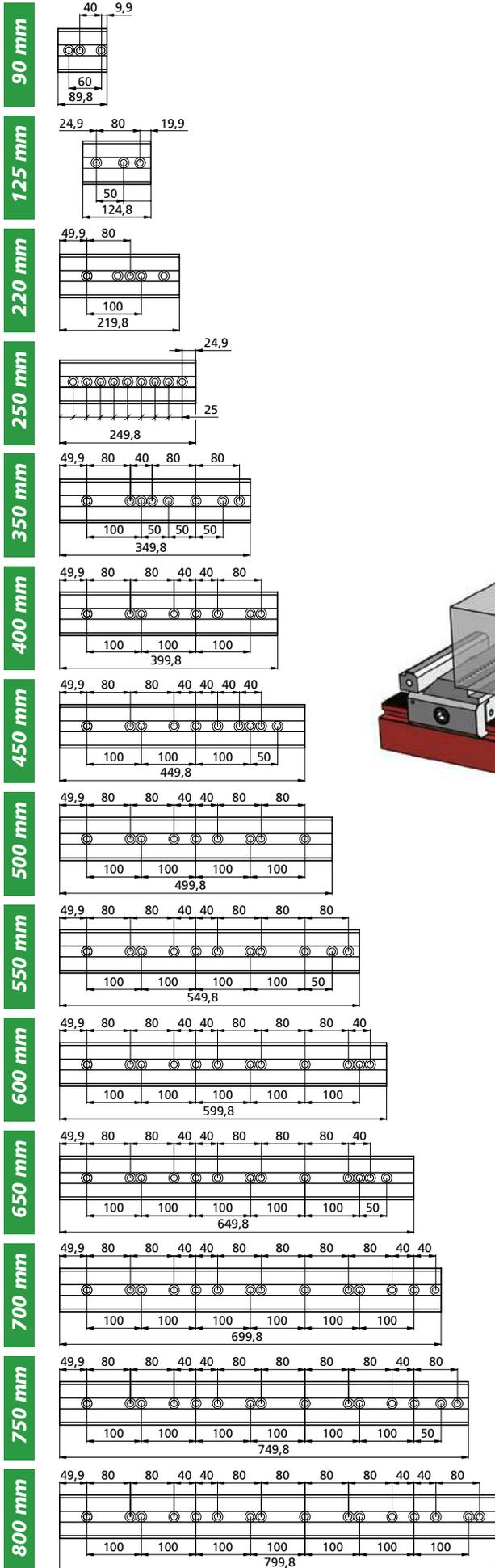


Keine spänefüllenden T-Nuten (im Gegensatz zu vielen Wettbewerbsprodukten) - Basis bilden stabile, mit Teilstücken verlängerbare Trägerschienen. Sie verfügen über eine hochgenau gefräste Verzahnung.

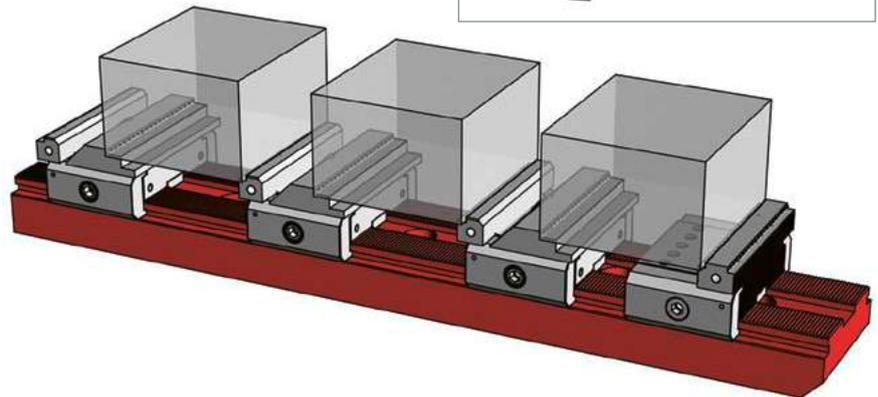
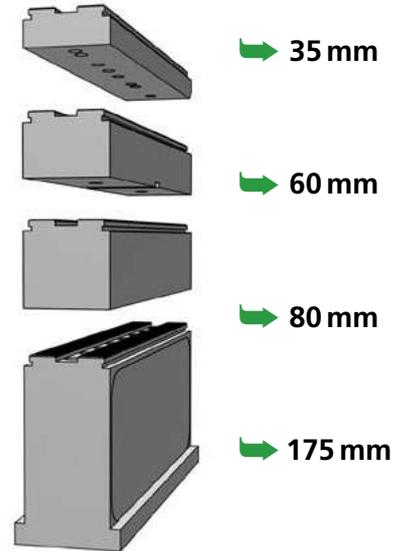
Eine Vielzahl an Spannmodulen mit unterschiedlichen Spannelementen lassen sich auf den Trägerschienen in einem Raster von 2 mm positionieren.

*No chip catching T slots (opposite of many competitors). The base rails are rigid and can be used modular in length width and hight. The serration is accurate and checked for each base rail.*

*Many different clamp modules can be used on only one type base rail (step 2 mm)*



Schienen sind in den folgenden Höhen lieferbar:  
 Rails are in following ups available:

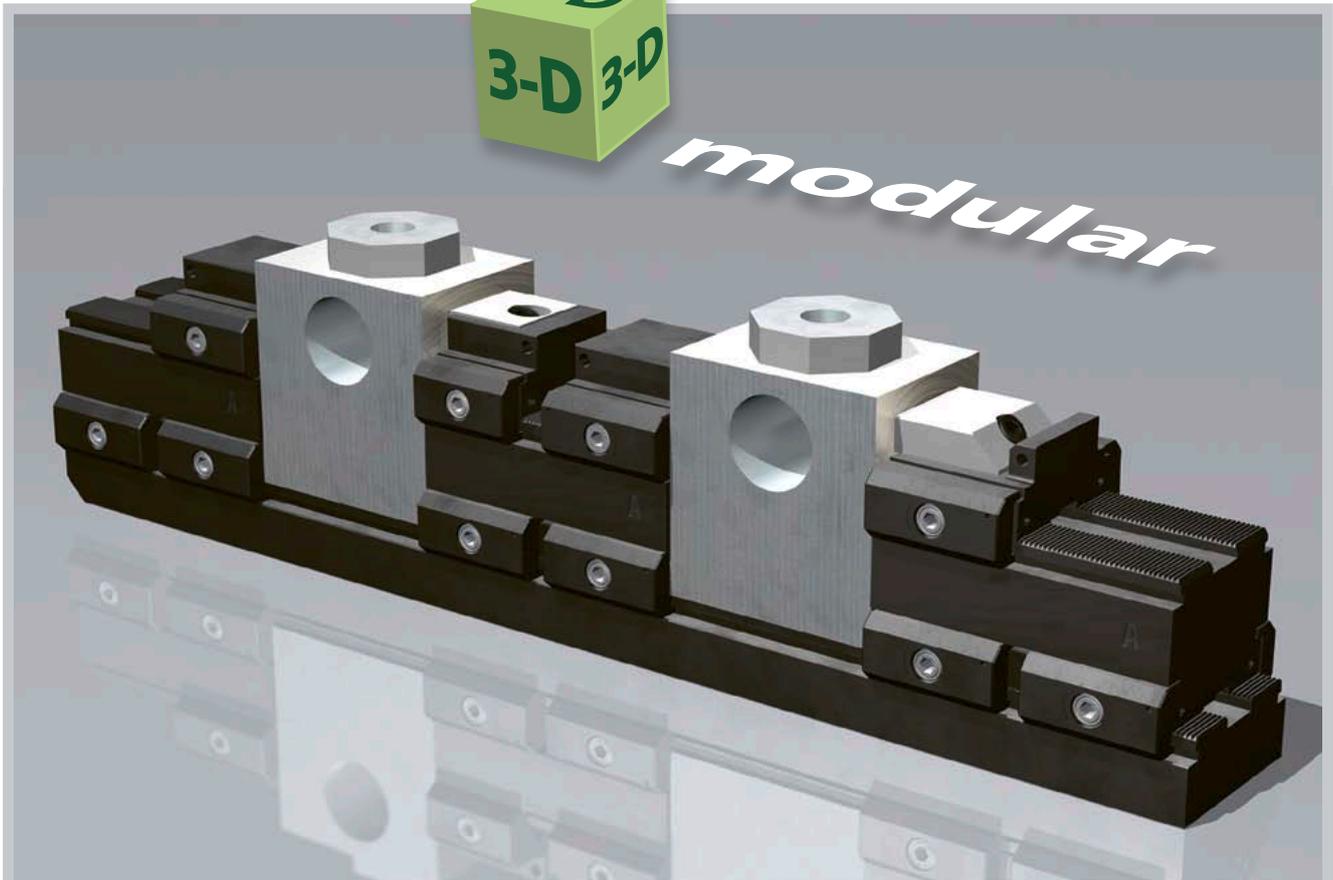


## Basisschiene

Die Basisschiene ist das Grundelement des modularen Spannsystems von Triag International und ist in den Höhen 35 mm, 60 mm, 80 mm und 175 mm verfügbar. Auf der Basisschiene werden alle Spann- und Anschlagmodule über eine Schraubspindel mit einer Haltekraft von 15.000 daN (= 15t) befestigt. Eine schnelle und genaue Positionierung ist durch die Verzahnung (2 mm Teilung) auf der Basisschiene gewährleistet und sorgt somit für kurze Rüstzeiten.

Durch den Einsatz von Erhöhungsmodulen wird die Werkstück-Zugänglichkeit speziell bei 5-Achsenmaschinen auch mit kurzen Werkzeugaufnahmen ermöglicht. Somit ist die Maximalgröße der Werkstücke nur noch durch die Maschinengröße eingeschränkt. Die Basisschiene dient in diesem Zusammenhang als mechanisches Nullpunktsystem.

Die Basisschienen sind für eine schnelle Aufspannung auf den gängigsten Palettsystemen konzipiert. Aus Gewichtsgründen können auch die eigens entwickelten Spanntürme aus Mineralguss eingesetzt werden. Diese verfügen über eine so hohe Vibrationsdämpfung, dass dadurch im oberen Bereich der Türme sehr präzise gearbeitet und dabei eine exzellente Oberflächengüte erreicht werden kann.



Mit verschiedenen Basismodulen kann man auch die 3. Dimension Modular gestalten! Mit der Höhe von 60 mm kann die Modulhöhe auf 94 respektive auf 109 mm erhöht werden (34/49 Modulhöhe). Die Länge von 130 mm erlaubt es jeweils ein Spannmodul und ein Anschlagmodul zu platzieren.

There are different sizes of riser blocks to increase the height of the clamp modules. This way you can get from 34 to a clamp height of 94 or 109 mm depending on the clamp module you choose. This riser blocks makes the power clamp system 3D-modular!

**Mehr auf Seite | More on Page 48**

## Base rail

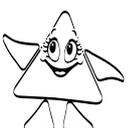
The base rail is the basic element of the Triag modular clamp system. We offer them in different lengths and heights and more than a hundred different standard clamp modules will fit onto the base rails.

Holding force which the clamp modules are clamped to the base rail is 15'000 daN (15t). The precision serration in 2mm pitch allows to fit the clamps fast and accurate.

All three dimension are modular!  
You can double or triple the length with coupling the rails or you can use them side words in a row. Also the height is modular (please see next page)



Basisschienen in Zoll  
Base rails in inch





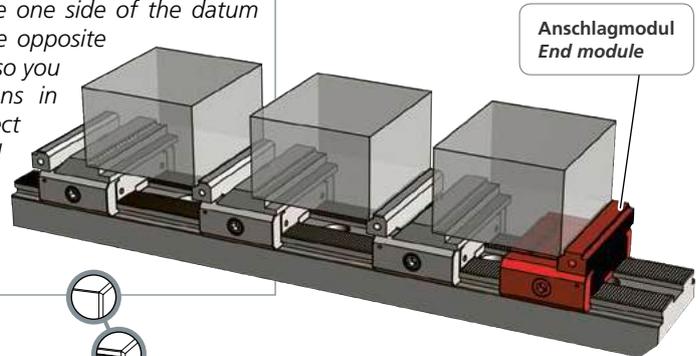
## Das Anschlagmodul / End modules

Für das Spannsystem «Power Clamp» ist in der Regel nur ein Anschlagmodul als «feste Backe» notwendig. Mittels der 2 mm Verzahnung lässt sich das Modul sehr genau auf der Basisschiene positionieren und ist mit der Schraubspindel schnell befestigt.

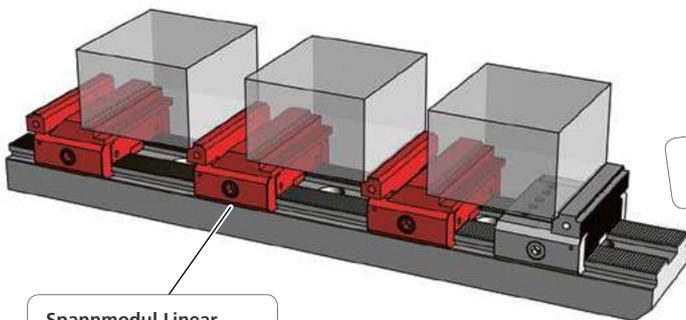
Für die unterschiedlichen Bearbeitungssituationen steht eine Vielzahl von Ausführungen zur Verfügung. Diese unterscheiden sich in der Breite der Backen (ab 19 mm bis max. 150 mm) als auch in der Beschaffenheit der Spannflächen (glatt, geriffelt, gerillt, hartmetallbeschichtet oder mit Prägeverzahnung, mit der direkt geprägt werden kann).

*In a row of parts there is usually one end module followed by the clamp modules. For all the different clamp situation we offer a wide range of different end modules from 19 mm to 150 mm.*

*Usually you have one side of the datum face flat and the opposite double serrated so you have two options in one. Also direct stamping end modules with a workholding step of 3 mm are available.*



Anschlagmodul  
End module



Spannmodul Linear  
Linear clamping module

Verschiedene Ausführungen der Anschlagflächen!  
Different styles at grip surfaces!



Lineare Direktprägespannung  
Linear direct stamping module

## Das Spannmodul / Clamp modules

Die «beweglichen Backen» gibt es in zwei Ausführungen. Zum einen für das Niederzugspannsystem und zum anderen für das Linearspannsystem. Dabei dient das Spannmodul bei beiden Systemen wiederum als Anschlagmodul für die nächste Aufspannung.

Die Breite der Spannfläche bewegt sich wie bei den Anschlagmodulen im Bereich zwischen 19 mm und 125 mm. Durch die innovativen Ausführungen der Spannflächen wie z. B. die Prägebacken oder Druckstifte werden enorme Haltekräfte erreicht.

Bei umfangreichen Testreihen zu der Werkstückverschiebung bei einer Spannkraft von 2000 daN und einer Zerspankraft von bis zu 600 daN wurden bei der Verwendung von Prägebacken nur minimale Abweichungen vom Nullpunkt festgestellt. Leichte Abweichungen von der Parallelität der Werkstücke werden mit der Pendelfunktion ( $\pm 4^\circ$ ) ausgeglichen.

Innovative Lösungen gibt es auch für spezielle Spannaufgaben, wie z.B. Formbacken, Dreibacken- und Spannanzgenfutter, Vakuumplatten oder Magnetspannplatten.

*There are mainly two different types of clamp modules. Linear and pull down jaws both with integrated datum face for the next workpiece. Datum face can normally be double serrated or flat.*

*The movable jaws you can get in various versions such as hardened flat, carbide coated soft jaws double serrated, linear pull down, direct stamping dovating and more. The width of the clamps modules starts from 19 mm up to 125 mm.*

*Clamping force goes to a maximum of 2800 daN (2,8t).*

*For special clamping situations we offer also chucks, collet chucks vacuum plates or even magnet plates which fits onto the Power Clamp base rails.*

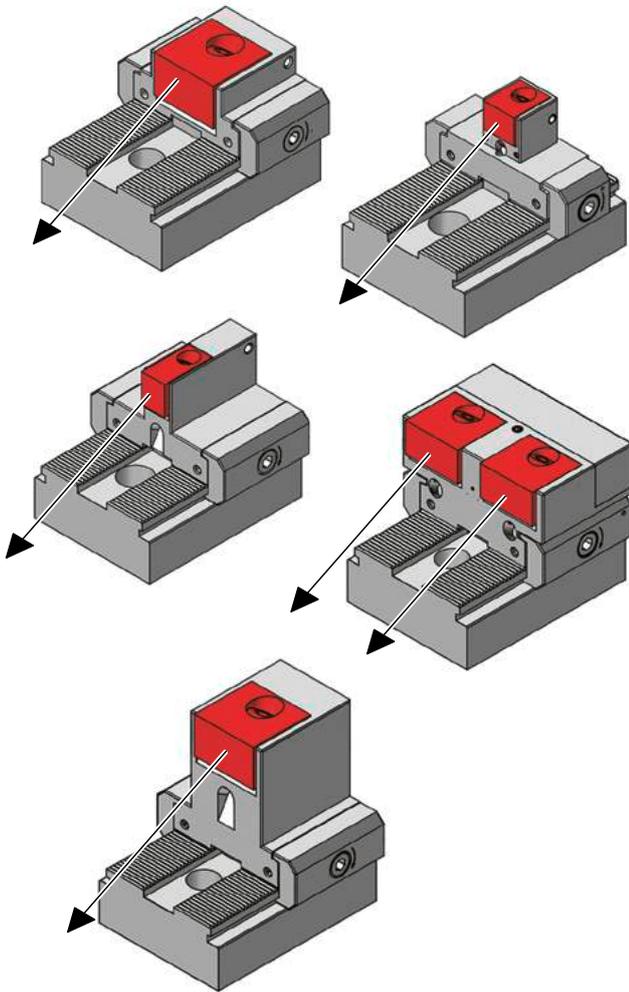


**Weltweit grösste Modulvielfalt:**

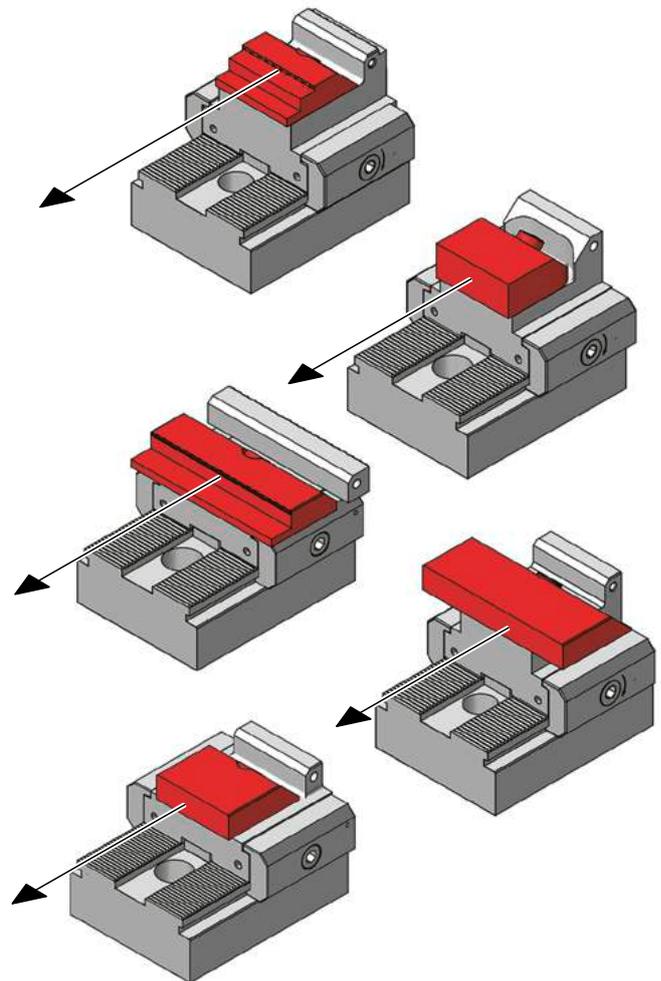
**The world widest clamp module variation:**

**powerCLAMP**

**Niederzugspanmodule**  
*Pull down clamp modules*



**Linearspanmodule**  
*Linear clamp modules*



**Die Fakten beim Niederzugspannsystem**

Verstellbereich: 0- 4,1 mm  
Spannkraft: Bis 2'800 daN

**Vorteile beim Niederzugspannsystem:**

- Höhere Haltekräfte
- Hohe Wiederholgenauigkeit
- Optimale Spannmethode für Kleinteile
- Mit Schnellwechselbacken
- Doppelspannsystem in einer Backe zum Spannen und Bearbeiten von zwei Kleinteilen
- Mit Vorsatz als Linearspannsystem einsetzbar
- Auch Anschläge mit Niederzugeffekt erhältlich

**Die Fakten beim Linearspannsystem**

Verstellbereich: 0- 5,0 mm  
Spannkraft: Bis 1'600 daN

**Vorteile beim Linearspannsystem:**

- Spannstockähnliches Spannen
- Prozesssichere Positionierung der zweiten Aufspannung
- Gut geeignet für die Erstellung von individuellen Formbacken
- Sicherer Halt mit Prägetechnik

**Facts for pull down clamp modules**

Jaw range: 0- 4,1 mm  
Clamping force: up to 2'800 daN

**Advantages pull down jaws:**

- Higher holding force
- With linear adaptable jaws
- Also with pull down jaws for the stop side available
- With adapter set can be changed to linear
- Also pull down jaws for datum face

**Facts for linear clamp modules**

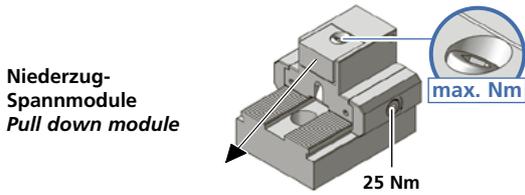
Jaw range: 0- 5,0 mm  
Clamping force: up to 1'600 daN

**Advantages linear jaws:**

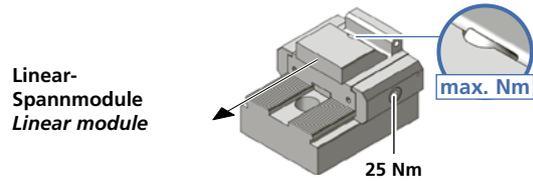
- Similar clamp as conventional vise
- Good for shaped jaws
- Secure clamped with direct stamping jaws
- Higher accuracy



**ACHTUNG / CAUTION**



Niederzug-Spannmodule  
 Pull down module



Linear-Spannmodule  
 Linear module

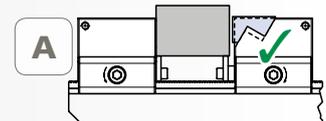
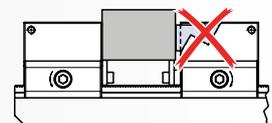
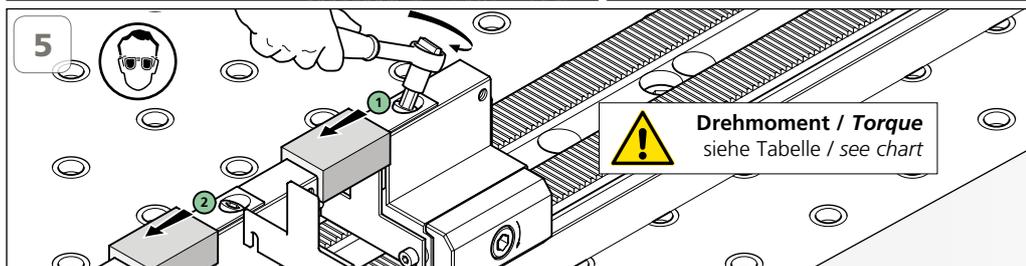
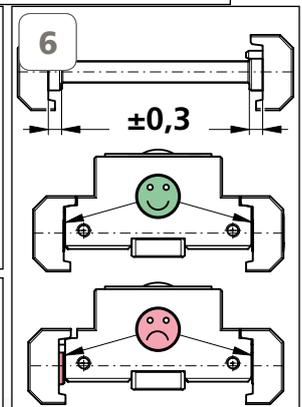
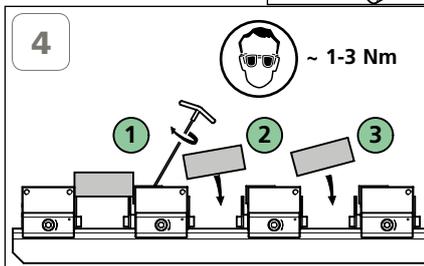
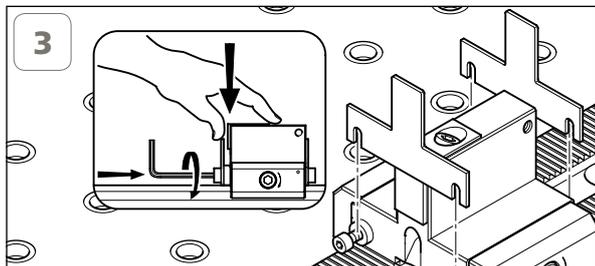
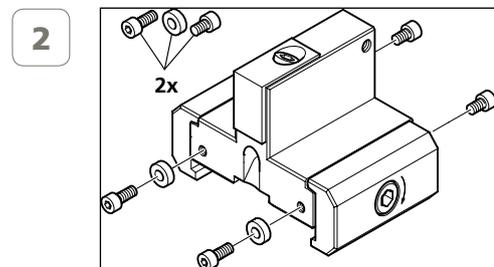
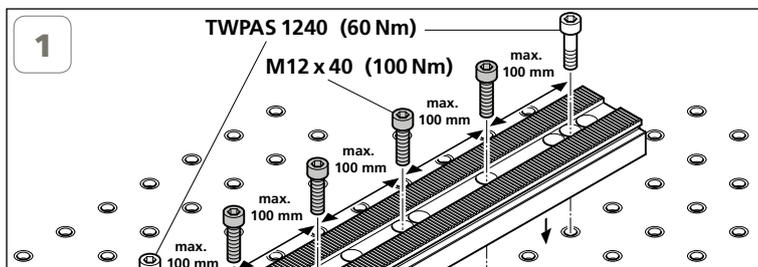
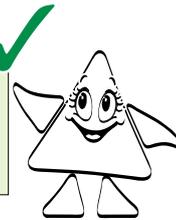
Schraube Screw	Drehmoment Torque		Spannkraft Workholding force		
	Nm	(lb-ft)	~daN	~(lb)	~t
M5 + M6	4	3	= 500	1100	0,50
	5	3,7	= 580	1280	0,58
	6	4,4	= 690	1520	0,69
	7	5,2	= 780	1720	0,78
	8	5,9	= 880	1940	0,88
	9	6,6	= 980	2160	0,98
M6	10	7,4	= 1020	2250	1,02
	12	8,9	= 1220	2690	1,22
	14	10,4	= 1450	3200	1,45
M8	15	11	= 1520	3350	1,52
	4	3	= 410	900	0,41
	5	3,7	= 490	1080	0,49
	6	4,4	= 560	1230	0,56
	7	5,2	= 660	1450	0,66
	8	5,9	= 730	1600	0,73
	9	6,6	= 810	1790	0,81
	10	7,4	= 900	1980	0,90
	15	11	= 1520	3350	1,52
	20	14,8	= 1810	3990	1,81
M10	25	18,4	= 2100	4630	2,10
	10	7,4	= 400	880	0,40
	20	14,8	= 1400	3090	1,40
	30	22,1	= 2000	4410	2,00
	40	29,5	= 2800	6170	2,80

Schraube Screw	Drehmoment Torque		Spannkraft Workholding force		
	Nm	(lb-ft)	~daN	~(lb)	~t
M8	10	7,4	= 400	880	0,4
	20	14,8	= 800	1760	0,8
	30	22,2	= 1200	2650	1,2
	40	29,6	= 1600	3530	1,6

**WICHTIG:**  
 Die angegebenen Drehmomente sind die absoluten Maximalwerte. Über die Spannkräfte geben die Tabellen Auskunft.

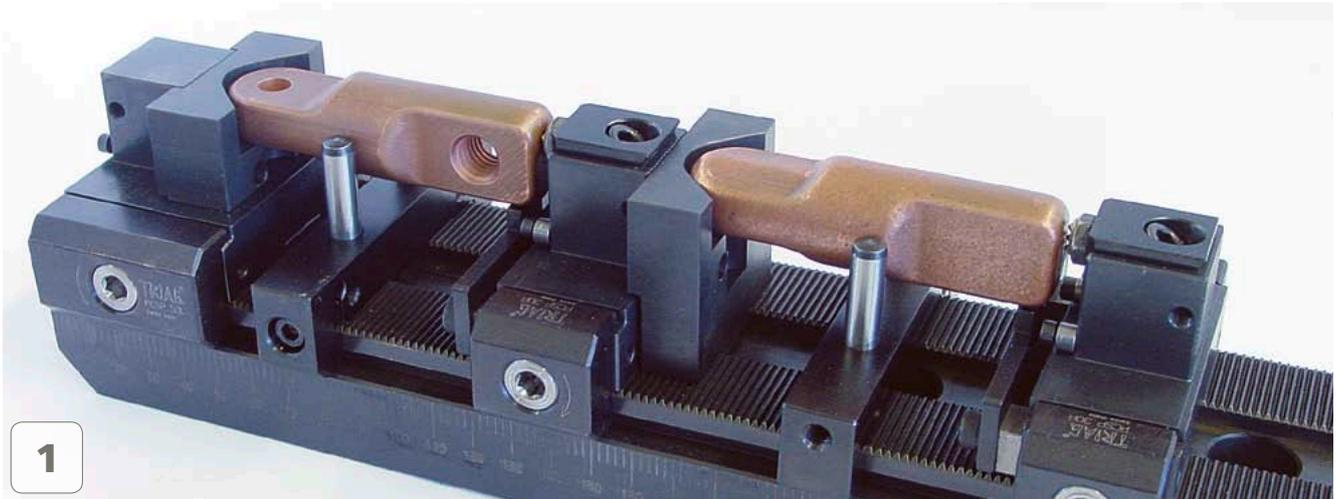
**IMPORTANT:**  
 The torque numbers specified represent the absolute maximum. The table at the bottom of this page provides further information on the workholding forces.

Die Spannbacken und Schrauben regelmäßig fetten!  
 Lubricate clamping jaw and screw regularly with grease!

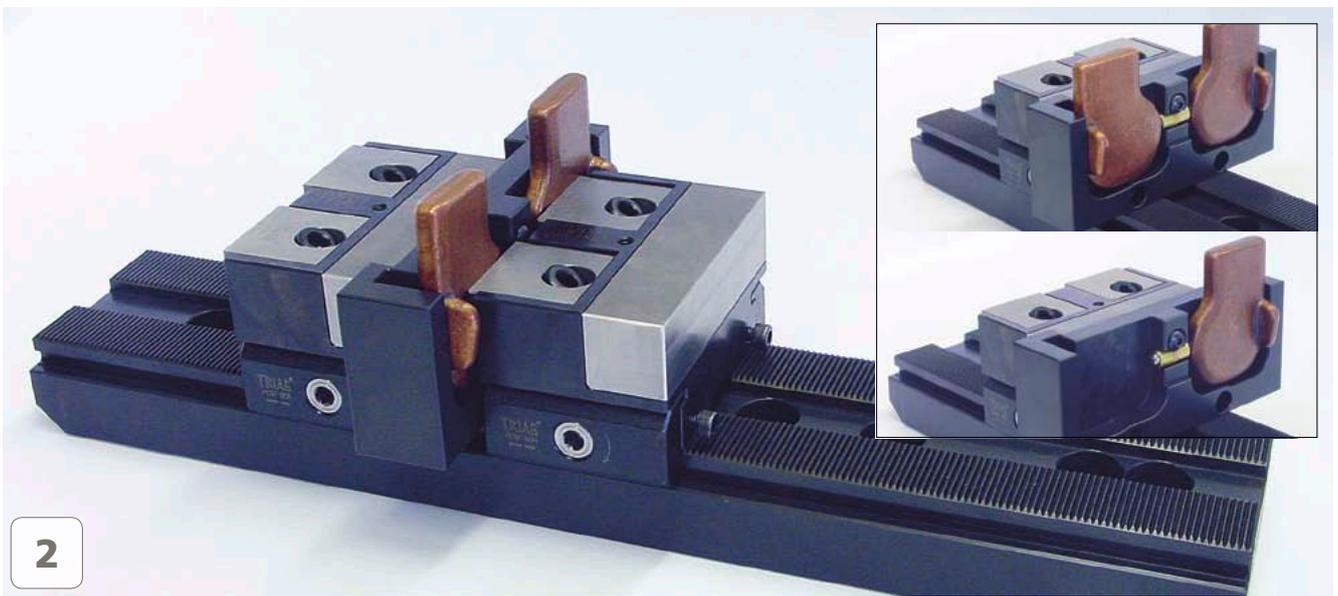


**WICHTIG:** Vor dem Positionieren der Spannmodule für ein neues Werkstück, ist die Spannbacke ganz zurück zu stellen, dies gewährleistet eine sichere Spannung (siehe Bild A)!

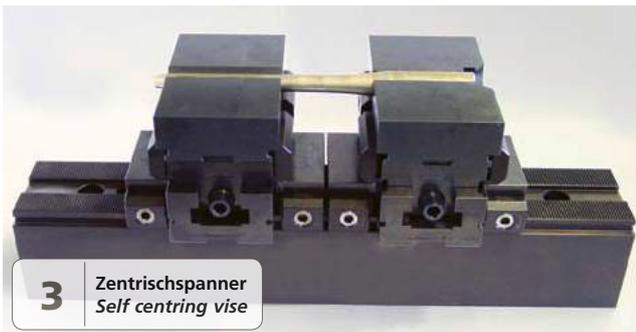
**IMPORTANT:** Prior to setting up a new clamping module the clamping jaw of the vice module must be retracted all the way (see picture A)! This guarantees proper clamping of the new workpiece.



1



2



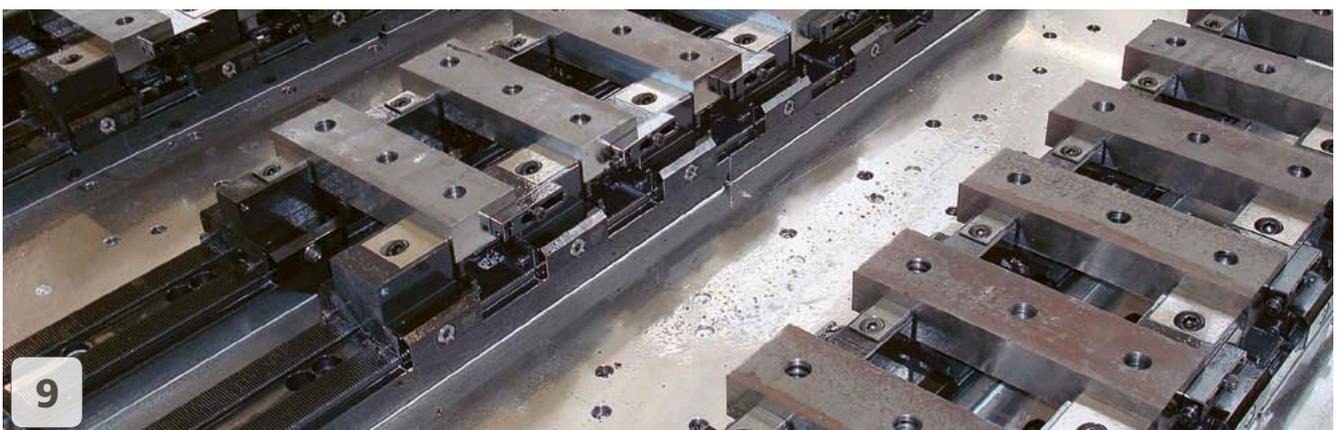
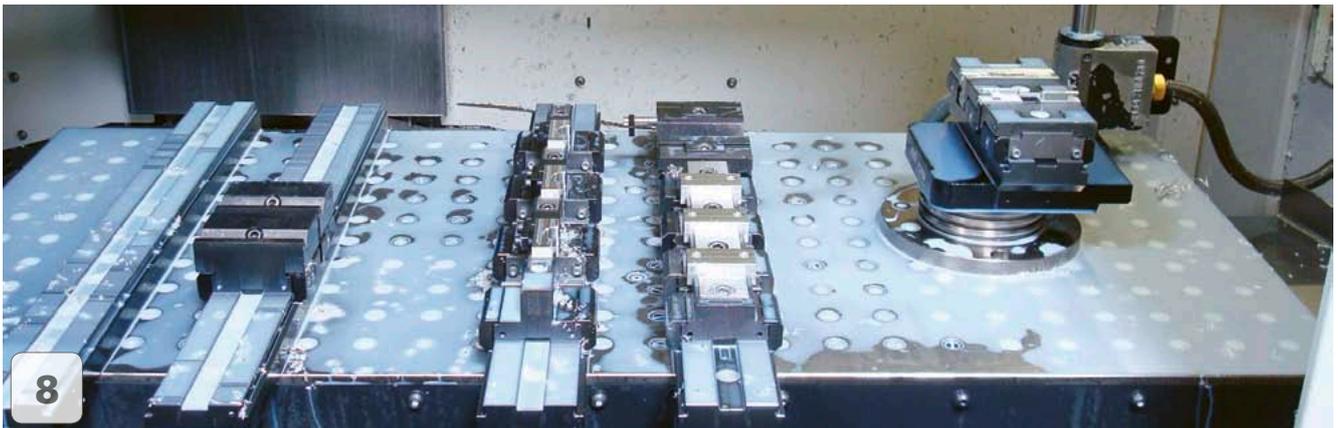
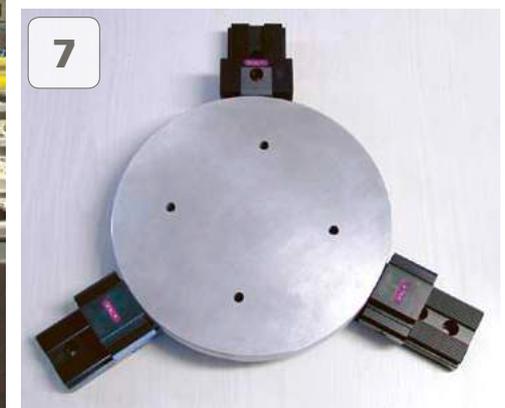
3 Zentrischspanner  
Self centring vise

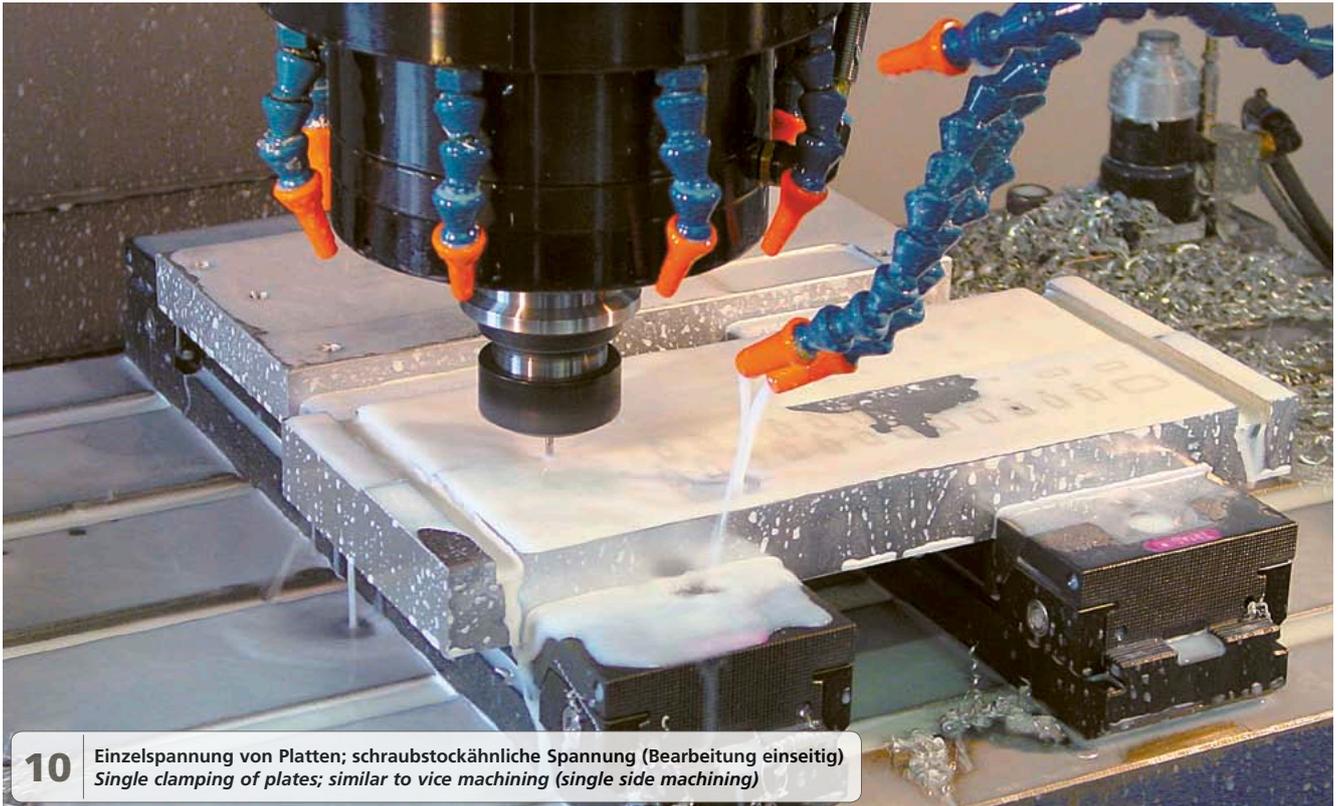


4



5





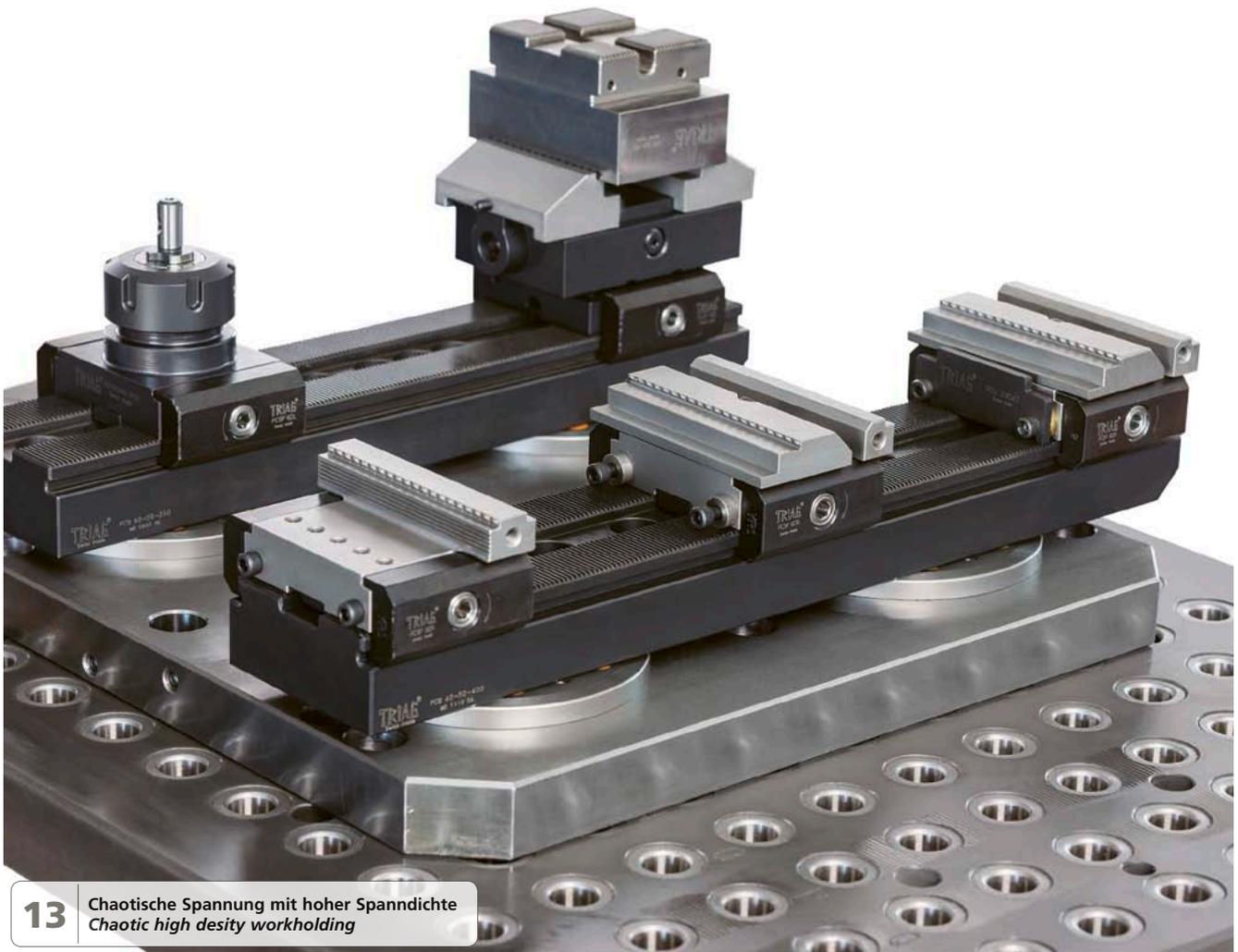
10 Einzelspannung von Platten; schraubstockähnliche Spannung (Bearbeitung einseitig)  
Single clamping of plates; similar to vice machining (single side machining)



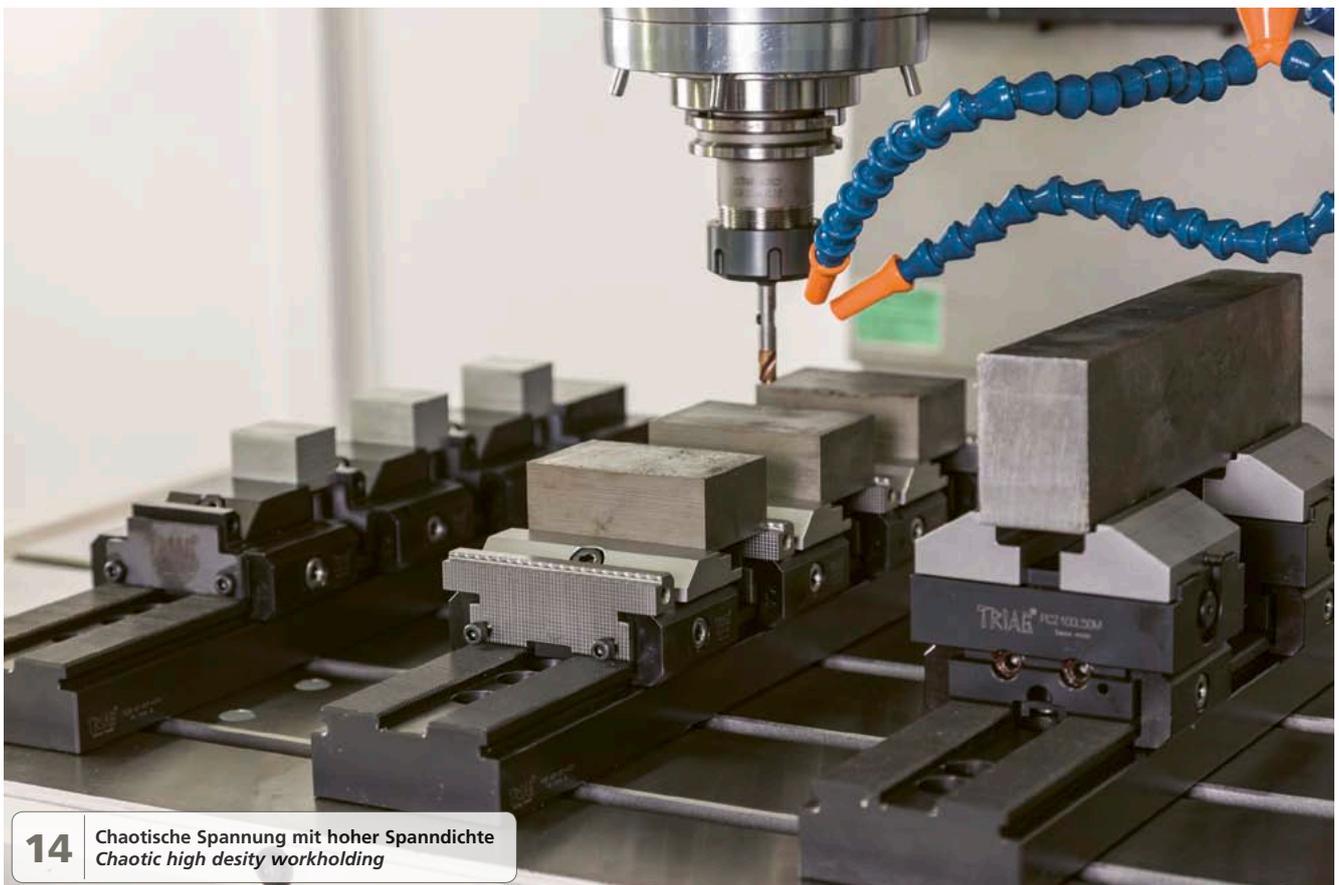
11



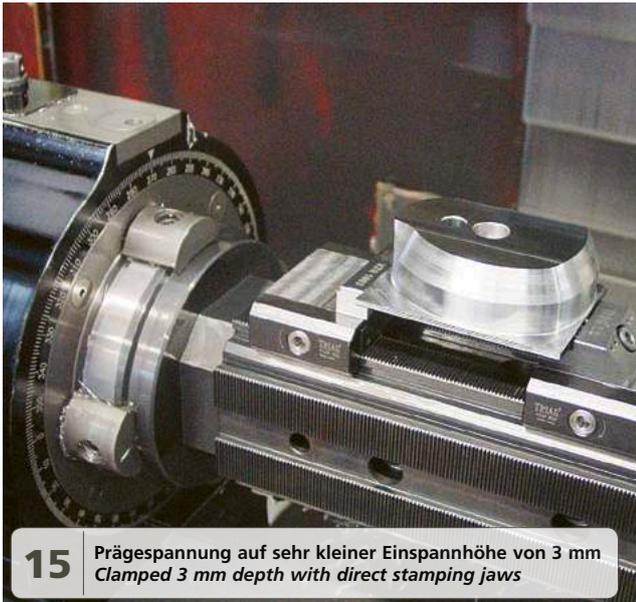
12 Verschiedene dringende Werkstücke in Bearbeitung, Grundplatte, Nutensteine und Keile (Total 9 Werkstücke)  
Various urgent work pieces in progress, base plate, nuts and wedges (totally 9 pieces)



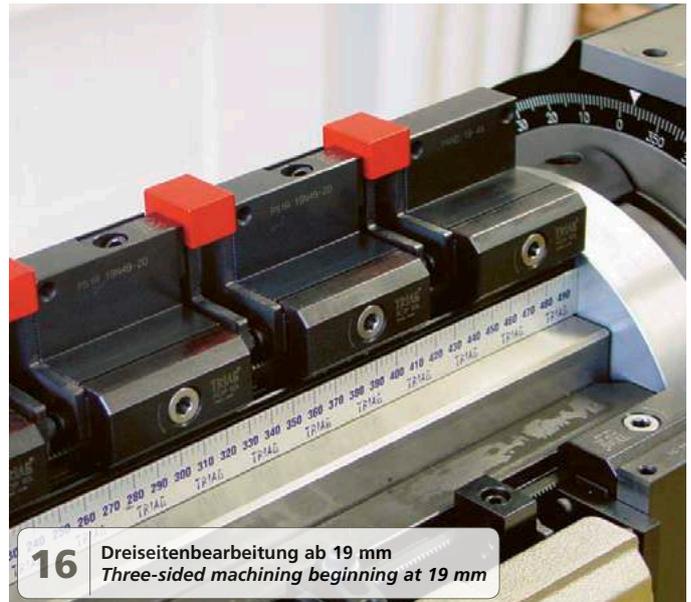
13 Chaotische Spannung mit hoher Spanndichte  
Chaotic high density workholding



14 Chaotische Spannung mit hoher Spanndichte  
Chaotic high density workholding



**15** Prägespannung auf sehr kleiner Einspannhöhe von 3 mm  
Clamped 3 mm depth with direct stamping jaws



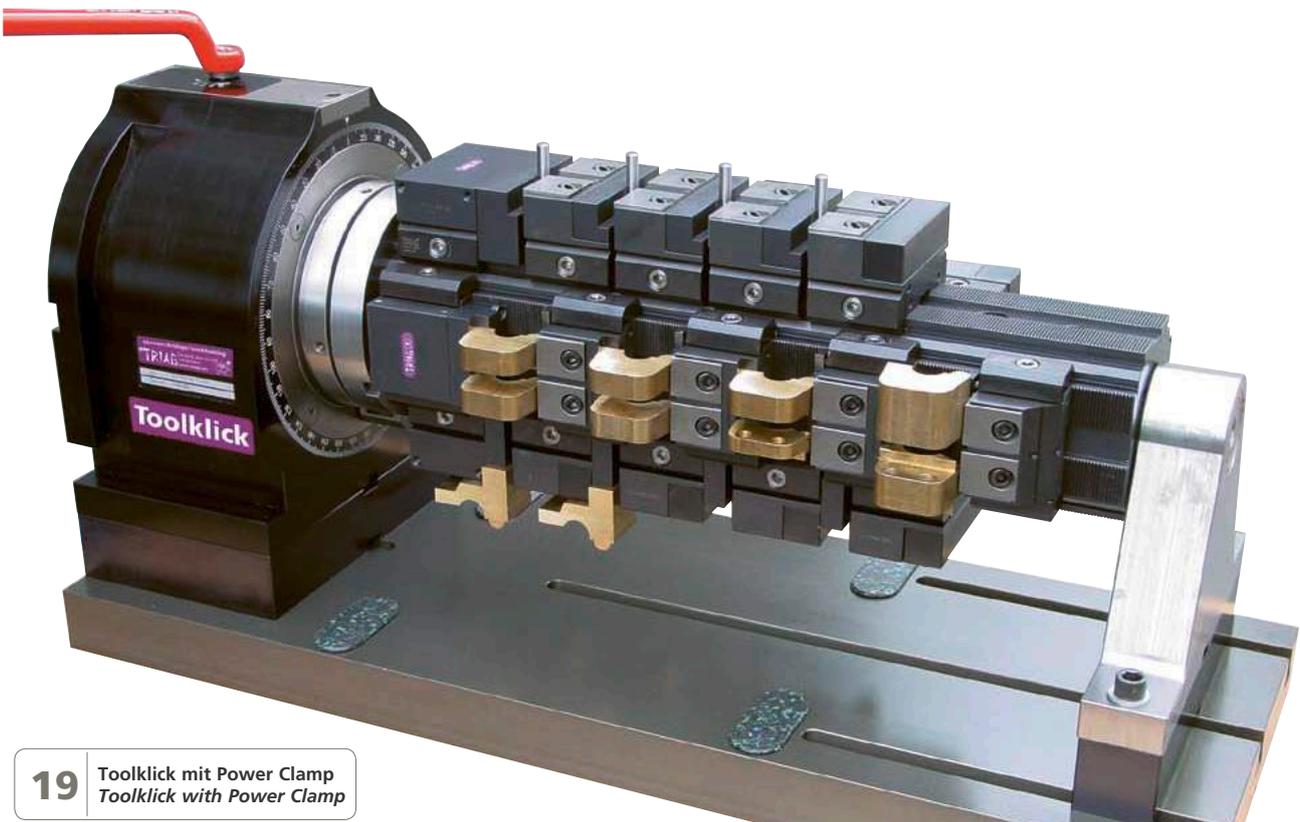
**16** Dreiseitenbearbeitung ab 19 mm  
Three-sided machining beginning at 19 mm



**17** ... im Einsatz auf der 4. Achse  
... in action on the 4th axis



**18** Das Triag Power Clamp im Einsatz als Spannstock (Starterset)  
Triag Power Clamp in action as machine vise (starter set)



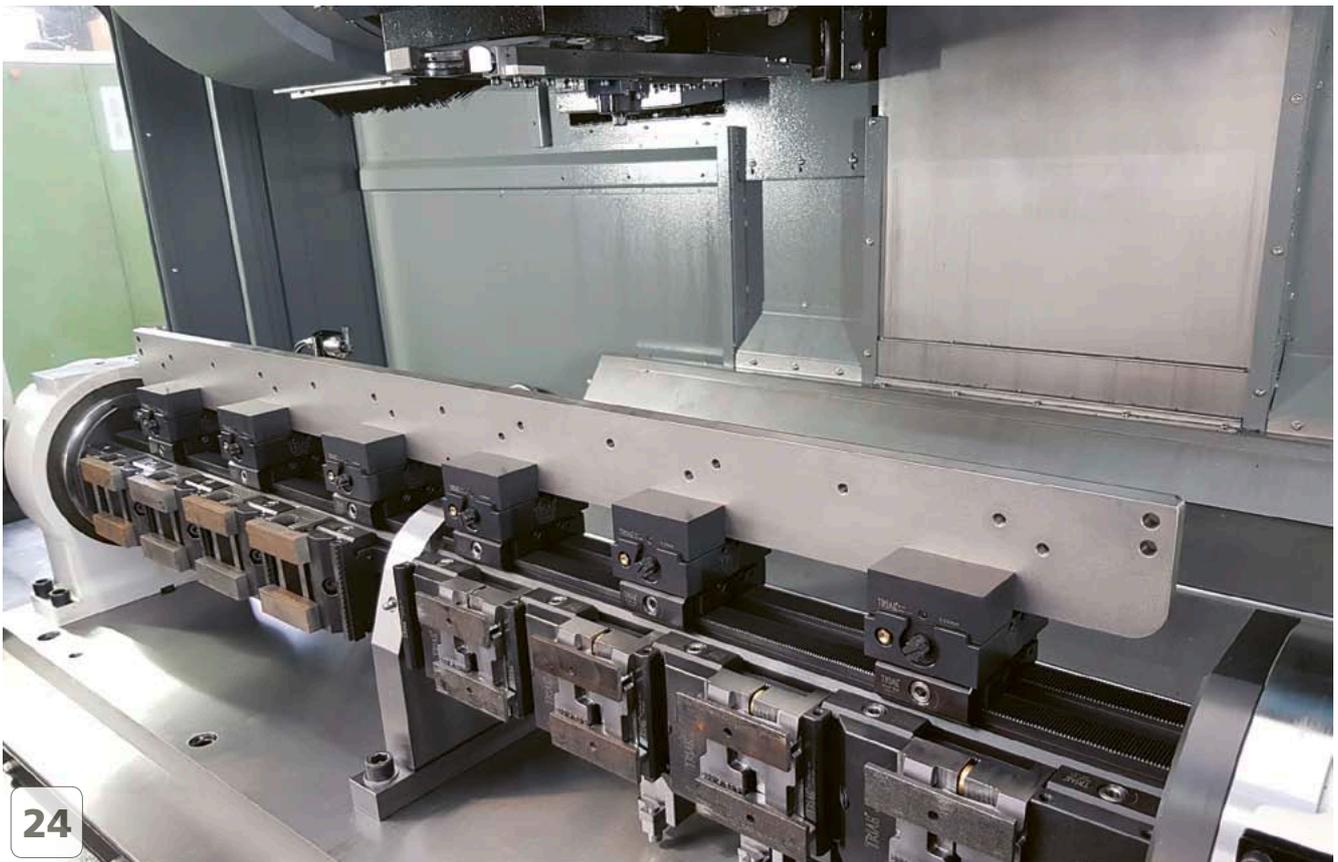
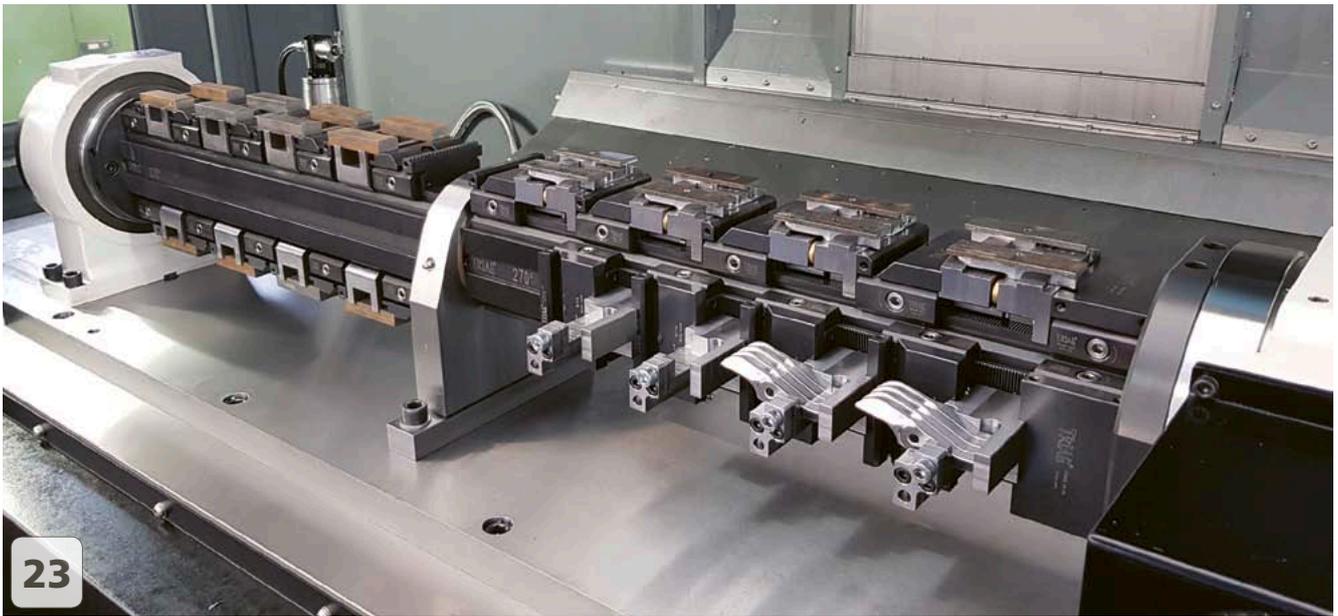
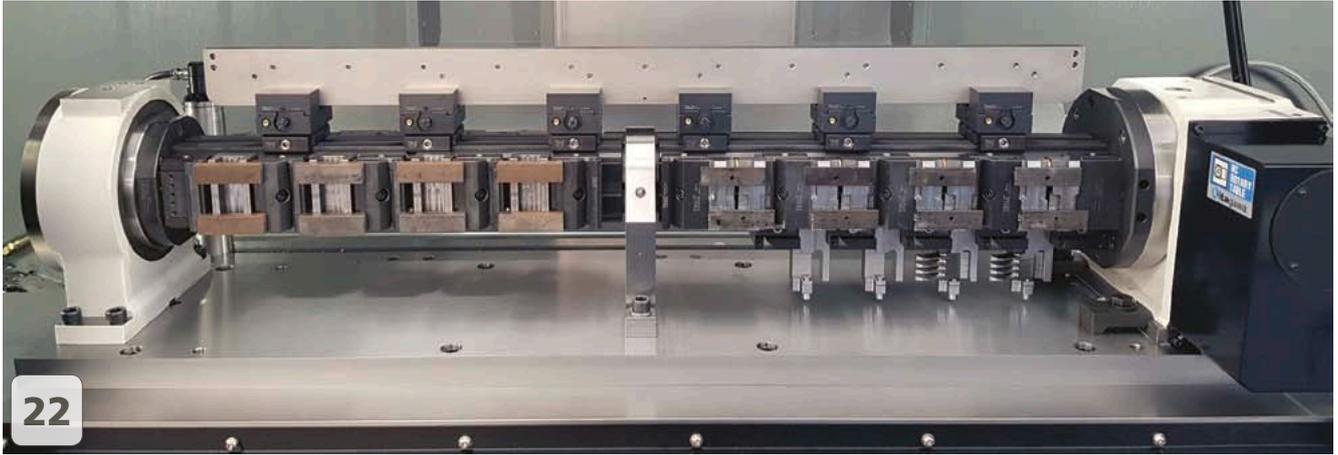
**19** Toolclick mit Power Clamp  
Toolclick with Power Clamp

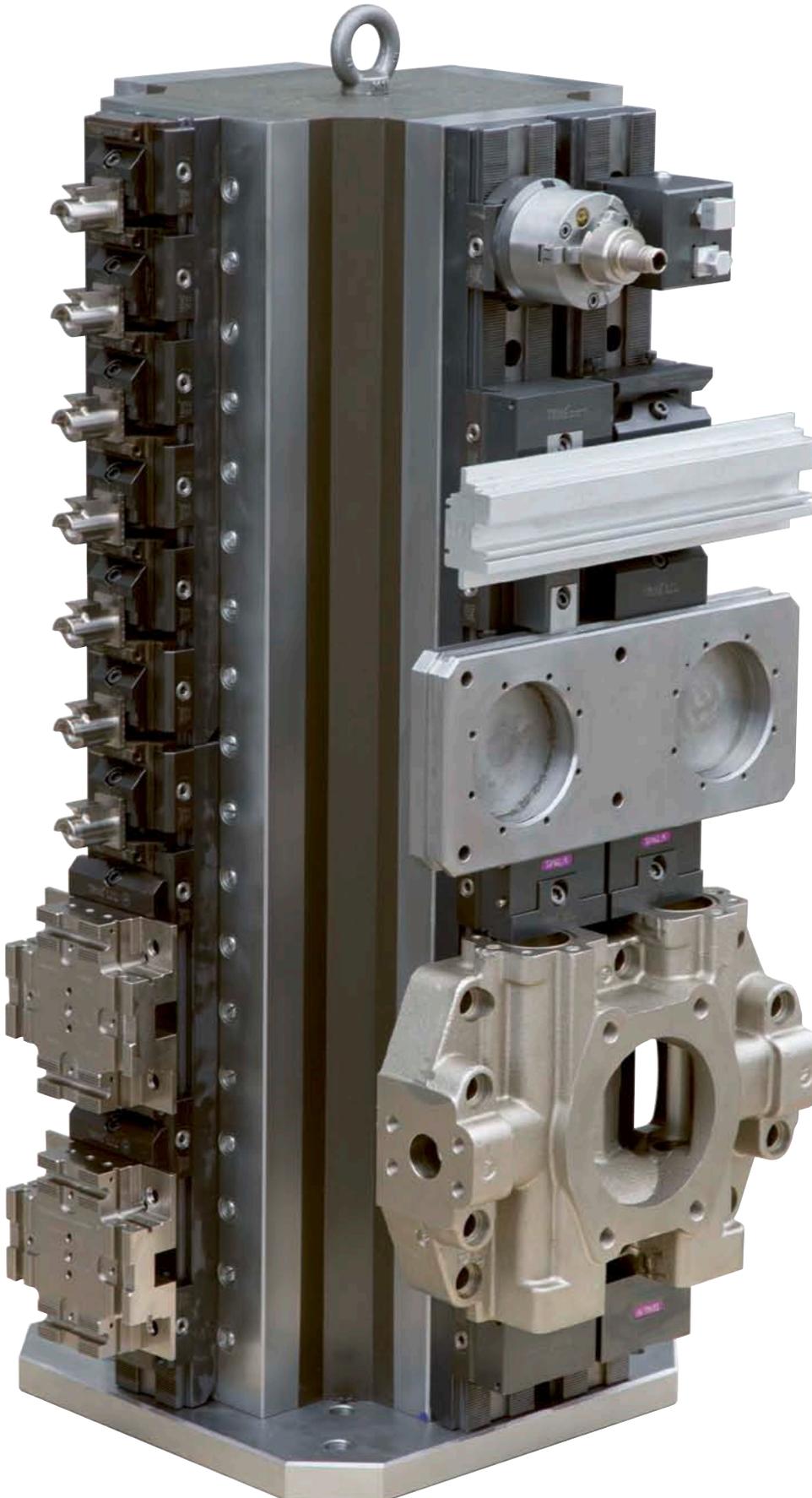


**20** 5-Achs Anwendung auf Lehmann Teilapparat  
5-axis application on Lehmann indexer



**21**





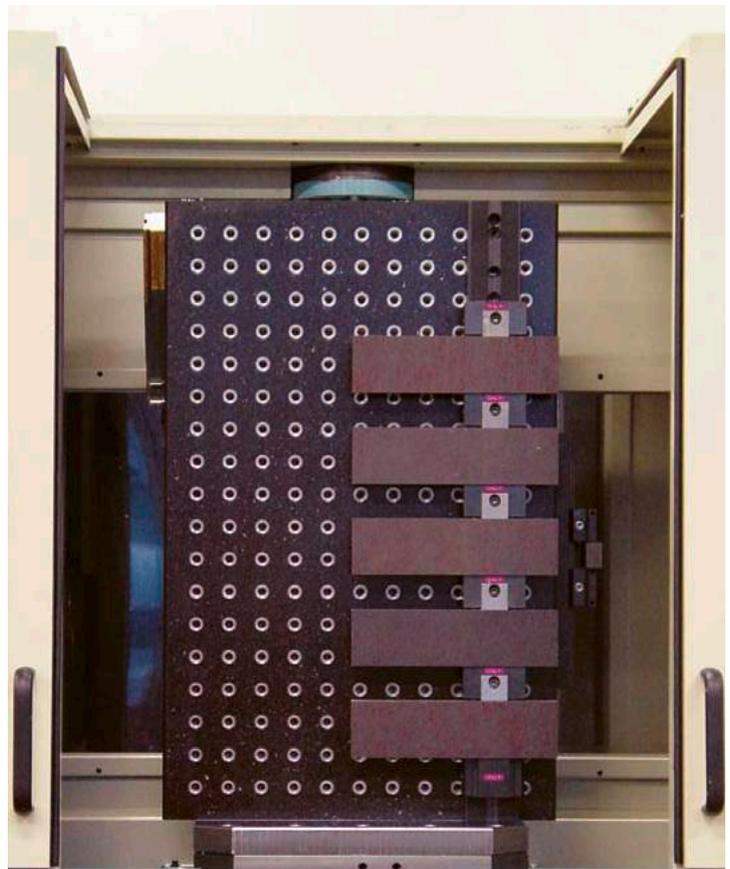
**25** tripoxymINERAL Kreuzturm mit PowerCLAMP Schienen für chaotische Spannung  
tripoxymINERAL Cross version with PowerCLAMP baserails for chaotic workholding



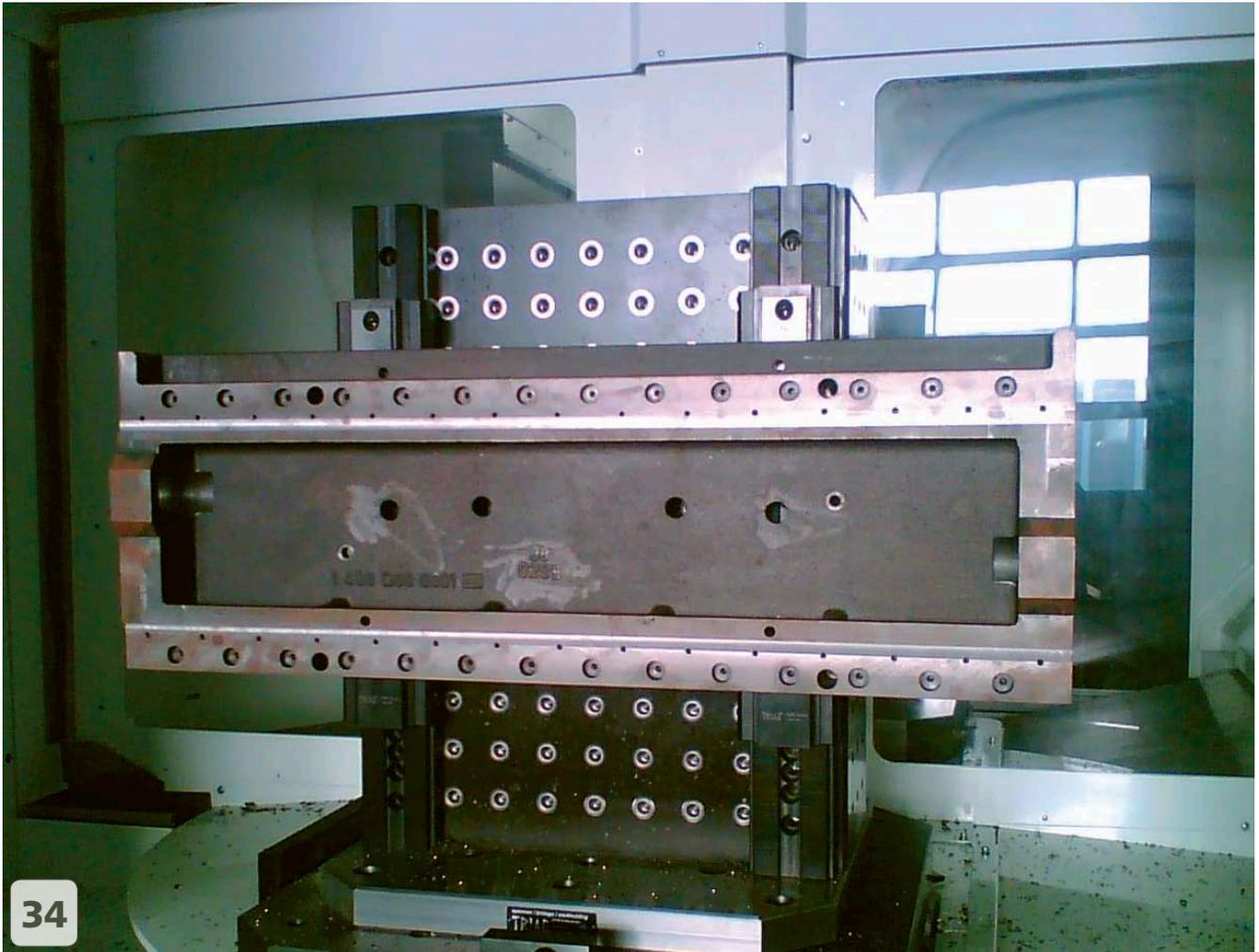
**31** tripoxyMINERAL mit unterschiedlichen Werkstücken bestückt  
tripoxyMINERAL tombstones holding a variety of workpieces



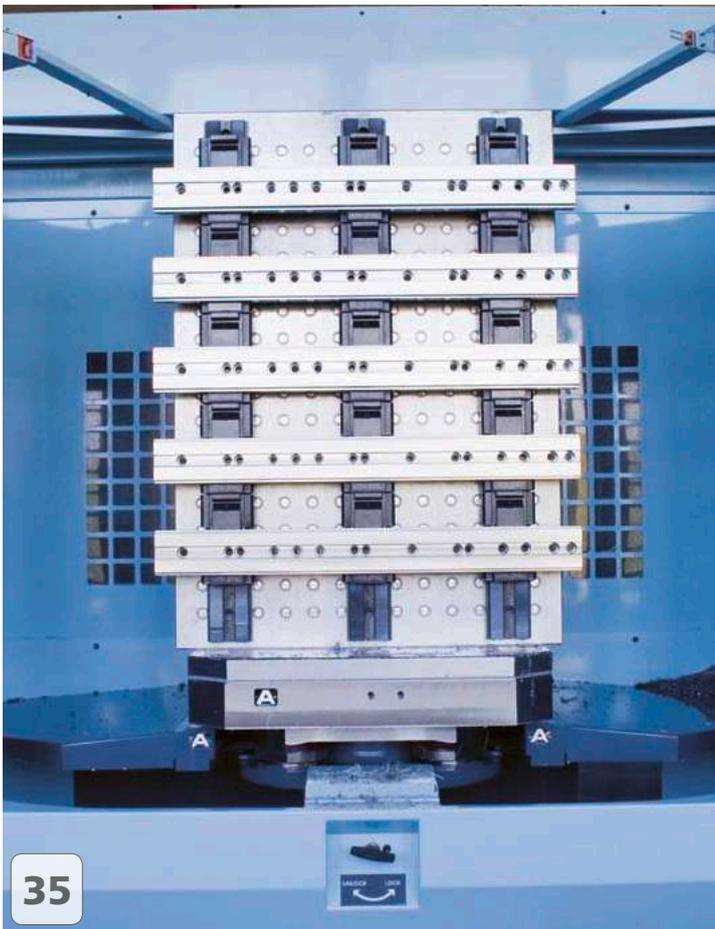
**32** Zentrischspanner auf einem Spezialturm  
Centric vices installed on a special tombstone



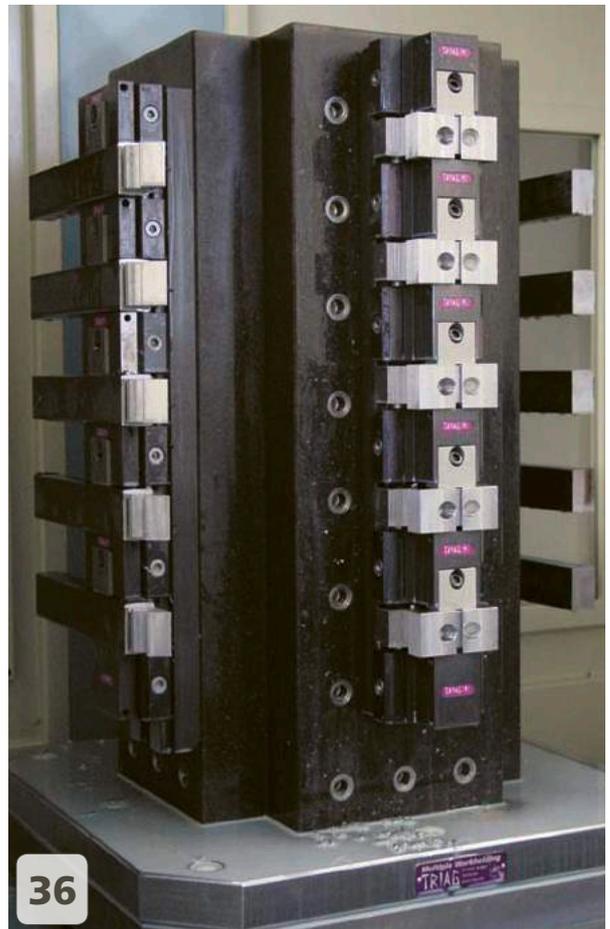
**33** Aufspannung mit Power Clamp auf einem Mineralgussturm  
Set up with Power Clamp on a tombstone made of composite concrete



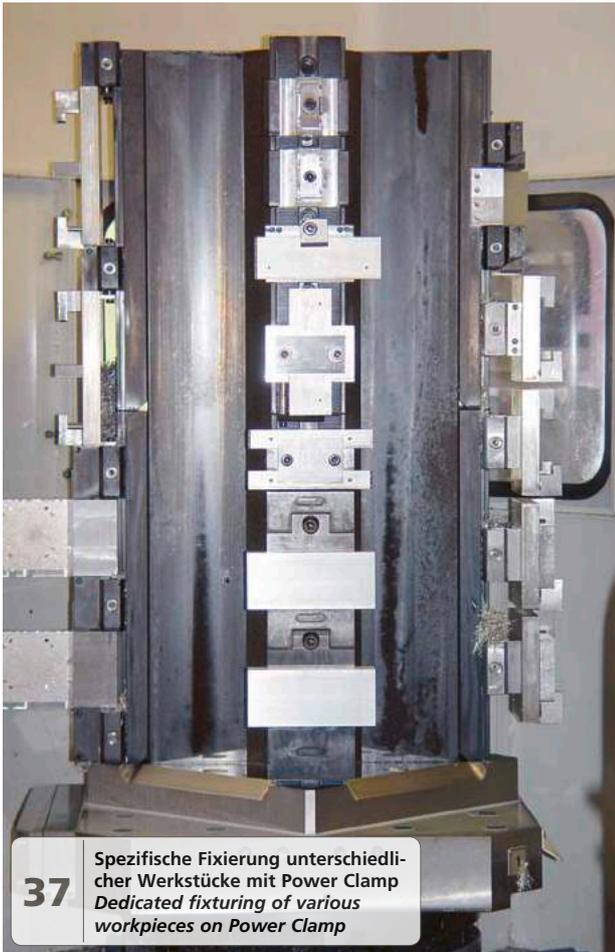
34



35



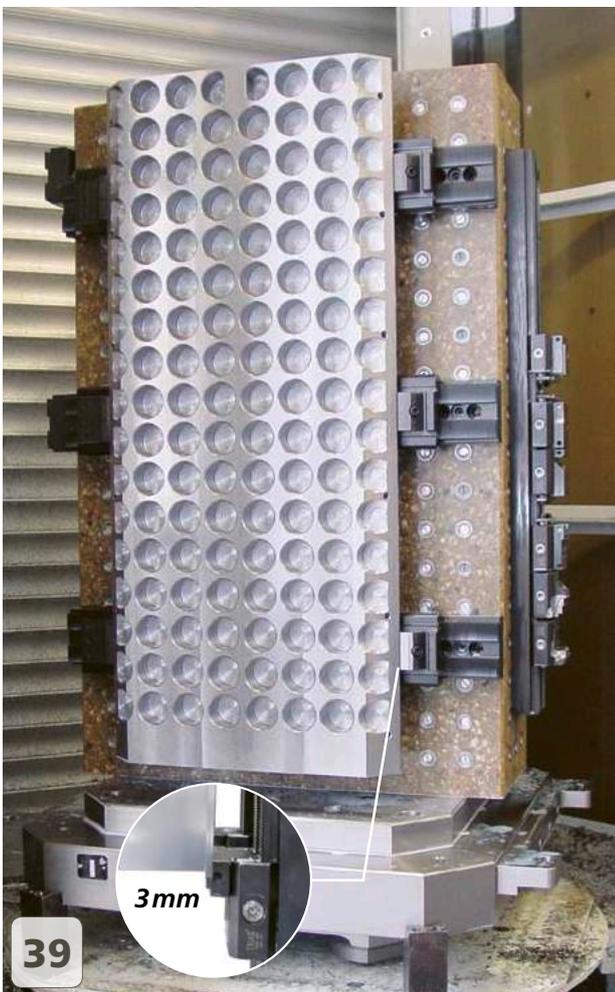
36



**37** Spezifische Fixierung unterschiedlicher Werkstücke mit Power Clamp  
*Dedicated fixturing of various workpieces on Power Clamp*



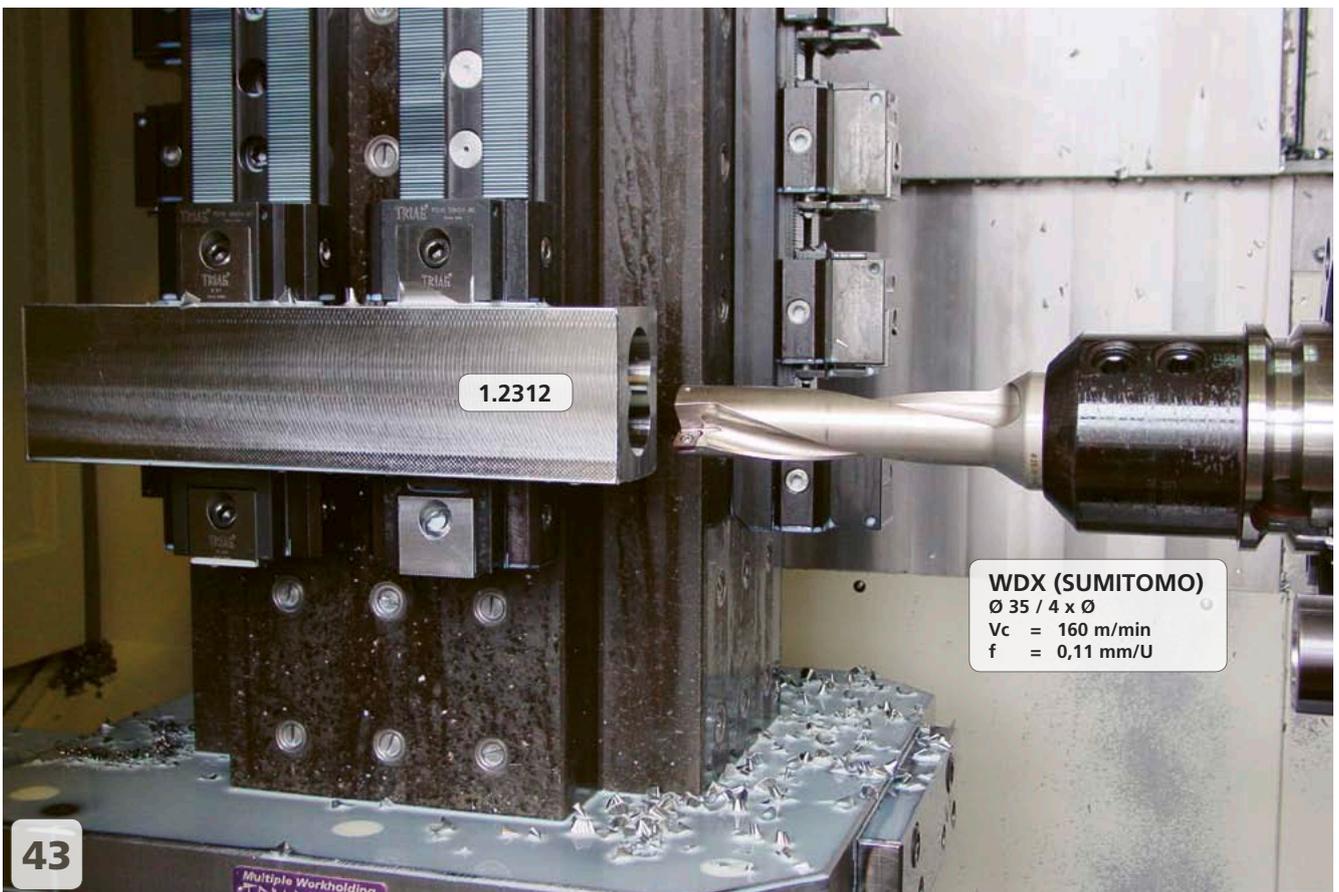
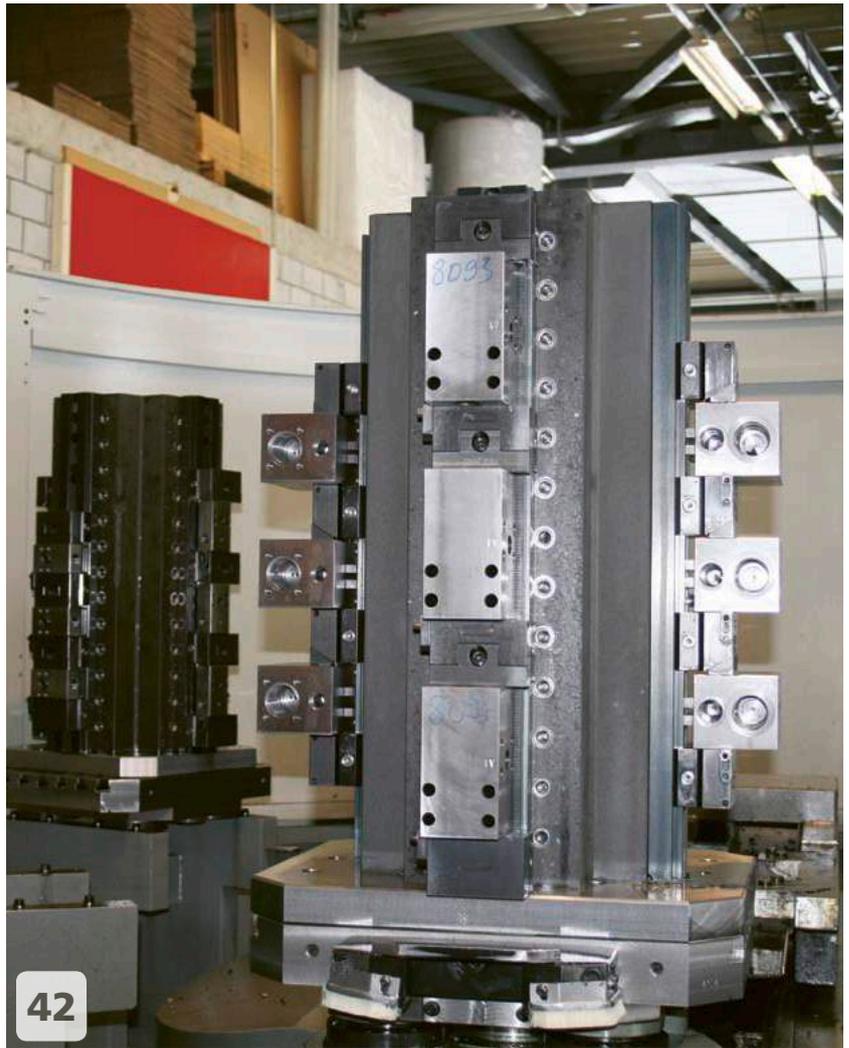
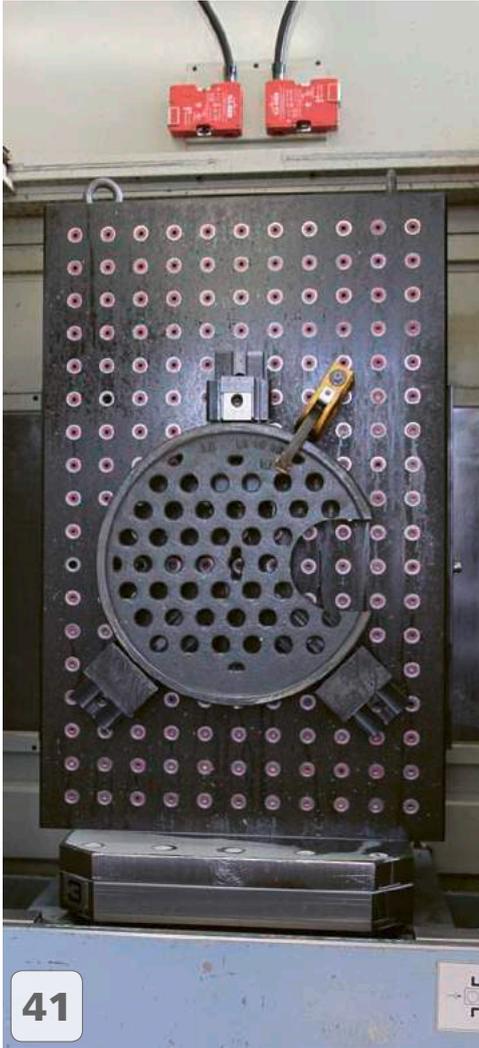
**38** Prägespannung auf sehr kleiner Einspannhöhe von 3 mm  
*Clamped 3 mm depth with direct stamping jaws*



**39** 3mm



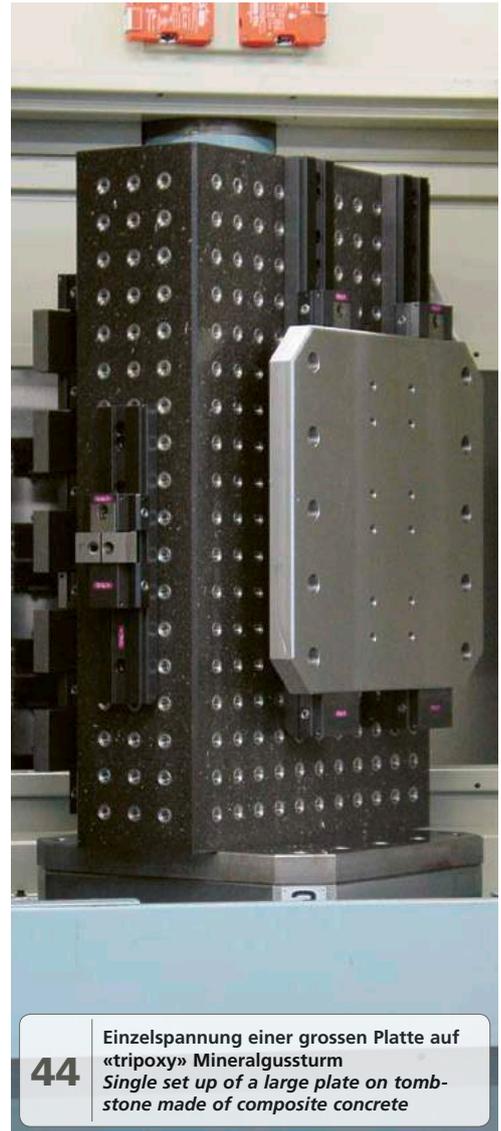
**40** Aufspannung mit Power Clamp auf einem „Tripoxy“ Mineralgussturm  
*Set up with Power Clamp on a tombstone made of composite concrete*





200 x 400 x 1330  
Flügelteil für Airbus A320  
Tail wing part for Airbus A320

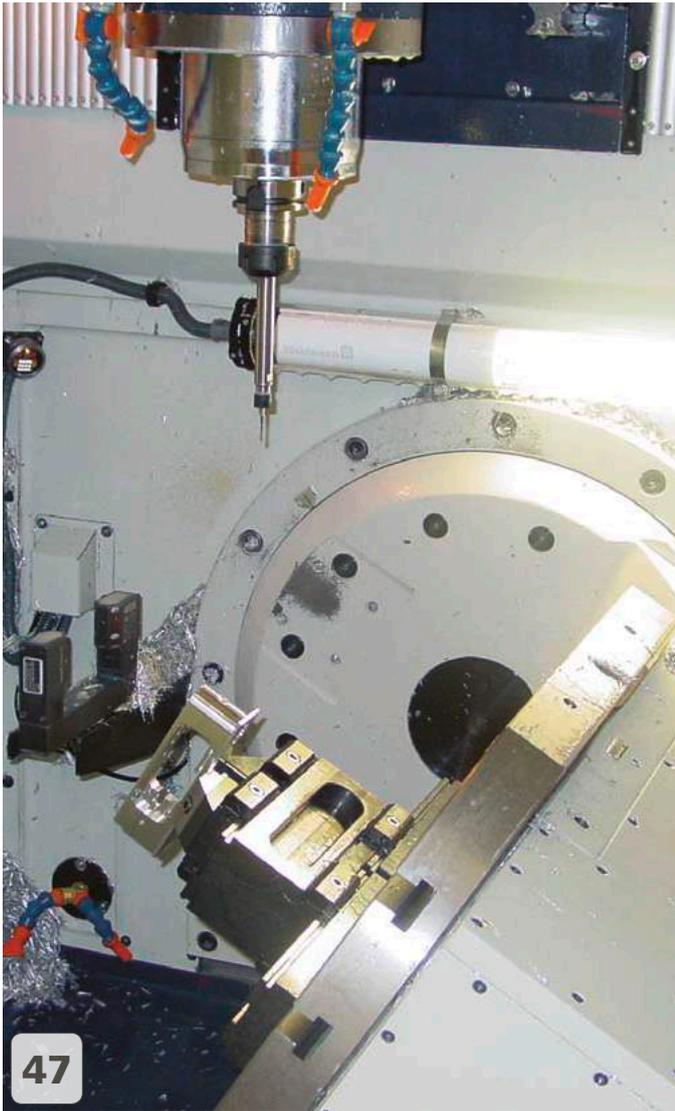
45  
Stahlminerguss-Säulen mit Power  
Clamp für die Fertigung von Flügelteilen.  
Steel epoxy frames machining wing  
parts on a Makino machine



44  
Einzelspannung einer grossen Platte auf  
«tripoxy» Mineralgussturm  
Single set up of a large plate on tomb-  
stone made of composite concrete



46

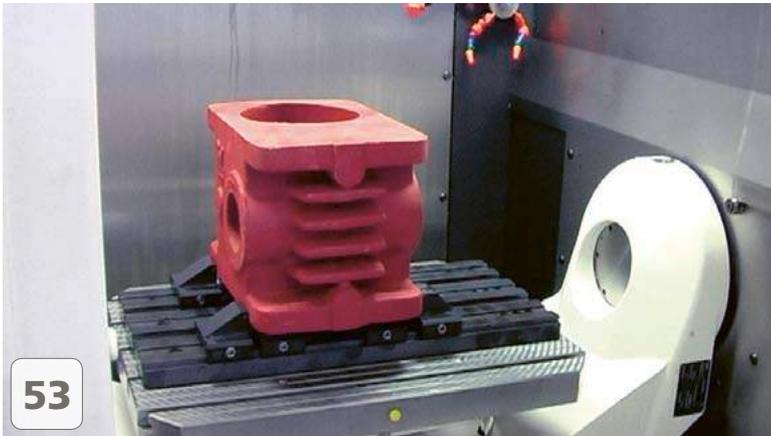




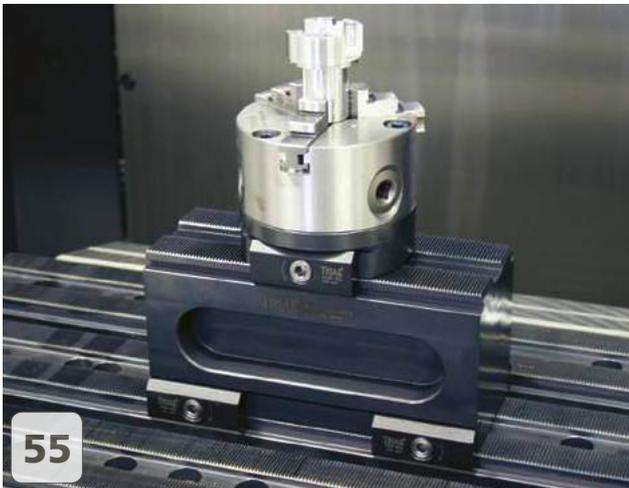
52



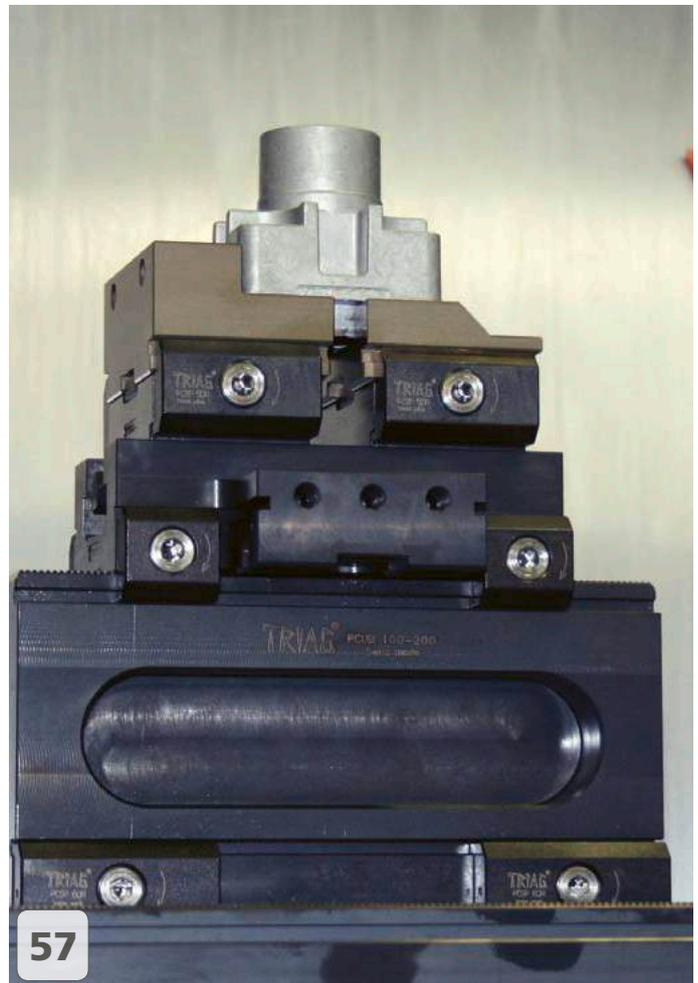
54



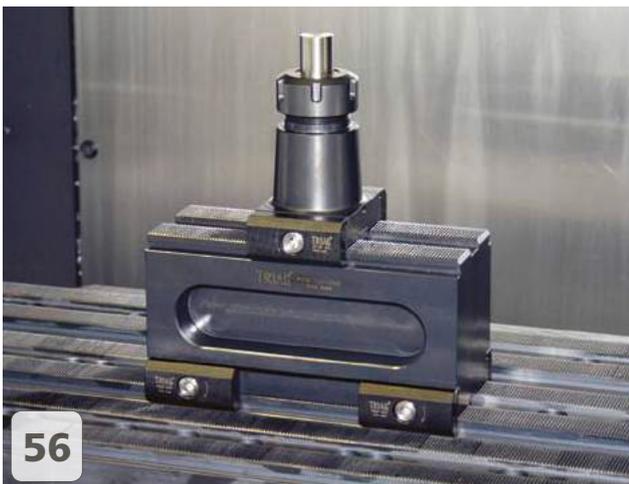
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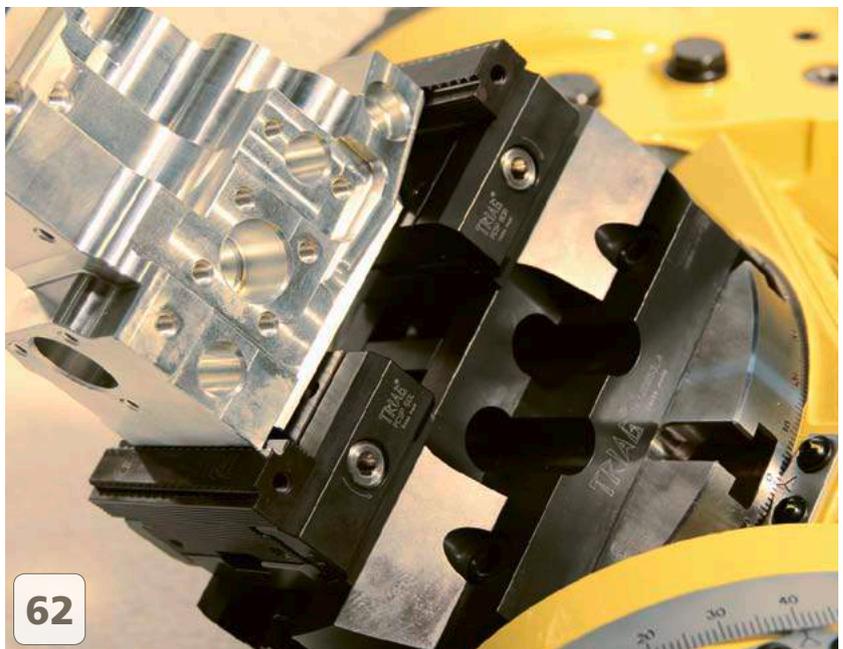
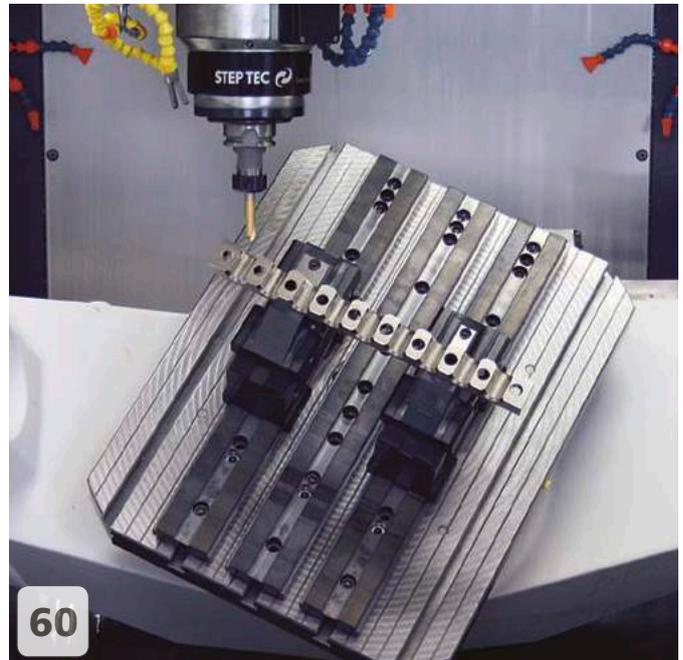
55



57



56





### Modulares Mehrfachspannen auf 5-Achsen-Maschinen

Immer öfter werden die 5-Achsen-Maschinen in den Produktionsabläufen eingesetzt, um den Ansprüchen der heutigen effizienten Herstellung gerecht zu werden und weltweit wettbewerbsfähig zu bleiben. Die Werkstückspannung ist sehr anspruchsvoll und fordert die technischen Mitarbeiter ausserordentlich, wie auf den nachfolgenden Bildern dargestellt.

### Modular workholding system for 5-axis machines

Increasingly, the 5-axis machines are used in the production processes to be in accordance with the demands of today's efficient manufacturing and remain globally competitive. The workpiece clamping is very demanding and calls for extremely technical staff, as shown on the following pictures.

#### Vorteile der Triag 5-Achsen Spannsysteme:

- Die unteren Basisschienen dienen sowohl als mechanisches Nullpunktspannsystem, aber auch als Spannstock.
- Die Spannkraft wirkt direkt beim Werkstück, trotzdem ist das Werkstück ob klein, lang oder gross mit kurzen Werkzeugen sehr gut zugänglich. (Die Einschränkung ist der Maschinentisch)!
- Bei der Dreiseitenbearbeitung ist auch Mehrfachspannung möglich.
- Es können über 200 verschiedene Spannmodule, sowie Rohmodule, Zentrischspanner, Dreibackenfutter, Spannzangenfutter, Vakuumspannmodule usw. aufgesetzt werden. Die Schnittstelle ist immer dieselbe.
- Sehr schnelles Umrüsten!
- Wenig Reinigungsaufwand, da keine T-Nuten vorhanden sind.
- Besonders gut geeignet für 5-Achsen-Maschinen. Alle Spannvorrichtungen können auch auf Horizontal- und Vertikalmaschinen universell eingesetzt werden.

#### Benefits of Triag 5-axis workholding systems:

- The lower base rails serve both as a mechanical zero-point clamping system, but also as a vice.
- The tension acts directly at the workpiece, the workpiece is still, whether small, long or large, very accessible with short tools. The constraint is the machine table!
- 3-side machining is possible as well.
- There may be placed over 200 different clamping modules, as well as raw modules, self-centring modules, three jaw chuck, collet chuck, vacuum clamping modules and so on. The interface is always the same.
- Very fast setup!
- Reduced cleaning required, since no T-slots available.
- Especially suitable for 5-axis machines. All clamping devices can also be used universally on horizontal and vertical machines.



Geeignet sowohl für kleine ...  
Especially suited for small ...



... als auch für grosse Werkstücke!  
... as well as large workpieces!



System System		bei Anschlagmodulen for end module		Modulnutzbreite Module clamping width		Modulnutzhöhe Module clamping height	
A	Apto Clamp	N	nitriergehärtet nitrated	19		34	
P	Power Clamp	D	durchgehärtet through hardened	25			
C	Compact Clamp	<b>bei Spanmodulen for vice modules</b>		26			
M	Micro Clamp	1	Anzahl Spannbacken Number of jaws	34			
V	Vorrichtungsbaumodule Workholding modules for dedicated fixtures	2		-		43	
		3				48	
				58			
				61			
				68			
				78			
				94			
				125			

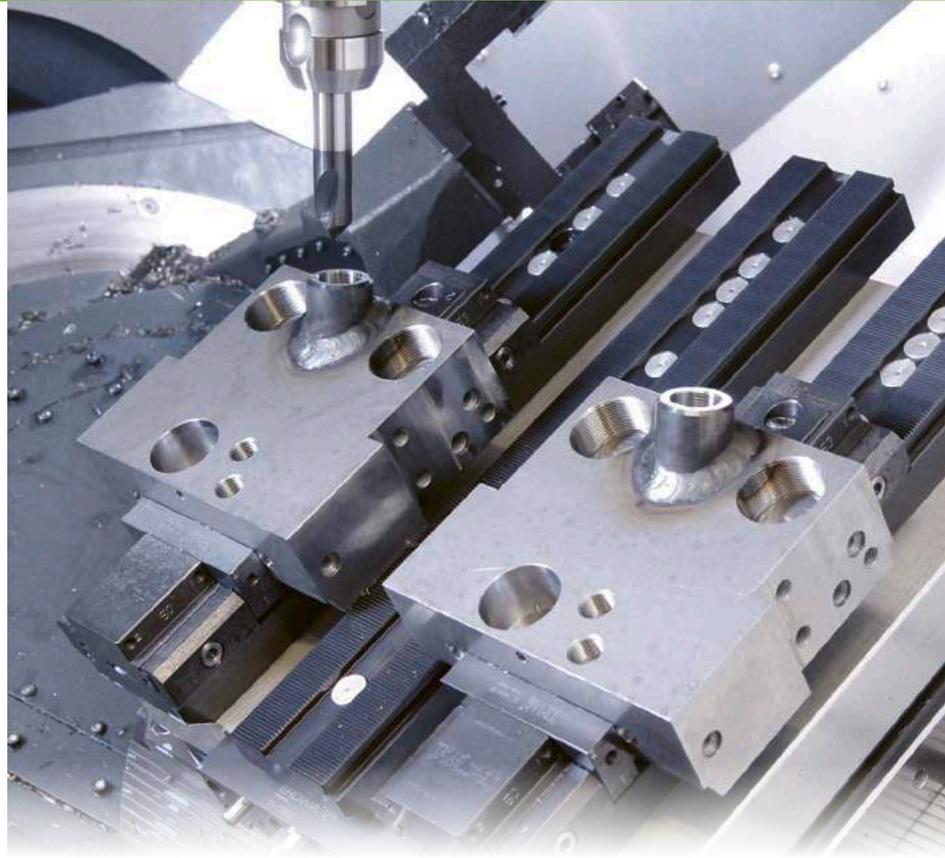
**P S 1 R 48 N 34 -80**

Modultyp Type of module	
A	Anschlagmodul End module
S	Spannmodul Clamping module
T	Trägermodul Supporting module
R	Rohling Blank

Anschlagfläche der Module Datum face	
F	Anschlagfläche glatt Datum face flat
R	Anschlagfläche geriffelt Datum face double serrated
D	eine Seite glatt, eine Seite geriffelt one face flat, one face double serrated
G	Anschlagfläche gerillt Datum face serrated
X	spezielle Ausführung special execution
5X	5axes Clamp
P	Fläche unterhalb der Prägung gerillt Area below the stamping serrated
PF	Fläche unterhalb der Prägung glatt Smooth surface below the stamping
PV	Präge vorstehend, Fläche unterhalb der Prägung glatt Stamping protruding, surface below the stamping flat
P6	prägen / stamping

Backenhub Stroke of clamping jaw	
N	Niederzug Pull down
L	linear / parallel linear / parallel
-	ohne Spannbacke no clamping jaw

Spannbackentyp Type of clamping jaw	
B01	Spannbacken Clamping jaws
- B313	
-013	Modul ohne Spannbacken Module without clamping jaw
-105	



**Die Basisschiene ist die Grundlage des Power Clamp Spannsystems**

Der Einsatz der Basisschiene als Modularspannstock ist jedem Mechaniker ein Begriff. Die Vorteile ihres Einsatzes als mechanisches Nullpunktsystem sind in der Zwischenzeit ebenfalls ins Planungsdenken der mechanischen Fertigung eingeflossen.

Die Power Clamp-Schiene dient als Basis für über 200 verschiedene Spannmodule, Zentrischspanner, Rohlingsmodule und Vakuumplatten.

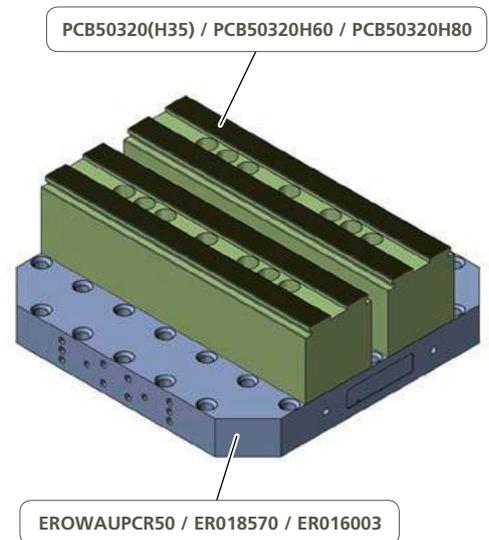
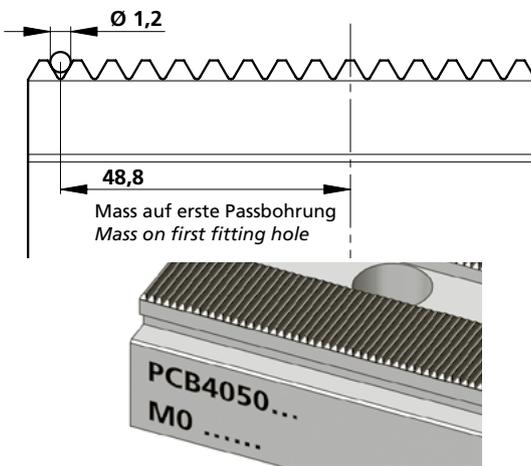
**The serrated base rail is the basic structure of the Power Clamp workholding system**

Using the base rail as a modular workholding vise is standard practice to any mechanic. The advantages of using it as a zero point system have also widely influenced the planning stages of mechanical production.

The Power Clamp base rail serves as a supporting plate for more than 200 different clamping modules, self centring vises, blank modules and vacuum clamping plates.

**Toleranz gilt für alle PCB-Basisschienen / Tolerance applies to all PCB base rails**

Toleranzklassen Tolerance classes	
P6	+0.06
P5	+0.05
P4	+0.04
P3	+0.03
P2	+0.02
P1	+0.01
P0	+0.005
M0	-0.005
M1	-0.01
M2	-0.02
M3	-0.03
M4	-0.04
M5	-0.05
M6	-0.06

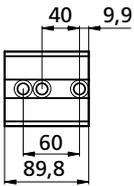


Separat bestellen / Separate order

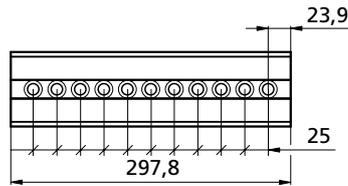
Bestellbeispiel / Ordering example: 2x PCB50320H80 & 1x ER018570



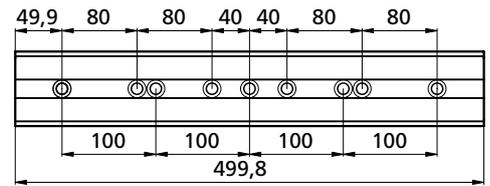
**PCB6090** kg ~1,8



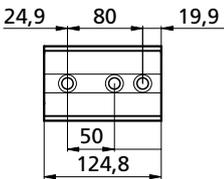
**PCB25300** kg ~5,4



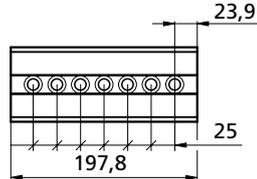
**PCB4050500** kg ~9,9



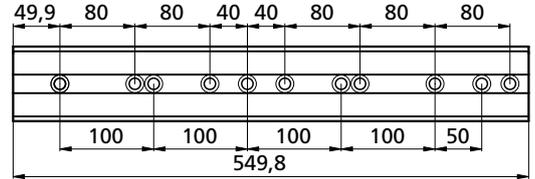
**PCB4050125** kg ~2,3



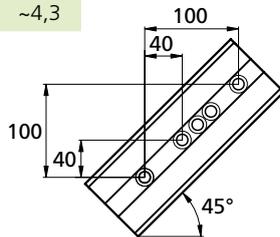
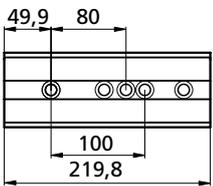
**PCB25200** kg ~3,6



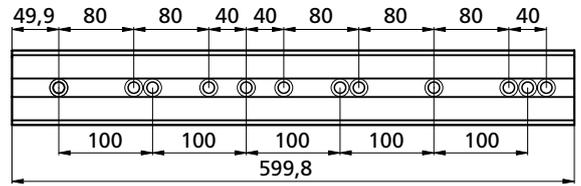
**PCB4050550** kg ~10,8



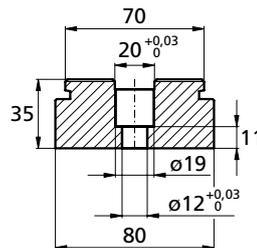
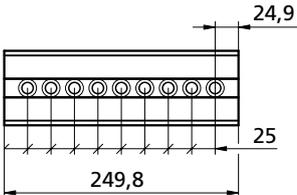
**PCB4050220W2** kg ~4,3



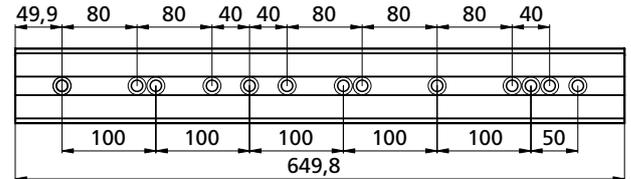
**PCB4050600** kg ~11,8



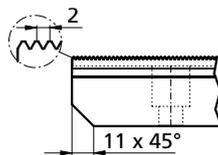
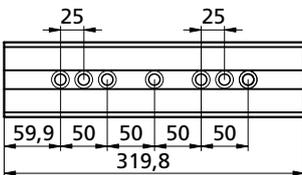
**PCB2550250** kg ~4,8



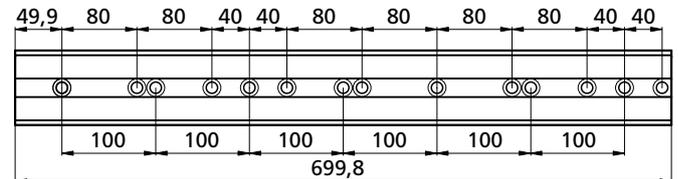
**PCB4050650** kg ~12,8



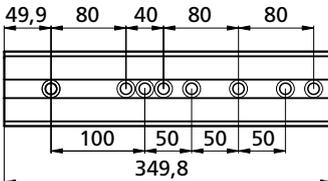
**PCB50320** kg ~6,0



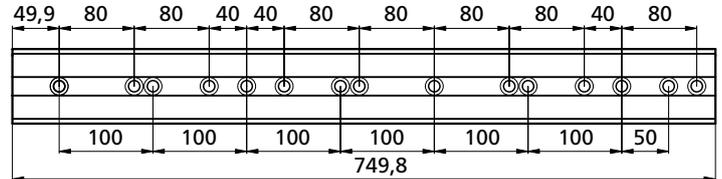
**PCB4050700** kg ~13,8



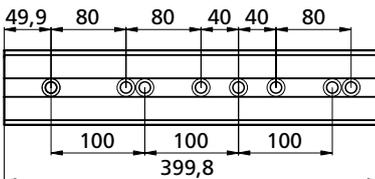
**PCB4050350** kg ~6,9



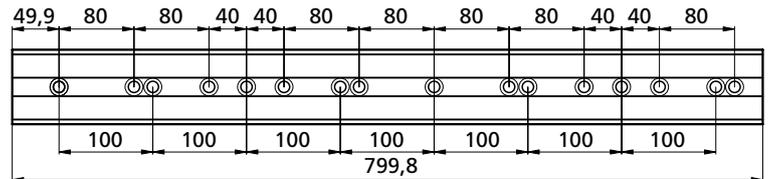
**PCB4050750** kg ~14,8



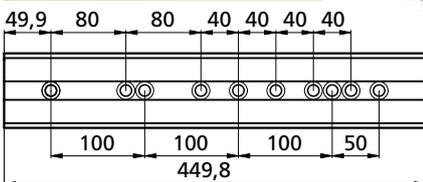
**PCB4050400** kg ~7,9



**PCB4050800** kg ~15,3

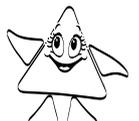


**PCB4050450** kg ~8,9

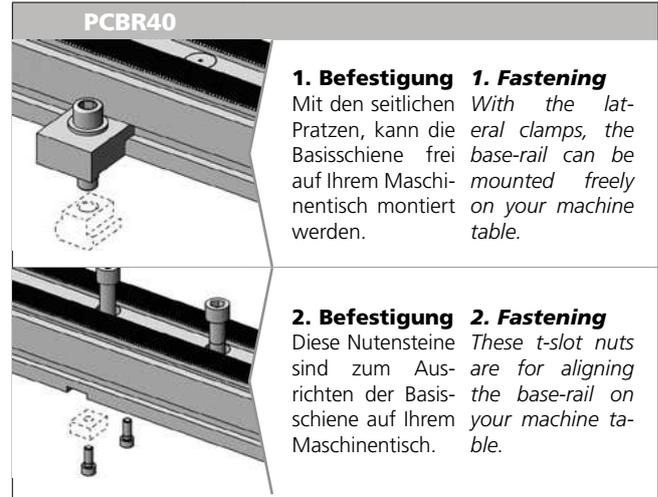
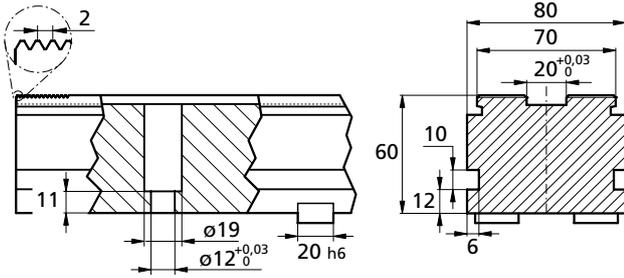


PCB4050400

Basisschienen in Zoll  
Base rails in inch



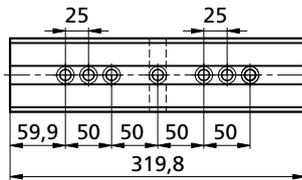
Bestellbeispiel / Ordering example: **PCB4050125**



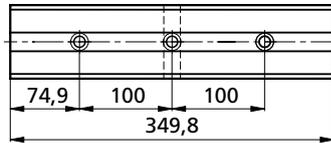
**1. Befestigung 1. Fastening**  
Mit den seitlichen Pratten, kann die Basisschiene frei auf Ihrem Maschinentisch montiert werden.  
*With the lateral clamps, the base-rail can be mounted freely on your machine table.*

**2. Befestigung 2. Fastening**  
Diese Nutensteine sind zum Ausrichten der Basisschiene auf Ihrem Maschinentisch.  
*These t-slot nuts are for aligning the base-rail on your machine table.*

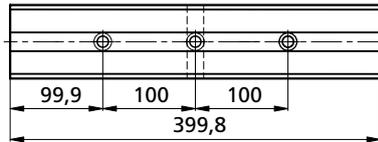
<b>PCB50320H60</b>	
1	1x TF190449
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~10,5



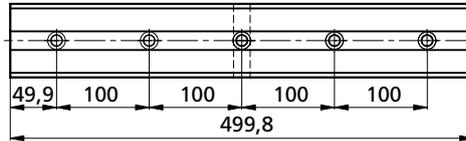
<b>PCB100350H60</b>	
1	1x TH170888
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~12,0



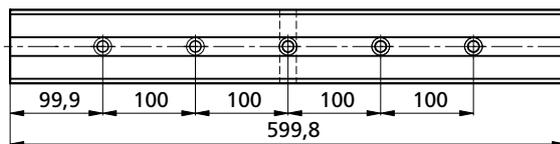
<b>PCB100400H60</b>	
1	1x TB140546
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~13,6



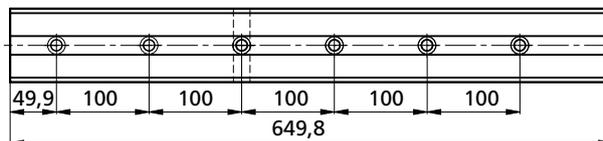
<b>PCB100500H60</b>	
1	1x TB140553
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~17,0



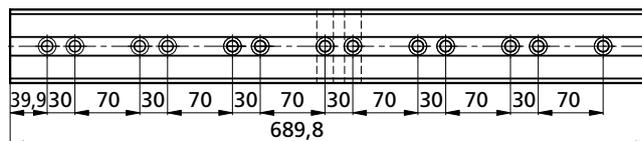
<b>PCB100600H60</b>	
1	1x TB140556
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~20,5



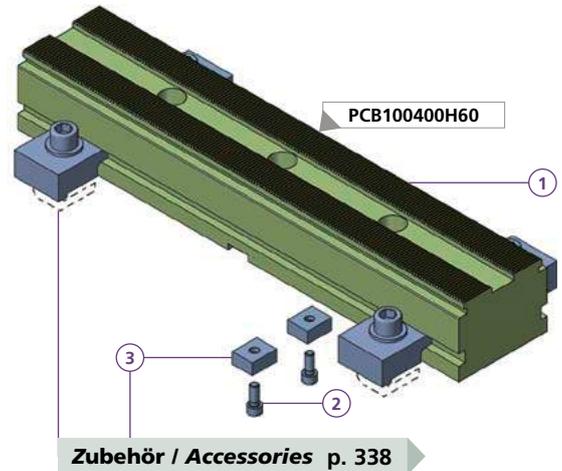
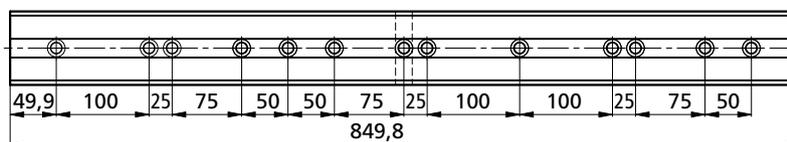
<b>PCB100650H60</b>	
1	1x TB140559
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~22,0



<b>PCB100690H60</b>	
1	1x ZL100122
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~22,6



<b>PCB100850H60</b>	
1	1x TB140562
2	2x M6X12ISO4762
3	2x SM1136-20
kg	~28,2



Zubehör / Accessories p. 338

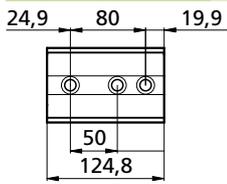
<b>PCBR40</b>	
4	1x M12X45ISO4762
5	1x TN100251
6	1x TK200035
kg	~0,25

**T-Nutensteine T-slot nuts**  
T-Nutensteine je nach Maschinentisch, muss separat bestellt werden.  
*T-slot nuts depending on the machine table, must be ordered separately.*

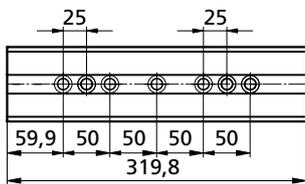
Bestellbeispiel / Ordering example: 1x PCB100400H60 & 2x M6X12ISO4762 & 2x SM1136-20



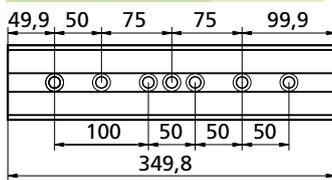
**PCB4050125H80** kg ~7,5



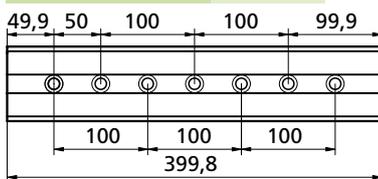
**PCB50320H80** kg ~14,4



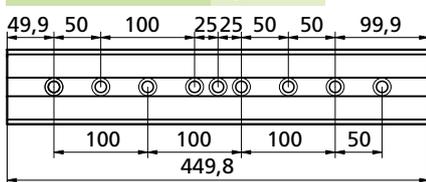
**PCB50350H80** kg ~15,8



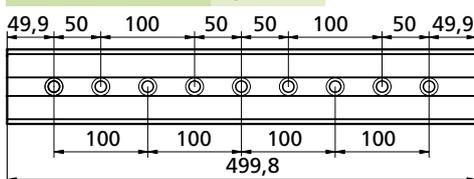
**PCB50400H80** kg ~18,2



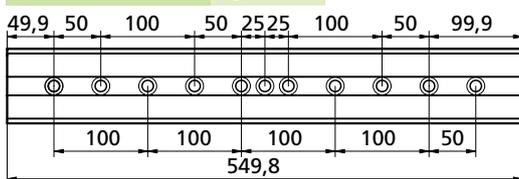
**PCB50450H80** kg ~20,3



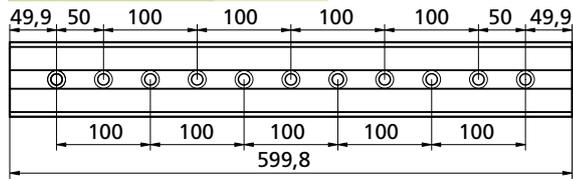
**PCB50500H80** kg ~22,8



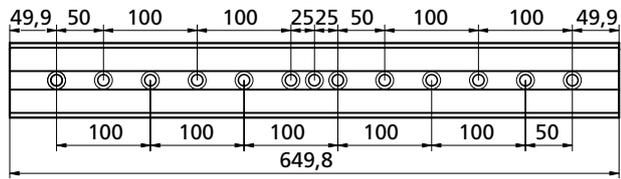
**PCB50550H80** kg ~24,8



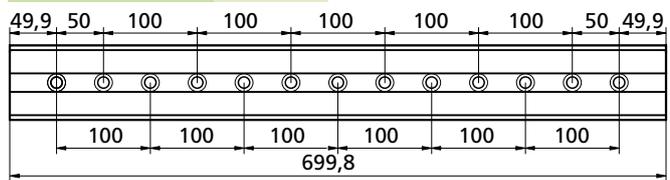
**PCB50600H80** kg ~27,3



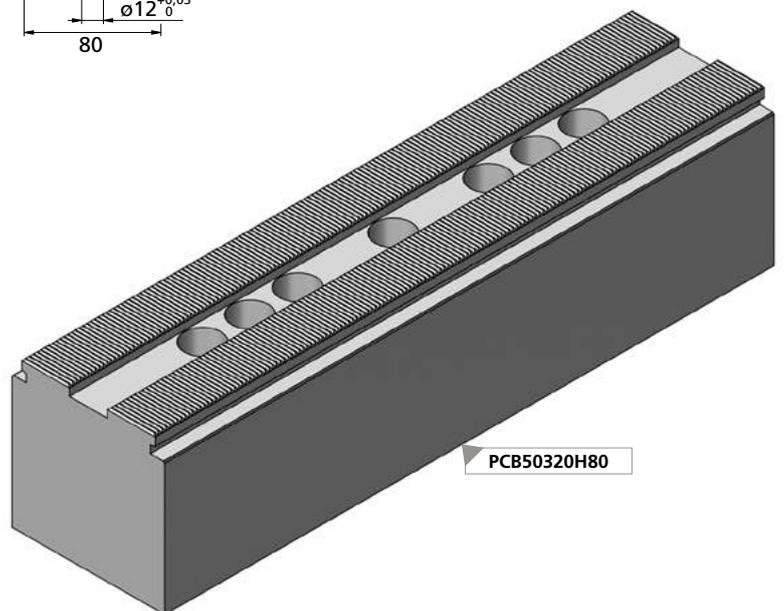
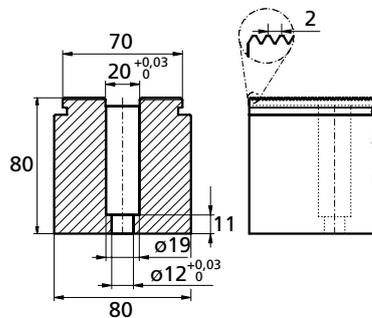
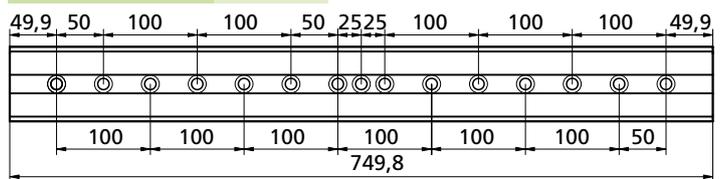
**PCB50650H80** kg ~29,4



**PCB50700H80** kg ~31,8



**PCB50750H80** kg ~33,9

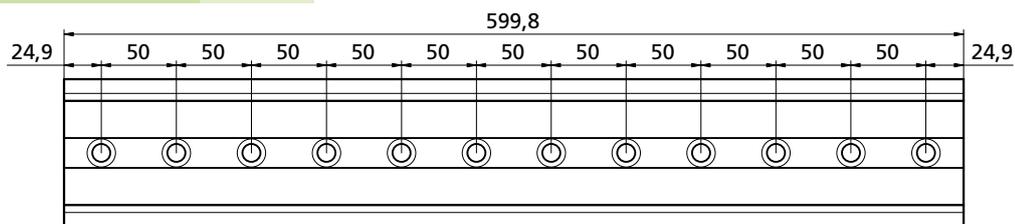




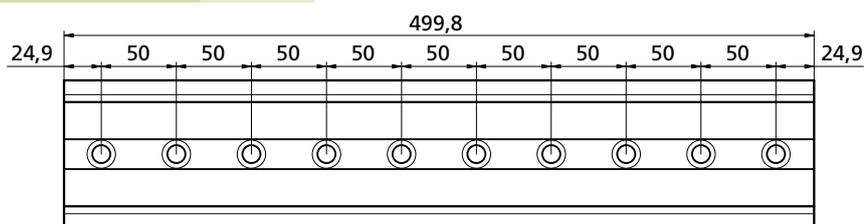
## Basisschiene Stahl-Mineralguss Base-rail steel-epoxy mineral tombstones

powerCLAMP

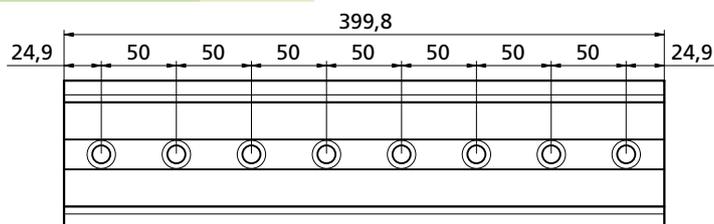
PCMB50600H175 kg ~39



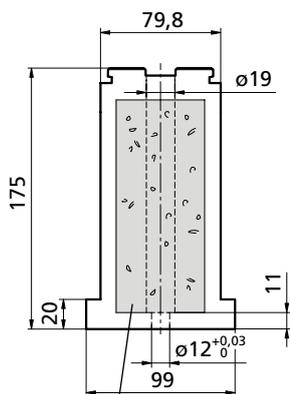
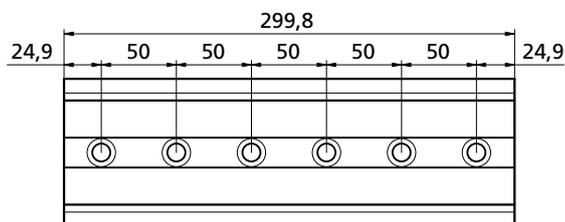
PCMB50500H175 kg ~34



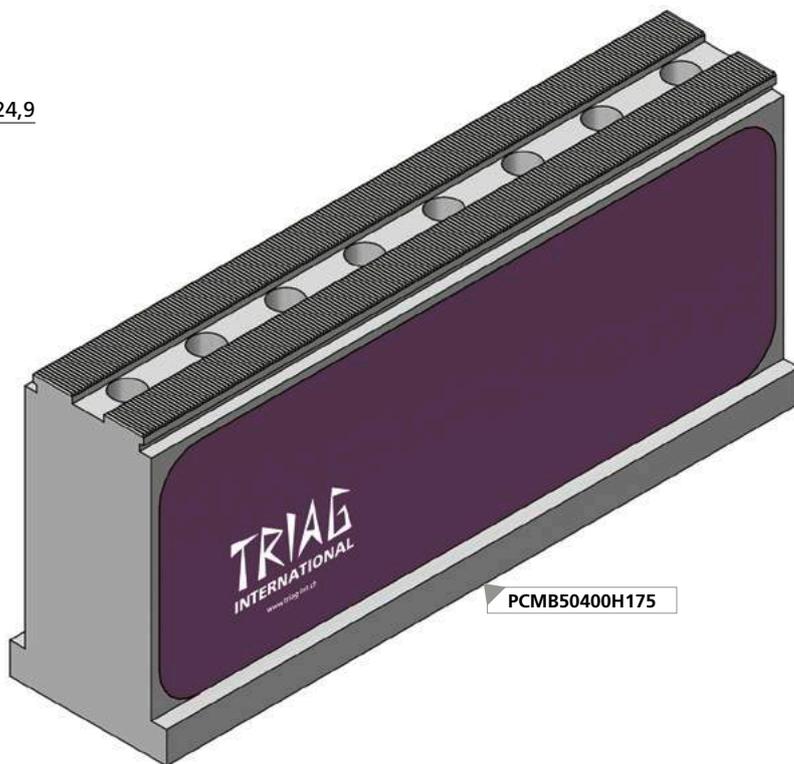
PCMB50400H175 kg ~27



PCMB50300H175 kg ~22



**Epoxy Mineral**  
Für gute Vibrationsdämpfung  
For brilliant dampening effect





# Kupplungsstück (Basisschienen zum koppeln)

## Coupling element (Base rails for coupling)

powerCLAMP

### Kupplungsstücke für PCB Basisschiene auf Mineralgus-Türmen

Mit diesen Kupplungsstücken ist es möglich, die PCB Basisschienen zu verlängern. Aufgrund des durchgängigen Kraftschlusses wird eine übermäßige Belastung des Mineralgussturmes vermieden. Erforderlich ist eine Modifikation der Enden der Basisschienen gemäss der untenstehenden Zeichnung durch den Anwender. Selbstverständlich können neue Schienen bereits mit dieser Modifikation ausgeliefert werden.

So können die zwei Kupplungsstücke montiert werden, die nach dem Platzieren der Schienen eingesetzt und festgezogen werden. Eine zusätzliche Schraube (B) nimmt allfällige, senkrecht zur Befestigungsfläche auftretende Kräfte auf.

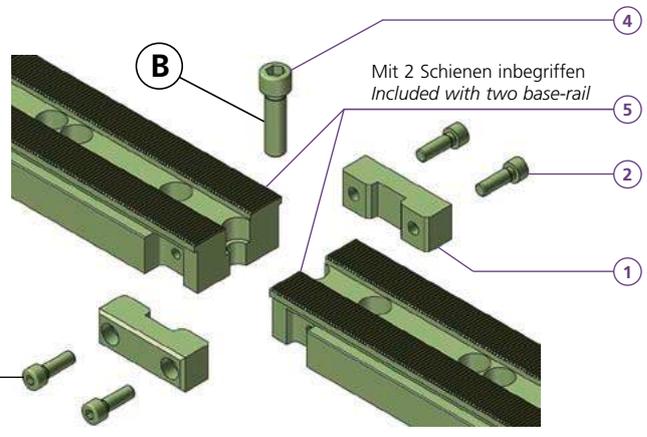
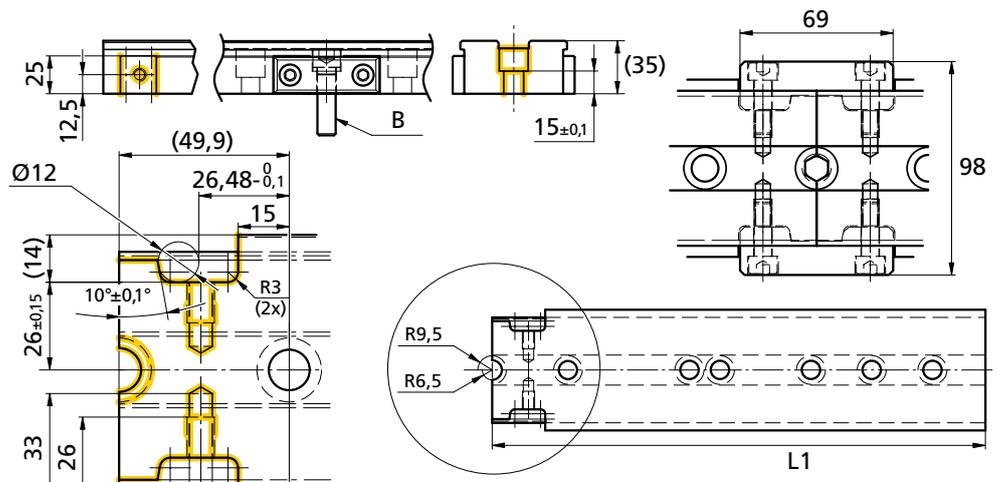
### Coupling element for PCB base rails mounted on epoxy mineral tombstones

With this coupling element, it is possible to extend the PCB base rail by a second rail. Due to the frictional connection, the behaviour of the associated items is approximate to the behaviour of a continuous rail. A modification according to the drawing below (made by the customer) is required at the end of the base rails. New base rails can be supplied with this modification.

So the two coupling elements can be placed between the base rails. An additional screw (B) is taken the force flatwise to the seating.

Detailzeichnung zum Bearbeiten aller Basisschienen H35, um die Aussparung für das Kupplungsstück bei vorhandenen Schienen nachträglich herzustellen.

Detail drawing for machining all base rails H35 to retrofit the recess for the coupling piece on existing rails.

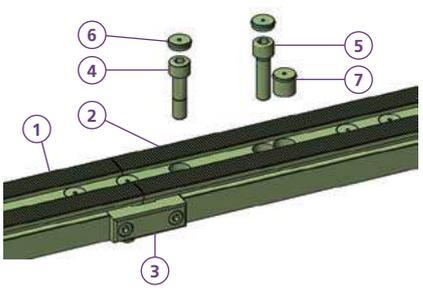


Montageanleitung siehe Video  
Assembly instructions see video

PCBP69SET		PCB4050250KP	PCB4050400KP	PCB4050450KP	PCB4050500KP	PCB4050650KP	PCB4050700KP
1	2x TW090078	5	5	5	5	5	5
2	4x M8X25ISO4762	L1 = 250	L1 = 400	L1 = 450	L1 = 500	L1 = 650	L1 = 700
4	1x M12X45ISO4762	kg ~5,1	kg ~7,9	kg ~8,9	kg ~9,9	kg ~12,8	kg ~13,8
kg	~0,4						

Bestellbeispiel / Ordering example: PCB4050250KP

PCB850SET	PCB900SET	PCB950SET	PCB1000SET
1	1x PCB4050400KP	1	2x PCB4050500KP
2	1x PCB4050450KP	2	1x PCBP69SET
3	1x PCBP69SET	3	4x TWPAS1240
4	4x TWPAS1240	4	6x M12X40ISO4762
5	5x M12X40ISO4762	5	10x PCPF16L6
6	9x PCPF16L6	6	11x PCPF16L6
7	9x PCPF16L18	7	12x PCPF16L18
kg	~17,8	kg	~19,8
		kg	~20,9



Bestellbeispiel / Ordering example: PCB850SET

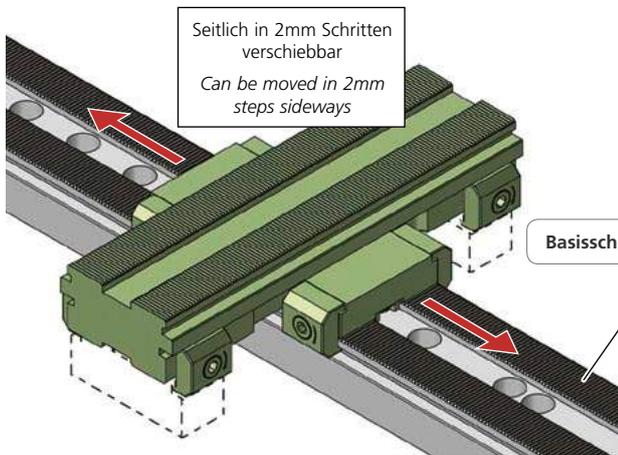


# Querschiene 90°

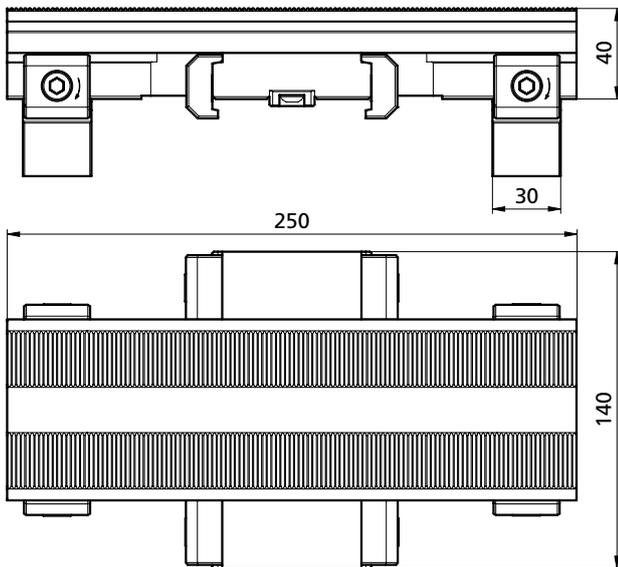
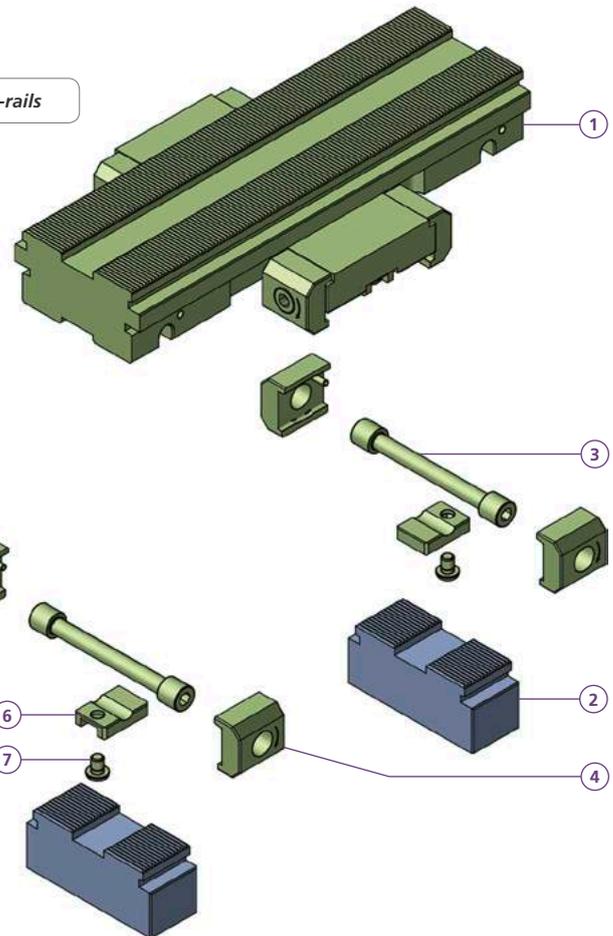
## Crossbar 90°

PCB250Q90-H35

powerCLAMP



Basisschienen / Base-rails



### Schienenhöhe / Rail height

#### PCB250Q90H35

- ① 1x TH151032
- ② 2x —
- ③ 4x PCS14
- ④ 4x PCSP30L
- ⑤ 4x PCSP30R
- ⑥ 4x PCGU2030
- ⑦ 1x M6X8ISO7380

kg ~8,18

#### AS35

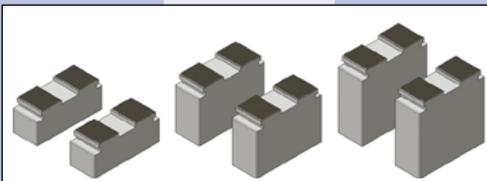
(H = 35)

#### AS60

(H = 60)

#### AS80

(H = 80)



#### Seitliche Stützen

Bei Gebrauch der Querschiene 90°, werden je nach Höhe der Basisschiene auf dessen sie aufgesetzt sind, zwei seitliche Stützen AS35 / AS60 / AS80 unterlegt.

#### Side support

When using the cross rail 90°, a side support AS35 / AS60 / AS80 is underlaid, depending on the height of the base rail on which it is placed.

Bestellbeispiel / Ordering example: PCB250Q90H35

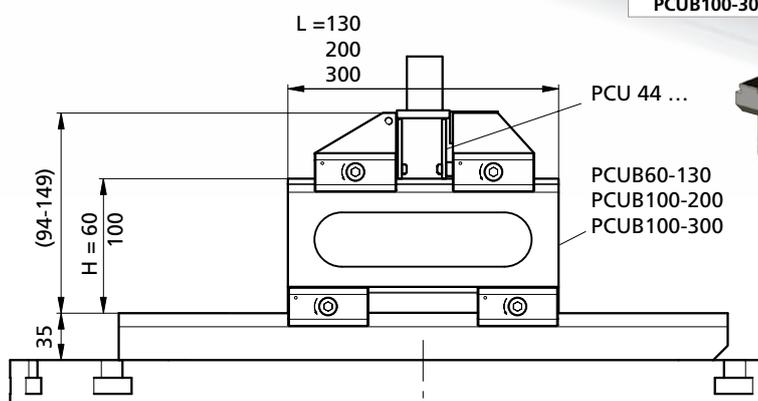
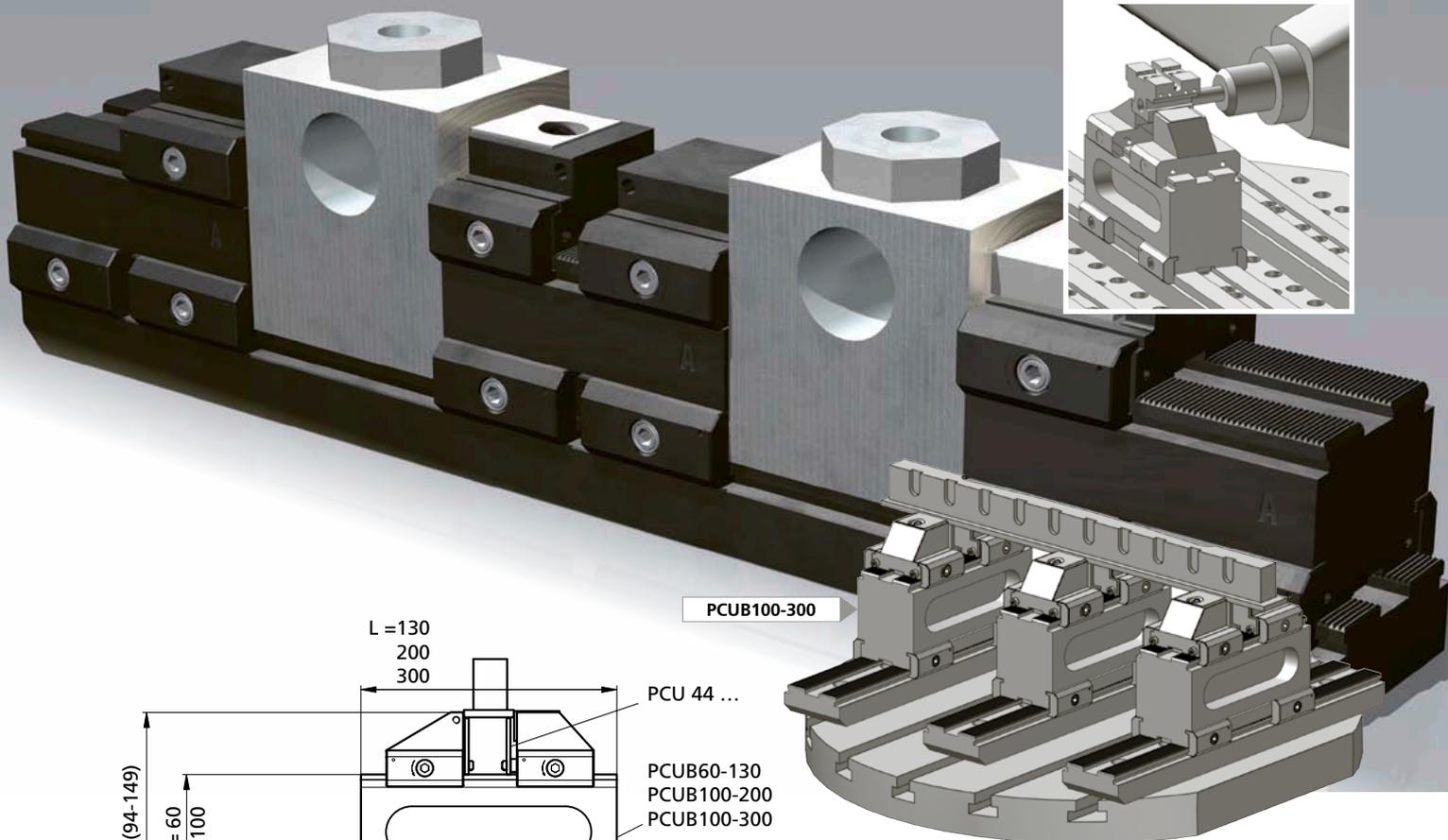
Separat bestellen / Separate order

**Erhöhung für 5-Achsenmaschinen**  
**Riser for 5-axes machines**

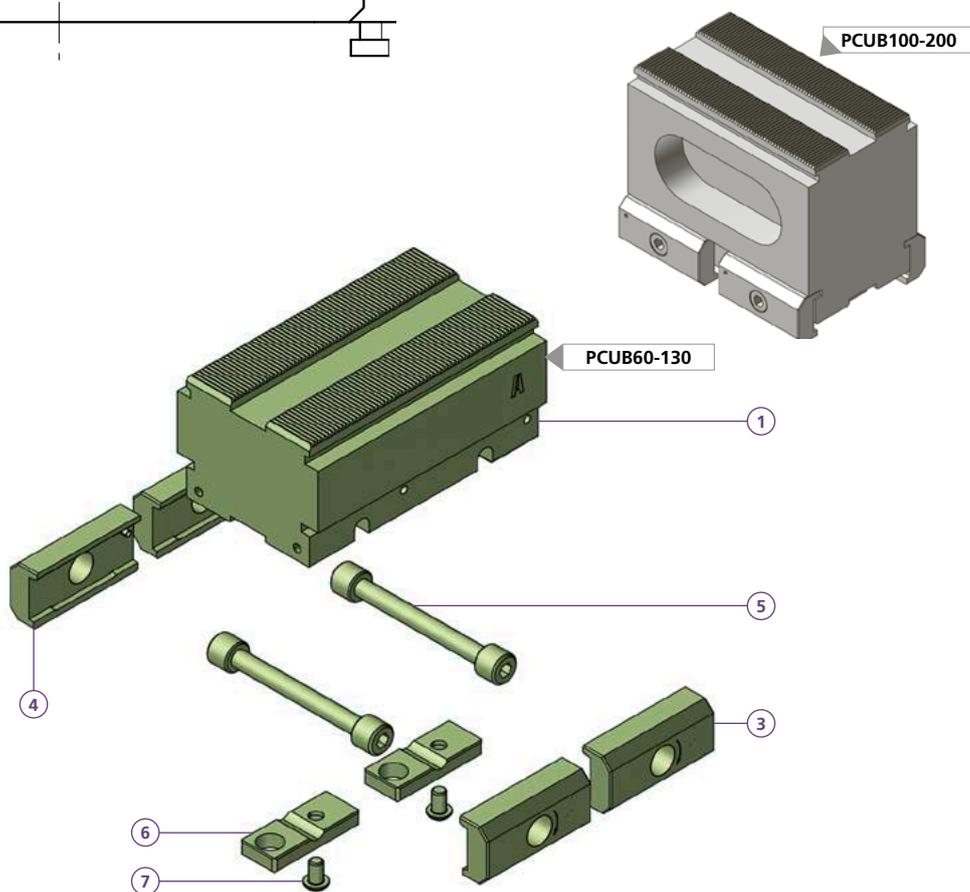
**PCUB60-130**  
**PCUB100-200**  
**PCUB100-300**



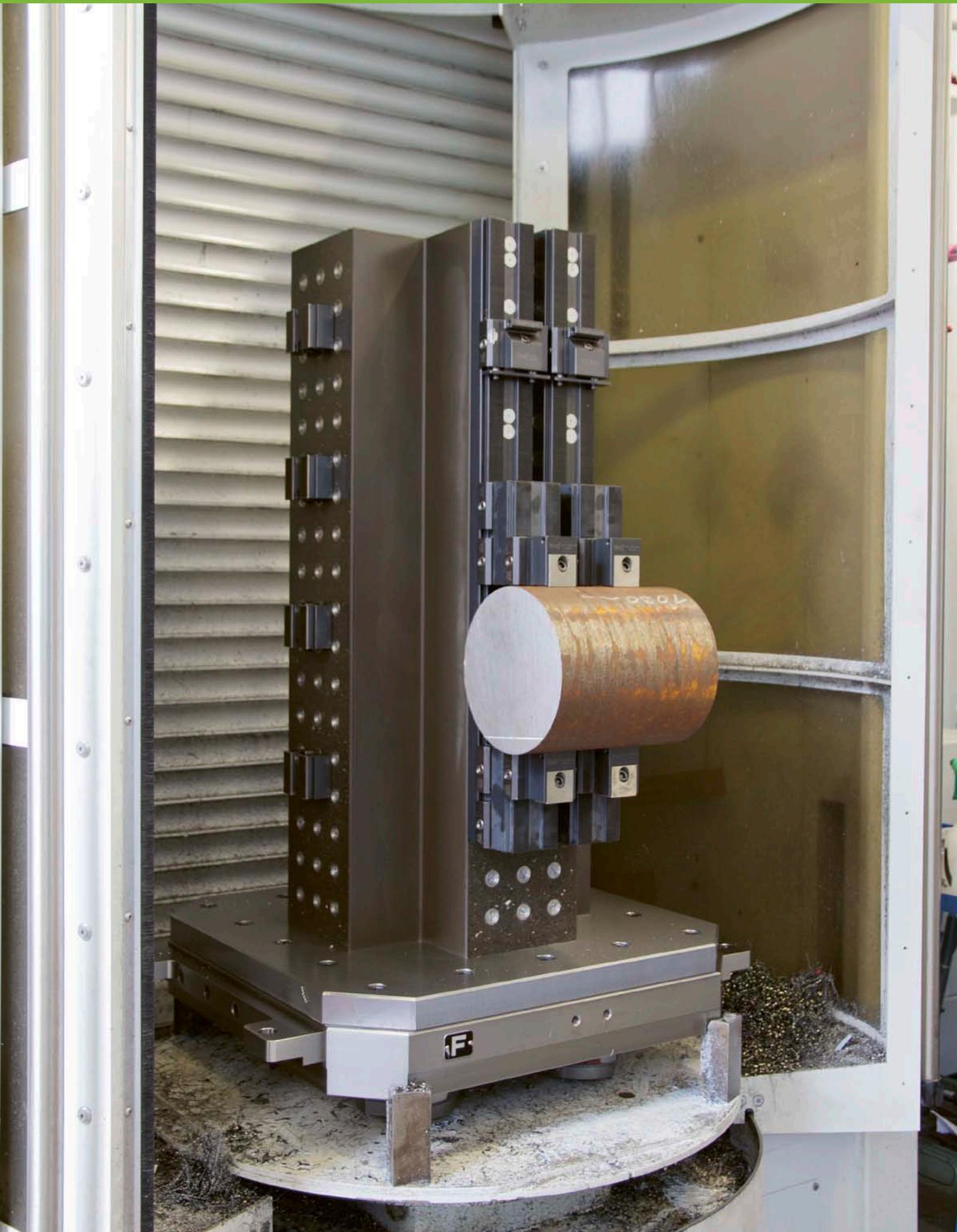
**powerCLAMP**



- | PCUB60-130 |                |
|------------|----------------|
| 1          | 1x TK120596    |
| 3          | 2x PCSP60R     |
| 4          | 2x PCSP60L     |
| 5          | 2x PCS14       |
| 6          | 2x PCGU2049    |
| 7          | 2x M6X8ISO7380 |
| L          | = 130          |
| H          | = 60           |
| kg         | ~5,8           |
- 
- | PCUB100-200 |             |
|-------------|-------------|
| 1           | 1x TK130108 |
| L           | = 200       |
| H           | = 100       |
| kg          | ~10,5       |
- 
- | PCUB100-300 |                |
|-------------|----------------|
| 1           | 1x TK130109    |
| 3           | 3x PCSP60R     |
| 4           | 3x PCSP60L     |
| 5           | 3x PCS14       |
| 6           | 3x PCGU2049    |
| 7           | 3x M6X8ISO7380 |
| L           | = 300          |
| H           | = 100          |
| kg          | ~16            |



Bestellbeispiel / Ordering example: **PCUB100-200**

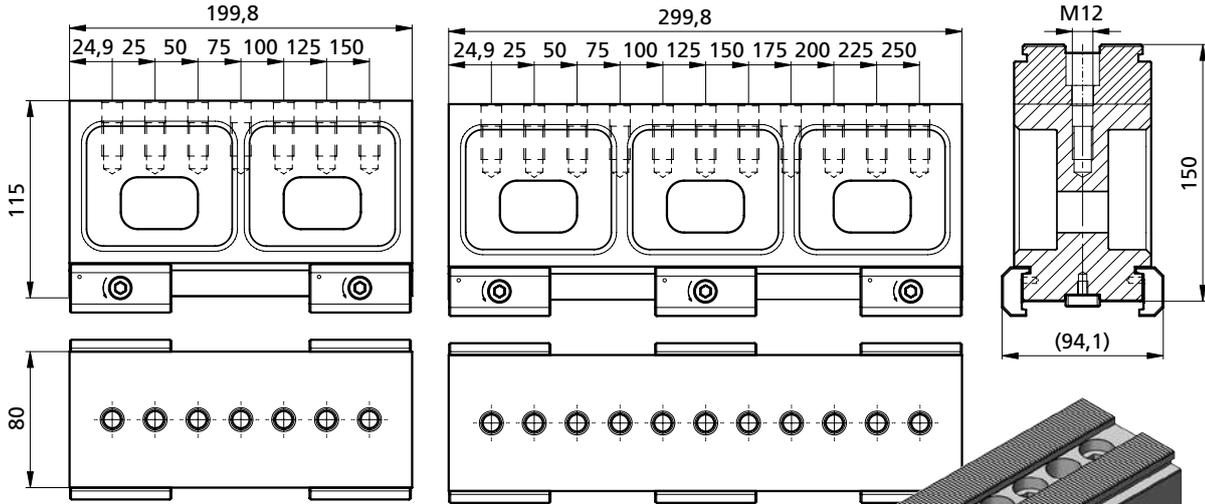




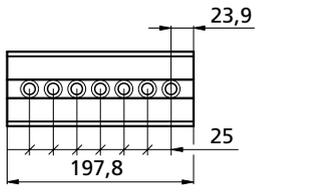
**PCUB115-200-R25**

**PCUB115-300-R25**

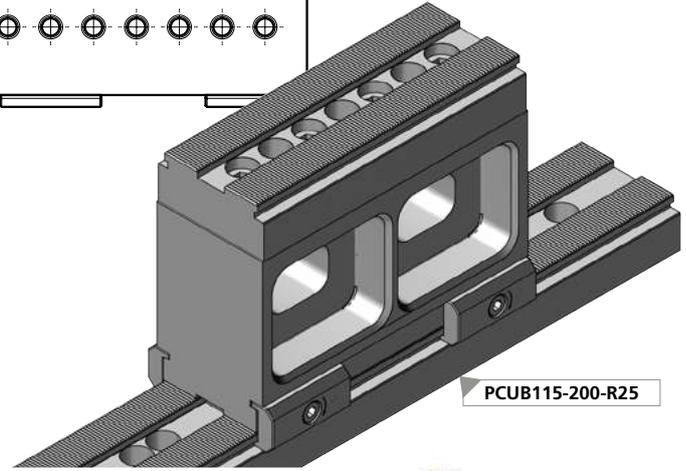
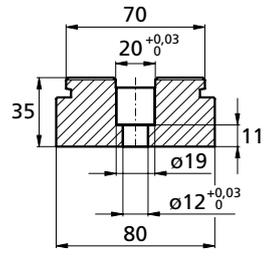
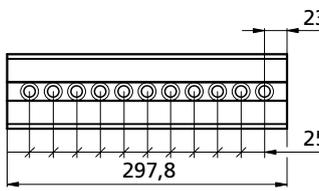
**powerCLAMP**



**PCB25200** kg ~3,6



**PCB25300** kg ~5,4



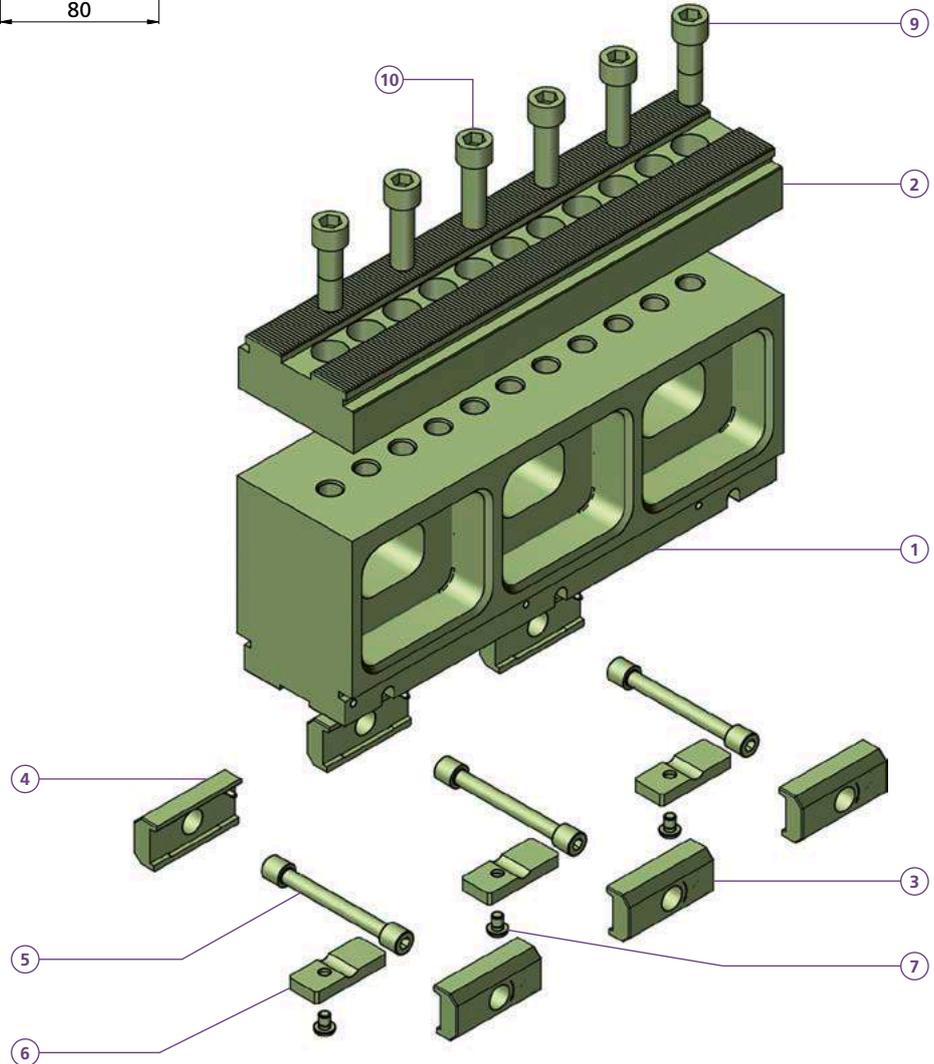
**PCUB115-200-R25**

**PCUB115-200-R25**

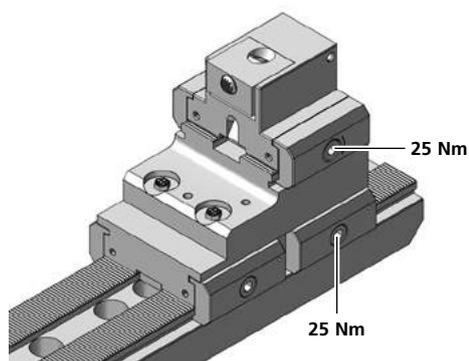
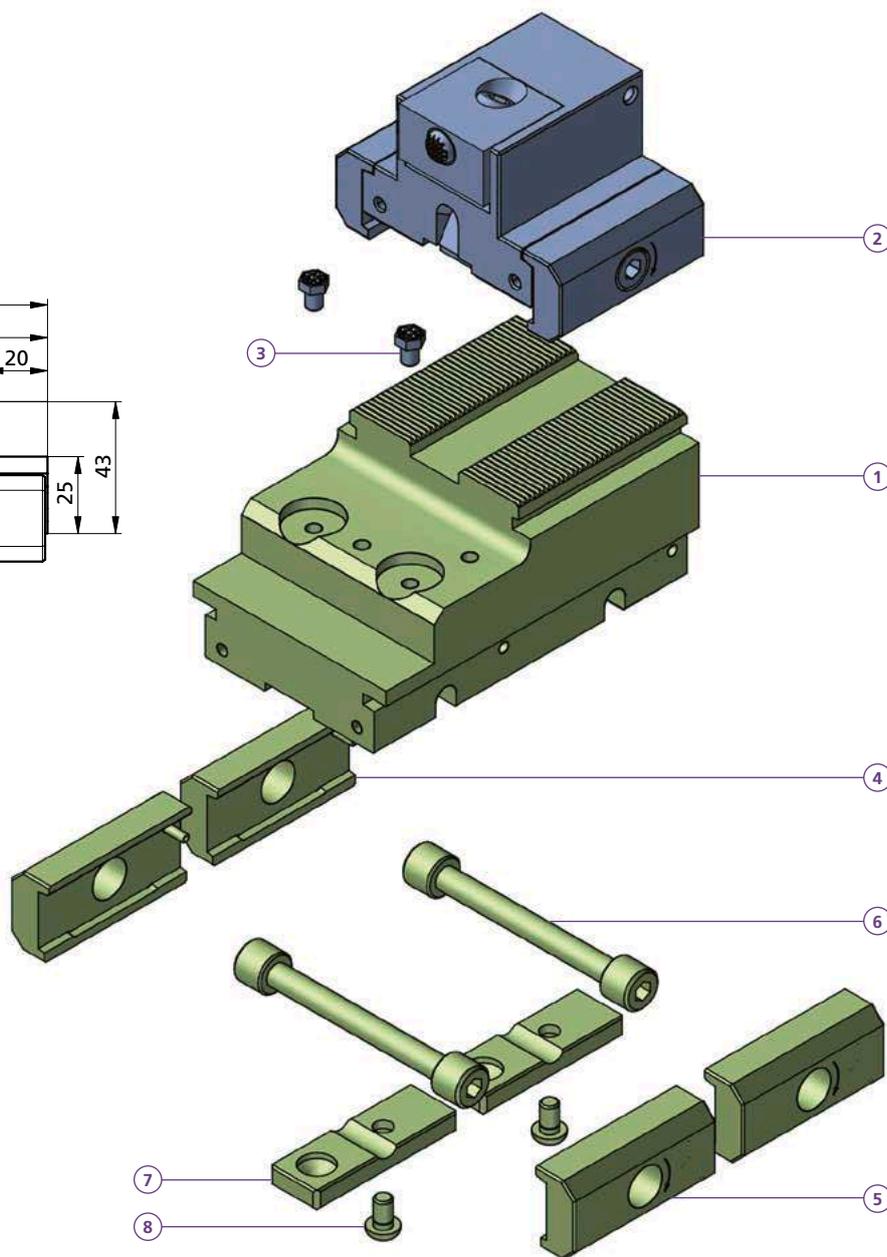
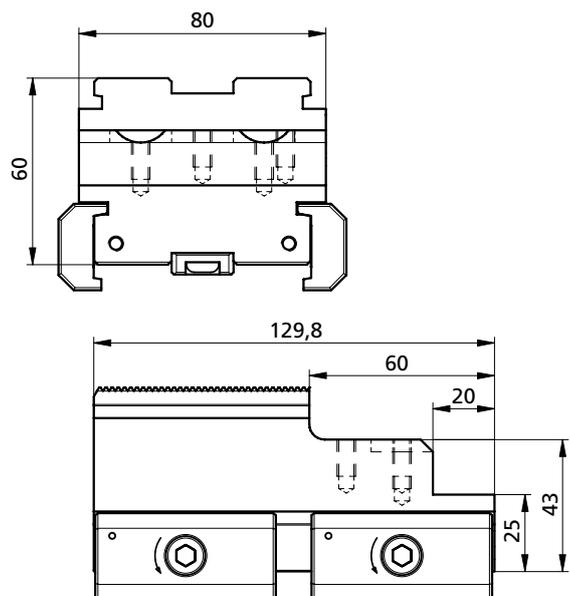
- 1 1x TK130323
  - 2 1x PCB25200
  - 3 2x PCSP60R
  - 4 2x PCSP60L
  - 5 2x PCS14
  - 6 2x PCGU2049
  - 7 2x M6X8ISO7380
  - 9 2x TWPAS1240
  - 10 2x M12X40ISO4762
- kg ~13

**PCUB115-300-R25**

- 1 1x TK130324
  - 2 1x PCB25300
  - 3 3x PCSP60R
  - 4 3x PCSP60L
  - 5 3x PCS14
  - 6 3x PCGU2049
  - 7 3x M6X8ISO7380
  - 9 2x TWPAS1240
  - 10 4x M12X40ISO4762
- kg ~19,6



Bestellbeispiel / Ordering example: **PCUB115-300-R25**



PCUB60-70-130	
①	1x TK130707
②	1x PS1F43N49-60
③	2x CCHMR
④	2x PCSP60L
⑤	2x PCSP60R
⑥	2x PCS14
⑦	2x PCGU2049
⑧	2x M6X8ISO7380
kg	~4,3

p. 64

Zubehör / Accessories p. 337

Bestellbeispiel / Ordering example: PCUB60-70-130

Separat bestellen / Separate order

# Schräge Basisschiene für 5-Achsenmaschinen

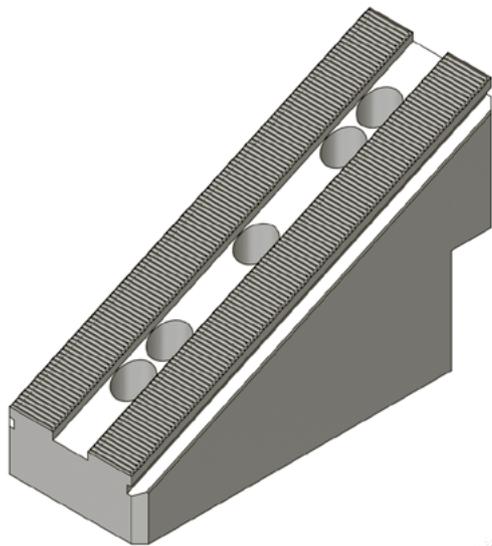
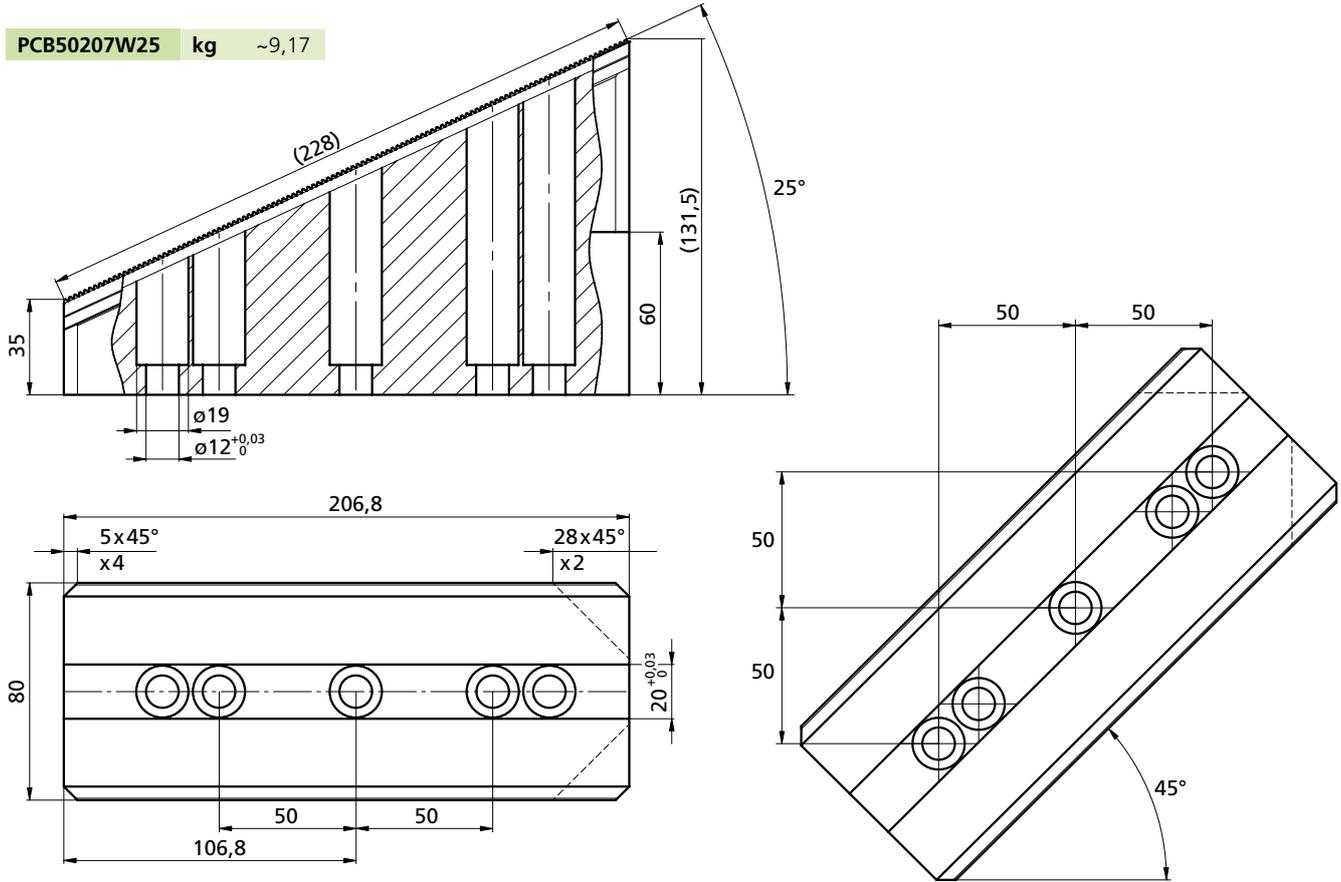
## Slanted base rail for 5-axes machines

PCB50207W25 25°



powerCLAMP

PCB50207W25 kg ~9,17

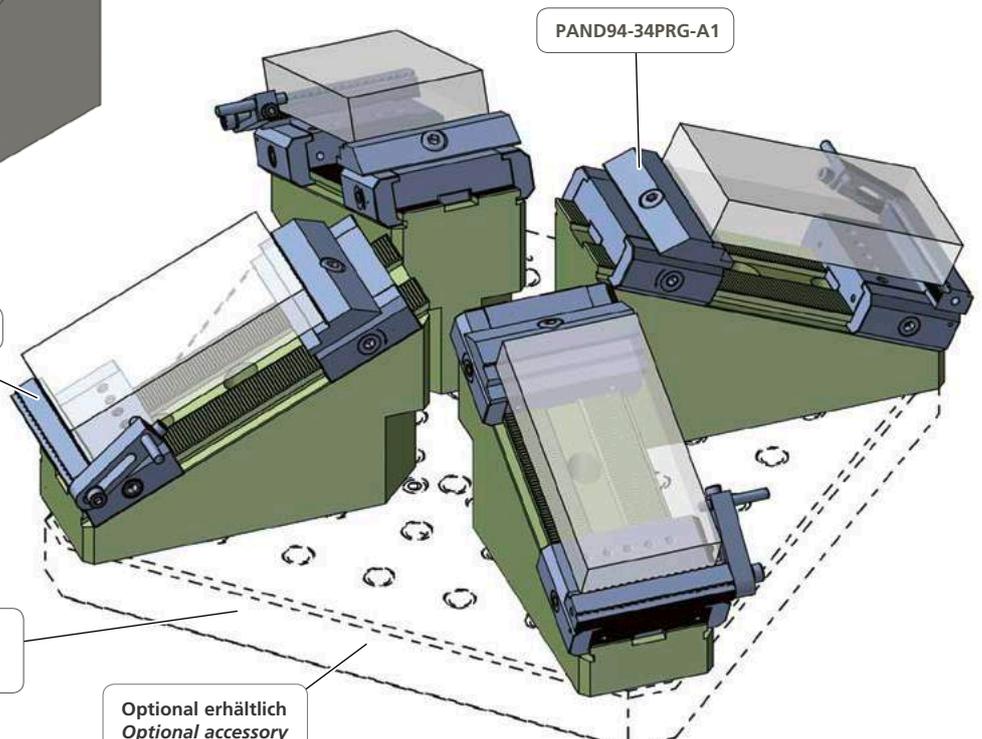


PS5X48L34-105 B120P

GPL400x40R50  
GPL500x40R50  
GPL630x40R50

Optional erhältlich  
Optional accessory

PAND94-34PRG-A1



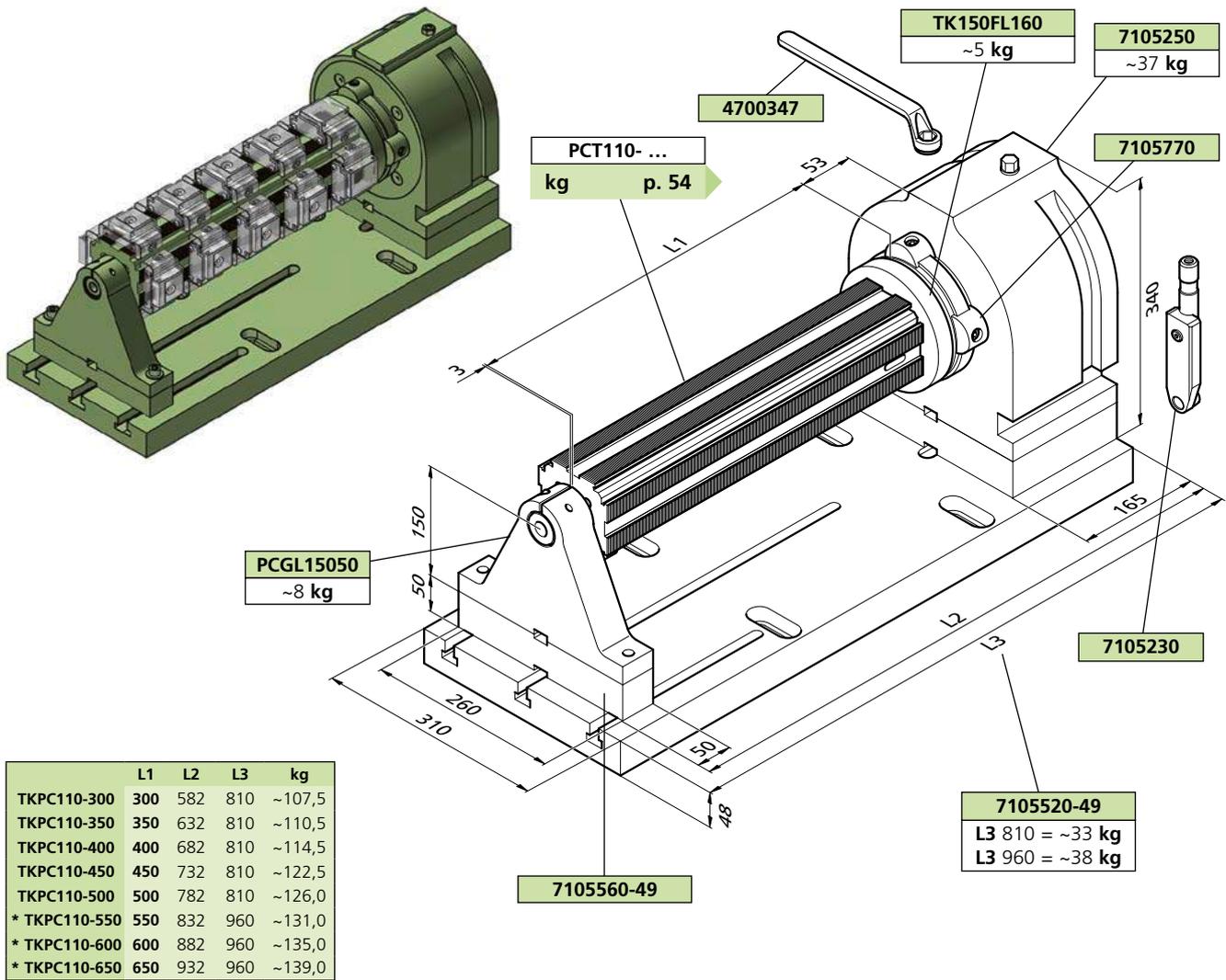
Bestellbeispiel / Ordering example: PCB50207W25

Separat bestellen / Separate order



**Teilapparat / PC Monobloc**  
**Indexing device / PC Monobloc**

**powerCLAMP**



\* Entspricht nicht der Abbildung  
 Does not correspond to the illustration

**Bestellbeispiel / Ordering example: TKPC110-300**





# Balken zu Teilapparat

## Monobloc Power Clamp for 4th-axis

powerCLAMP

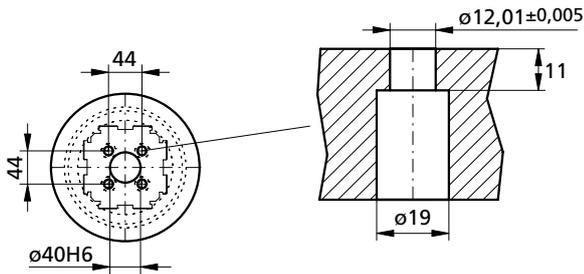
### Störkreis für Balken zu Teilapparat

Workpiece diameter for monobloc Power Clamp for 4th-axis

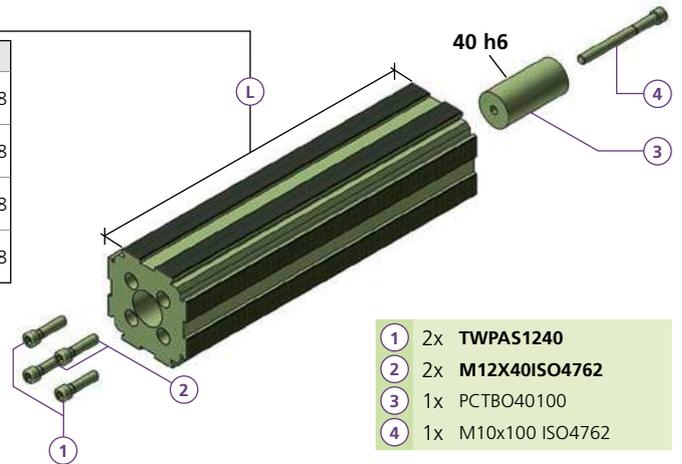
L	kg	Ø D			
PCT110-300	~24,5	255	241	211	224
B=110x110					
PCT110-350	~27,5	255	241	211	224
B=110x110					
PCT110-400	~31,5	255	241	211	224
B=110x110					
PCT110-450	~35,5	255	241	211	224
B=110x110					
PCT110-500	~39,5	255	241	211	224
B=110x110					
PCT110-550	~43,0	255	241	211	224
B=110x110					
PCT110-600	~47,0	255	241	211	224
B=110x110					
PCT110-650	~51,0	255	241	211	224
B=110x110					
PCT110-700	~55,2	255	241	211	224
B=110x110					

L	kg	Ø D		
PCMT150-700	~83	238	266	278
B=150x150				
PCMT150-750	~89	238	266	278
B=150x150				
PCMT150-800	~95	238	266	278
B=150x150				
PCMT150-850	~101	238	266	278
B=150x150				

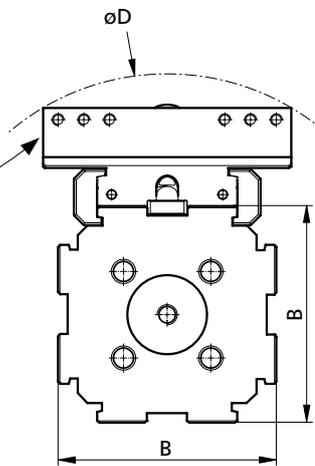
- PS1R43N49-B60
- PS1R94N34-B80
- PS1R94N49-B90
- PS1R125N49-B95



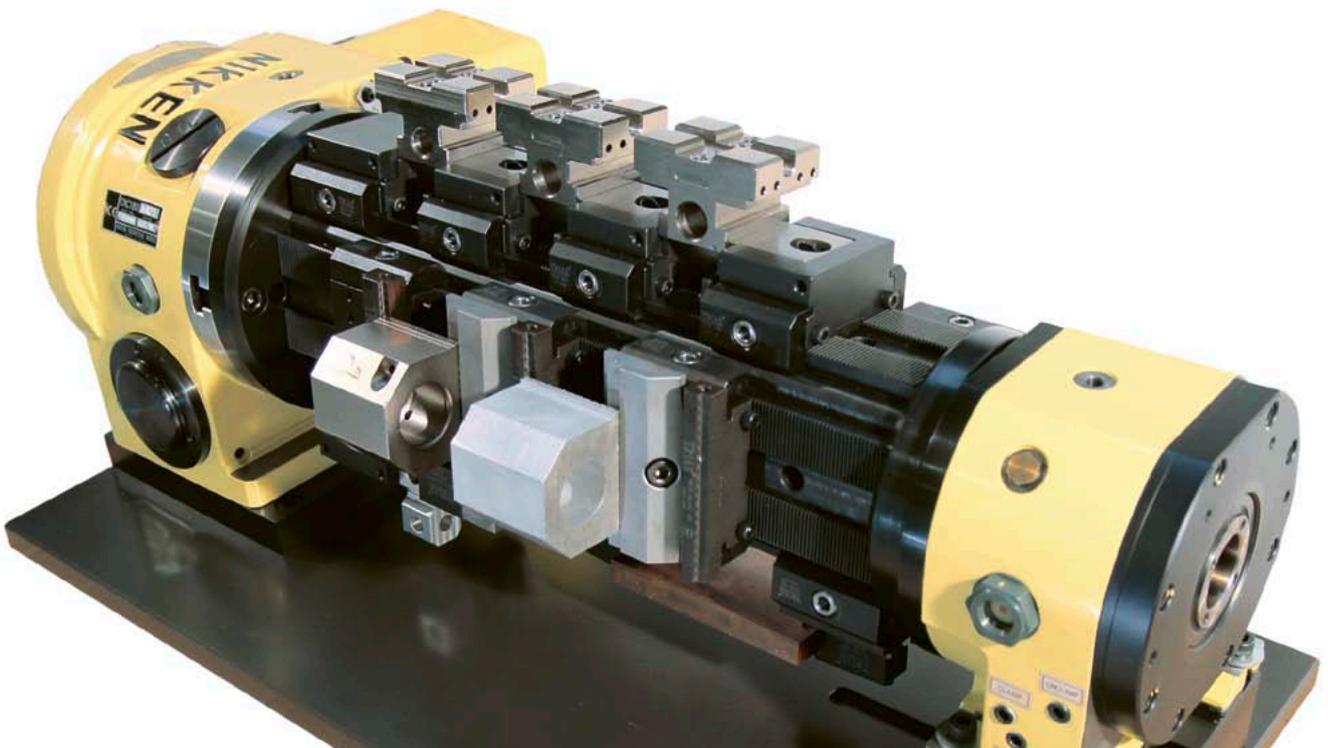
Monobloc powerCLAMP 110 x 110 x ...



- 1 2x TWPAS1240
- 2 2x M12X40ISO4762
- 3 1x PCTBO40100
- 4 1x M10x100 ISO4762



Bestellbeispiel / Ordering example: PCT110-500





**Spanntürme zu 5-Achs Bearbeitungszentren**  
*Clamping fixtures for 5 axis machines*

**powerCLAMP**



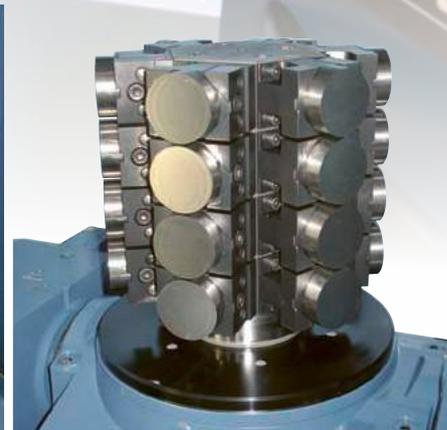
 **powerCLAMP**

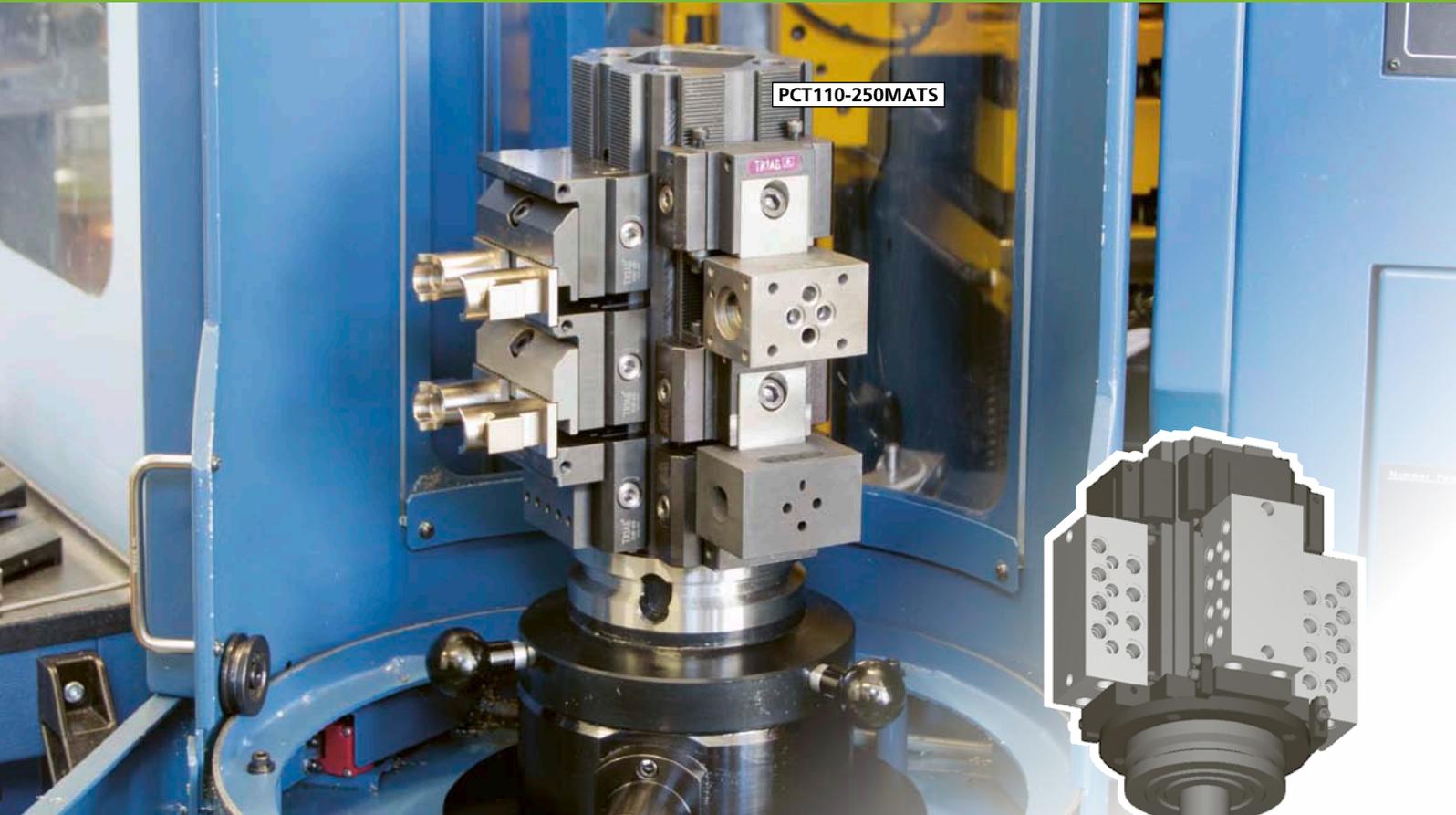
 **microCLAMP**

 **powerCLAMP**

 **triCENTRO**

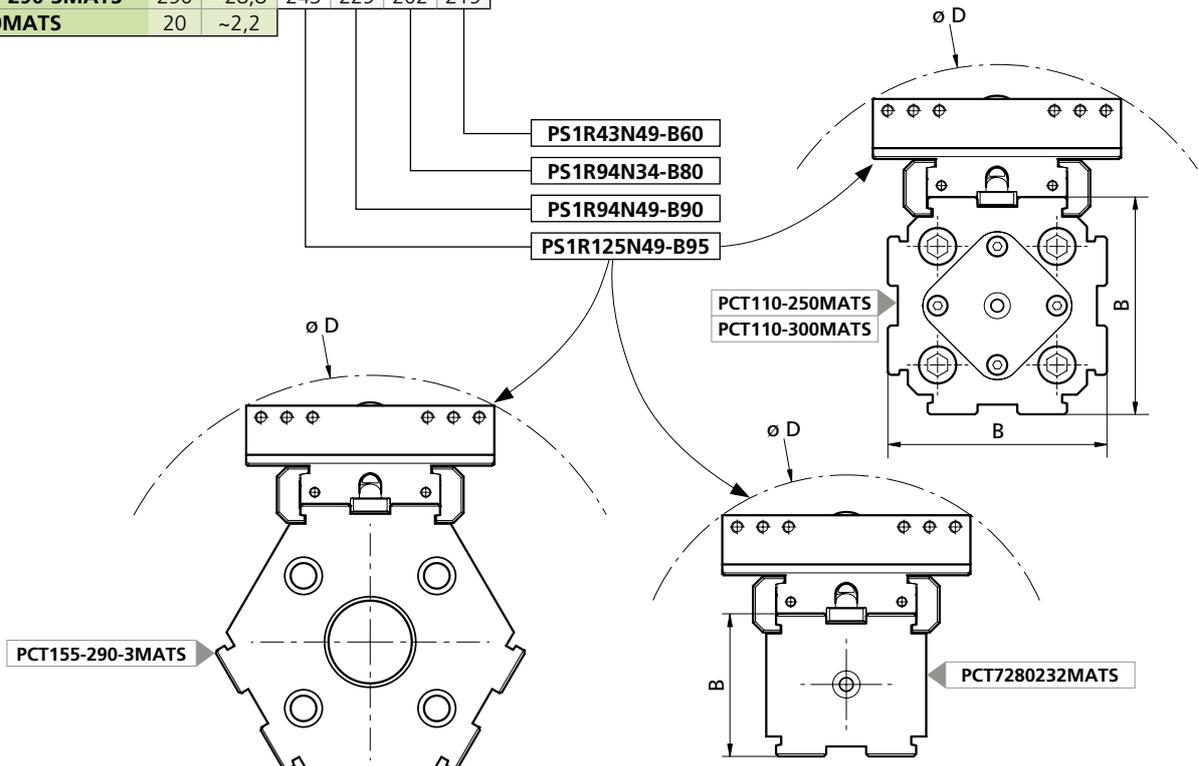
 **microCLAMP**





**Störkreis für MATS-Spanntürme**  
**Workpiece diameter for MATS clamping towers**

	H	kg	Ø D			
PCT110-250MATS	250	~20	255	241	211	224
PCT110-300MATS	300	~24	255	241	211	224
PCT7280232MATS	232	~11	211	195	161	176
PCT155-290-3MATS	290	~28,8	243	229	202	219
GPL160MATS	20	~2,2				



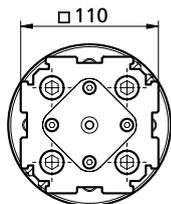
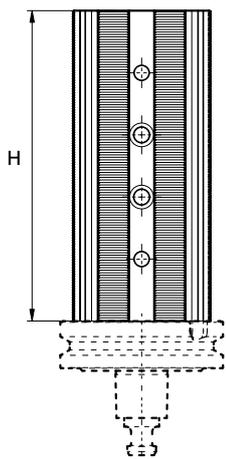
Bestellbeispiel / Ordering example: **PCT110-250MATS**

PCT110-250MATS  
 PCT110-300MATS  
 PCT155-290-3MATS

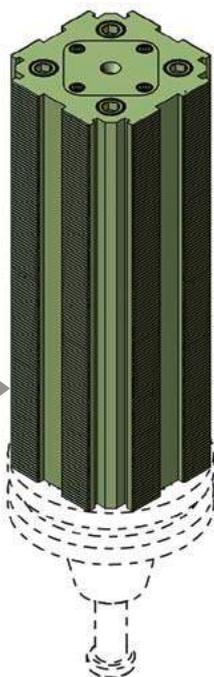
PCT7280232MATS  
 GPL160MATS



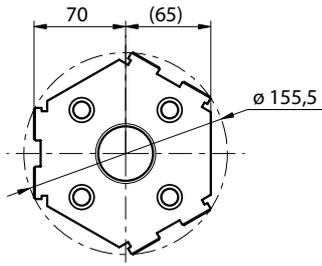
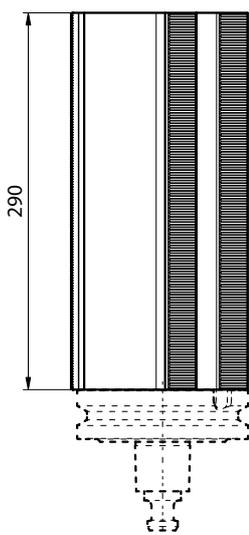
powerCLAMP



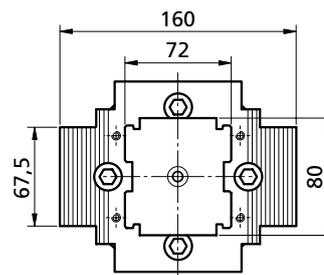
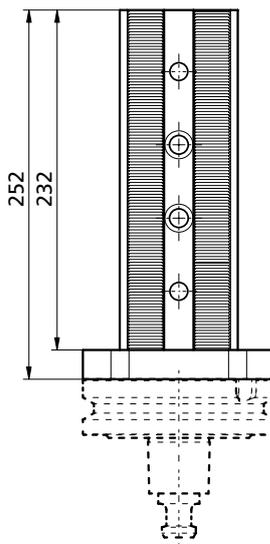
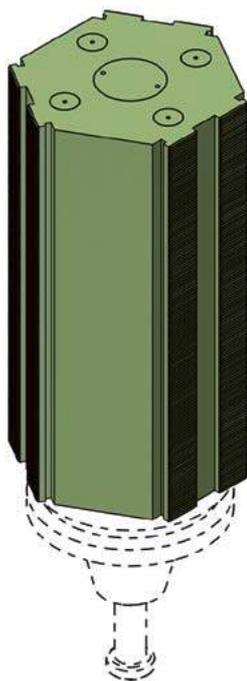
PCT110-250MATS



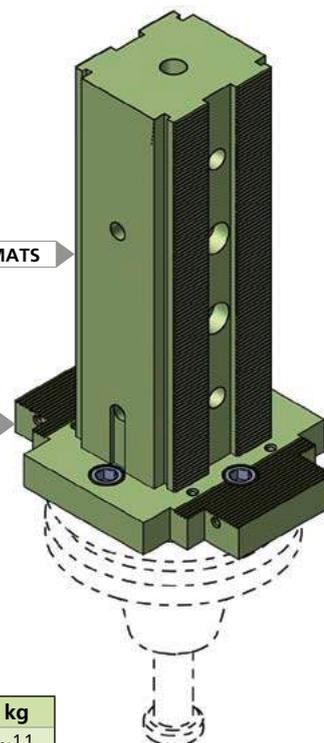
	H	kg
PCT110-250MATS	250	~20
PCT110-300MATS	300	~24



	H	kg
PCT155-290-3MATS	290	~28,8



PCT7280232MATS



GPL160MATS

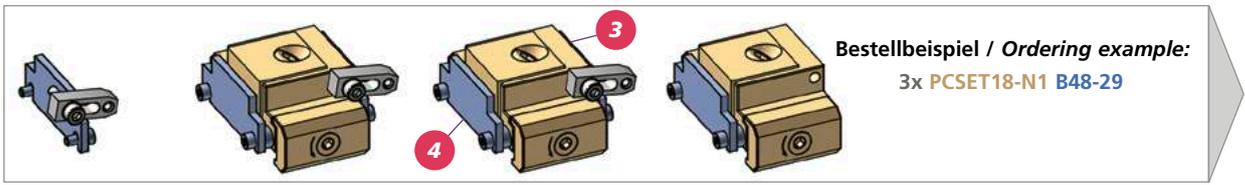
	H	kg
PCT7280232MATS	232	~11
GPL160MATS	20	~2,2

Separat bestellen / Separate order

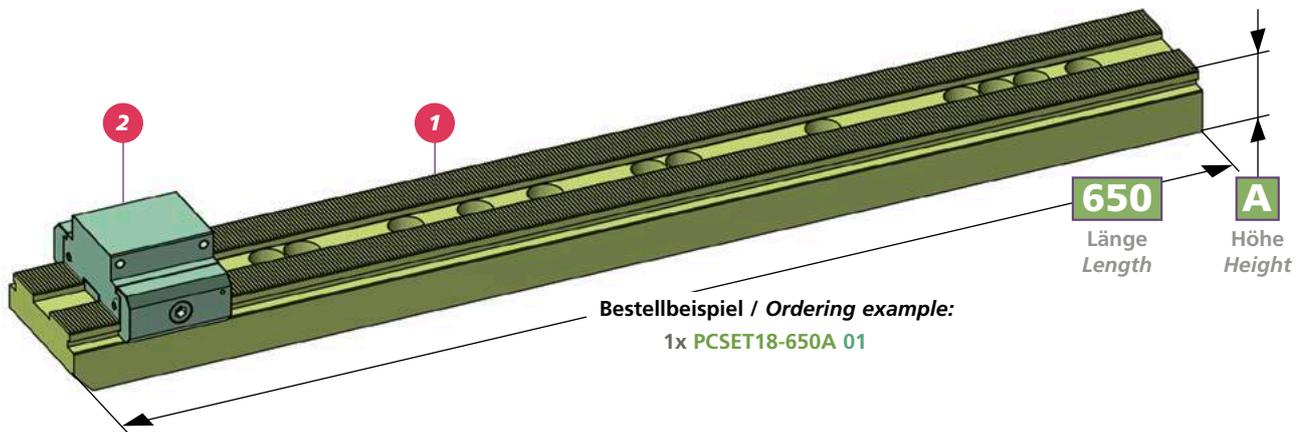
# Set Basisschiene und Anschlagmodul / Set base and endmodule

...X **PCSET18-650A** **01**

Stellen Sie Ihre eigenen Sets zusammen / Set up your own starter kits



Bestellbeispiel / Ordering example:  
3x PCSET18-N1 B48-29



Bestellbeispiel / Ordering example:  
1x PCSET18-650A 01

1

Zu jeder Basisschiene gehört 1 Anschlagmodul «Tabelle 2» nach Ihrer Wahl!  
To each base rail one end module «table 2» of your choice is included!

Basisschienen / Base-rails	<b>PCSET18-250A</b> PCB2550250	<b>PCSET18-500A</b> PCB4050500	<b>PCSET18-700A</b> PCB4050700	A=H35 
	<b>PCSET18-350A</b> PCB4050350	<b>PCSET18-550A</b> PCB4050550	<b>PCSET18-750A</b> PCB4050750	
	<b>PCSET18-400A</b> PCB4050400	<b>PCSET18-600A</b> PCB4050600	<b>PCSET18-800A</b> PCB4050800	
	<b>PCSET18-450A</b> PCB4050450	<b>PCSET18-650A</b> PCB4050650		
	<b>PCSET18-320B</b> PCB50-320H60	<b>PCSET18-650B</b> PCB100-650H60		B=H60 
	<b>PCSET18-400B</b> PCB100-400H60	<b>PCSET18-690B</b> PCB100-690H60		
	<b>PCSET18-500B</b> PCB100-500H60	<b>PCSET18-850B</b> PCB100-850H60		
	<b>PCSET18-600B</b> PCB100-600H60			

2

Anschlagmodule / End modules	Breite / Width 48mm		Breite / Width 78mm		Breite / Width 94mm	
	<b>PAND48-34</b>  H=34	<b>PAND48-49</b>  H=49	<b>PAND78-34</b>  H=34	<b>PAND78-49</b>  H=49	<b>PAND94-34</b>  H=34	<b>PAND94-49</b>  H=49
	<b>01</b>	<b>02</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b>
prägen / stamping			prägen / stamping			
<b>PAND48-34PRF-A1</b>  H=34	<b>PAND48-49PRF-A1</b>  H=49			<b>PAND94-34PRF-A1</b>  H=34	<b>PAND94-49PRF-A1</b>  H=49	
<b>03</b>	<b>04</b>			<b>09</b>	<b>10</b>	





...X

PCSET18-N1

B48-29

3

Niederzugspannmodule / Pull down clamp modules

Breite / Width 48mm		Breite / Width 78mm		Breite / Width 94mm	
 PS1 R 48N34 B80N <b>PCSET18-N1</b> H=34	 PS1 R 48N49 B80N <b>PCSET18-N2</b> H=49	 PS1 R 78N49 B90R78 <b>PCSET18-N5</b> H=49	 PS1 F 78N49 B90F78 <b>PCSET18-N6</b> H=49	 PS1 R 94N49 B90 <b>PCSET18-N7</b> H=49	 PS1 F 94N49 B90 <b>PCSET18-N8</b> H=49
 PS1 F 48N34 B80N <b>PCSET18-N3</b> H=34	 PS1 F 48N49 B80N <b>PCSET18-N4</b> H=49			 PS1 R 94N49 B93 <b>PCSET18-N9</b> H=49	

Linearspannmodule / Linear clamp modules

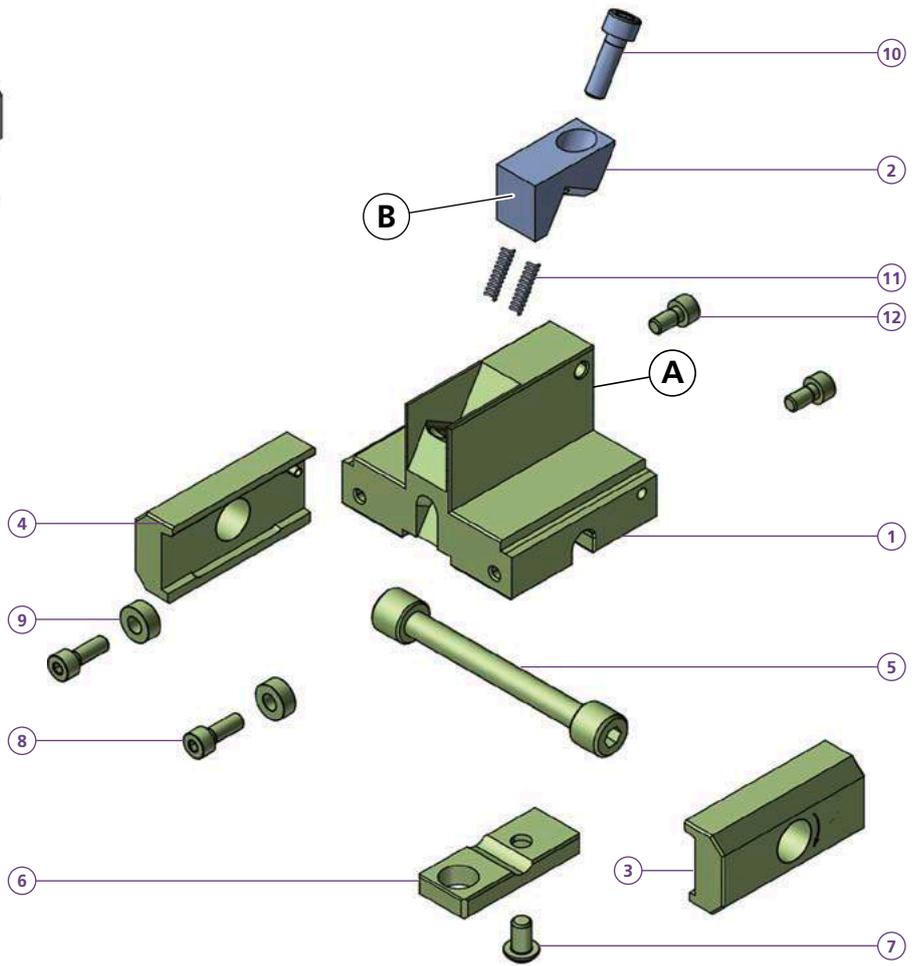
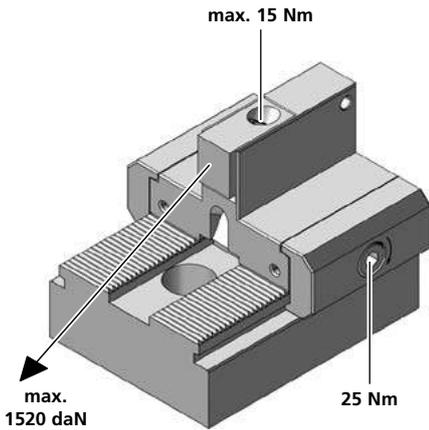
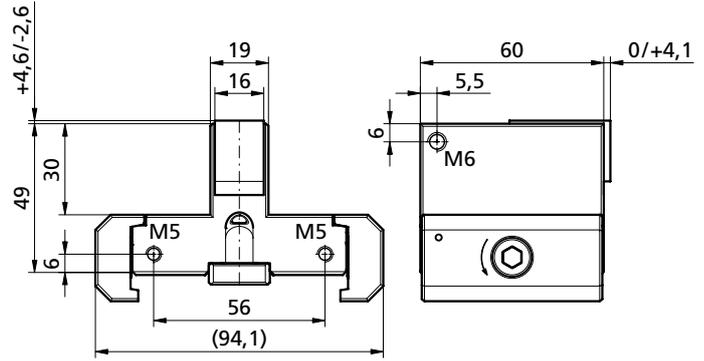
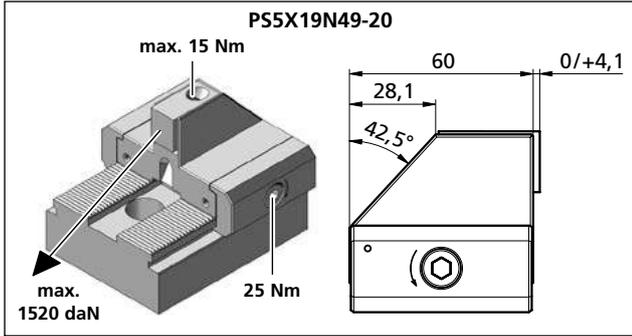
Breite / Width 48mm		Breite / Width 78mm		Breite / Width 94mm	
prägen / stamping					
 PS1 PF 48L34 B115P <b>PCSET18-L1</b> H=34	 PS1 PF 48L49 B115P <b>PCSET18-L2</b> H=49	 PS1 R 78L34 B141 <b>PCSET18-L5</b> H=34	 PS1 F 78L34 B140 <b>PCSET18-L6</b> H=34	 PS1 PF 94L34 B120P <b>PCSET18-L9</b> H=34	 PS1 PF 94L49 B120P <b>PCSET18-L11</b> H=49
 PS1 R 48L49 B106 <b>PCSET18-L3</b> H=49	 PS1 F 48L49 B105 <b>PCSET18-L4</b> H=49	 PS1 R 78L49 B141 <b>PCSET18-L7</b> H=49	 PS1 F 78L49 B140 <b>PCSET18-L8</b> H=49	 PS1 R 94L34 B111 <b>PCSET18-L12</b> H=34	 PS1 F 94L34 B110 <b>PCSET18-L13</b> H=34
 PS1 R 48L34 B106 <b>PCSET18-L16</b> H=34	 PS1 F 48L34 B105 <b>PCSET18-L17</b> H=34	* Bei jedem Spannmodule sind 2 Parallelunterlagen nach Ihrer Wahl und 1 Fräsanschlag enthalten		 PS1 R 94L49 B111 <b>PCSET18-L14</b> H=49	 PS1 F 94L49 B110 <b>PCSET18-L15</b> H=49

Each clamp module included 2 parallels of your choice and 1 milling buffer

4

Inkl. 2 x Parallelunterlage  
Incl. 2 x Steel parallels

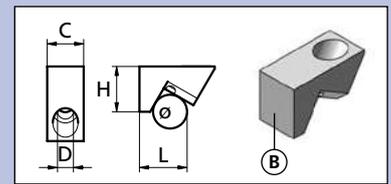
Breite / Width 48mm	Breite / Width 78mm	Breite / Width 94mm	Fräsanschlag Milling buffer																																																								
 PCU29047	 PCU39077	 PCU29093	1 x Inklusive / Included  FA1240																																																								
<table border="1"> <thead> <tr> <th>B48-</th> <th>H*</th> </tr> </thead> <tbody> <tr><td>PCU 20</td><td>047</td></tr> <tr><td>PCU 24</td><td>047</td></tr> <tr><td>PCU 29</td><td>047</td></tr> <tr><td>PCU 31</td><td>047</td></tr> <tr><td>PCU 34</td><td>047</td></tr> <tr><td>PCU 39</td><td>047</td></tr> <tr><td>PCU 44</td><td>047</td></tr> <tr><td>PCU 46</td><td>047</td></tr> </tbody> </table>	B48-	H*	PCU 20	047	PCU 24	047	PCU 29	047	PCU 31	047	PCU 34	047	PCU 39	047	PCU 44	047	PCU 46	047	<table border="1"> <thead> <tr> <th>B78-</th> <th>H*</th> </tr> </thead> <tbody> <tr><td>PCU 20</td><td>077</td></tr> <tr><td>PCU 24</td><td>077</td></tr> <tr><td>PCU 29</td><td>077</td></tr> <tr><td>PCU 31</td><td>077</td></tr> <tr><td>PCU 34</td><td>077</td></tr> <tr><td>PCU 39</td><td>077</td></tr> <tr><td>PCU 44</td><td>077</td></tr> </tbody> </table>	B78-	H*	PCU 20	077	PCU 24	077	PCU 29	077	PCU 31	077	PCU 34	077	PCU 39	077	PCU 44	077	<table border="1"> <thead> <tr> <th>B94-</th> <th>H*</th> </tr> </thead> <tbody> <tr><td>PCU 14</td><td>093</td></tr> <tr><td>PCU 20</td><td>093</td></tr> <tr><td>PCU 24</td><td>093</td></tr> <tr><td>PCU 29</td><td>093</td></tr> <tr><td>PCU 31</td><td>093</td></tr> <tr><td>PCU 34</td><td>093</td></tr> <tr><td>PCU 39</td><td>093</td></tr> <tr><td>PCU 44</td><td>093</td></tr> <tr><td>PCU 46</td><td>093</td></tr> <tr><td>PCU 47</td><td>093</td></tr> </tbody> </table>	B94-	H*	PCU 14	093	PCU 20	093	PCU 24	093	PCU 29	093	PCU 31	093	PCU 34	093	PCU 39	093	PCU 44	093	PCU 46	093	PCU 47	093	
B48-	H*																																																										
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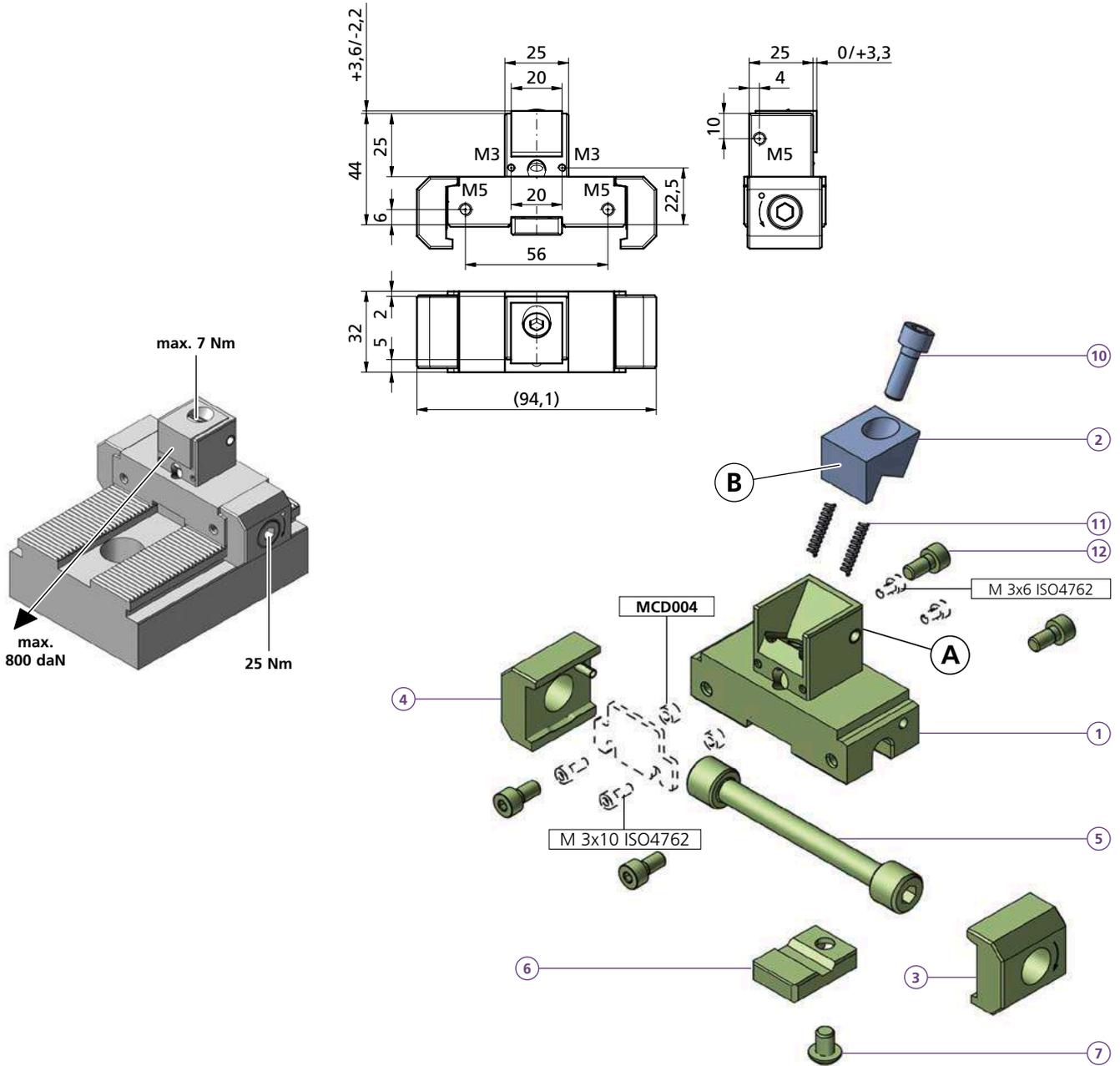


	<b>PS5X19N49-20</b>
1	1x TF140449
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,1
	<b>PS1F19N49-20</b>
1	1x TF150961
	<b>PS1R19N49-20</b>
1	1x TF140448
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M6X20ISO4762
11	2x FED0418
12	2x M5X10ISO4762
kg	~1,2

			
	<b>B20</b>	<b>B21</b>	<b>B22</b>
C	16	16	16
H	20	20	20
L	19	19	19
D	6,5	6,5	6,5
ø	12	12	12
i	HV700	HV700	*
	x0,2mm	x0,2mm	
kg	~0,06	~0,06	~0,06

Bestellbeispiel / Ordering example: 1x PS1R19N49-20 & 1x B21





<b>PS1F25N44-13</b>	
①	1x TF150960
<b>PS1R25N44-13</b>	
①	1x TF140450
②	1x
③	1x PCSP30R
④	1x PCSP30L
⑤	1x PCS14
⑥	1x PCGU2030
⑦	1x M6X8ISO7380
⑩	1x M6X16ISO4762
⑪	2x FED03018
⑫	4x M5X10ISO4762
kg	~0,6

<b>Bestellbeispiel / Ordering example: 1x PS1R25N44-13 &amp; 1x B14</b>				
	<b>B13</b>	<b>B14</b>	<b>B15</b>	<b>B16</b>
③	20	20	20	20
④	16	16	16	16
⑤	13,8	13,8	13,8	19
⑥	6,5	6,5	6,5	6,5
⑦	10	10	10	10
i	HV700	HV700	*	*
	x0,2mm	x0,2mm		
kg	~0,05	~0,05	~0,05	~0,06

	H	B	N	kg
MCU11037	11	23	2	~0,004
MCU15037	15	23	2	~0,006
MCU18037	18	23	2	~0,008
MCU20037	20	23	2	~0,008
MCU22537	22,5	23	2	~0,008
	2x	<b>M3X10ISO4762</b>		
	2x	<b>M3X6ISO4762</b>		
	2x	MCD 004		

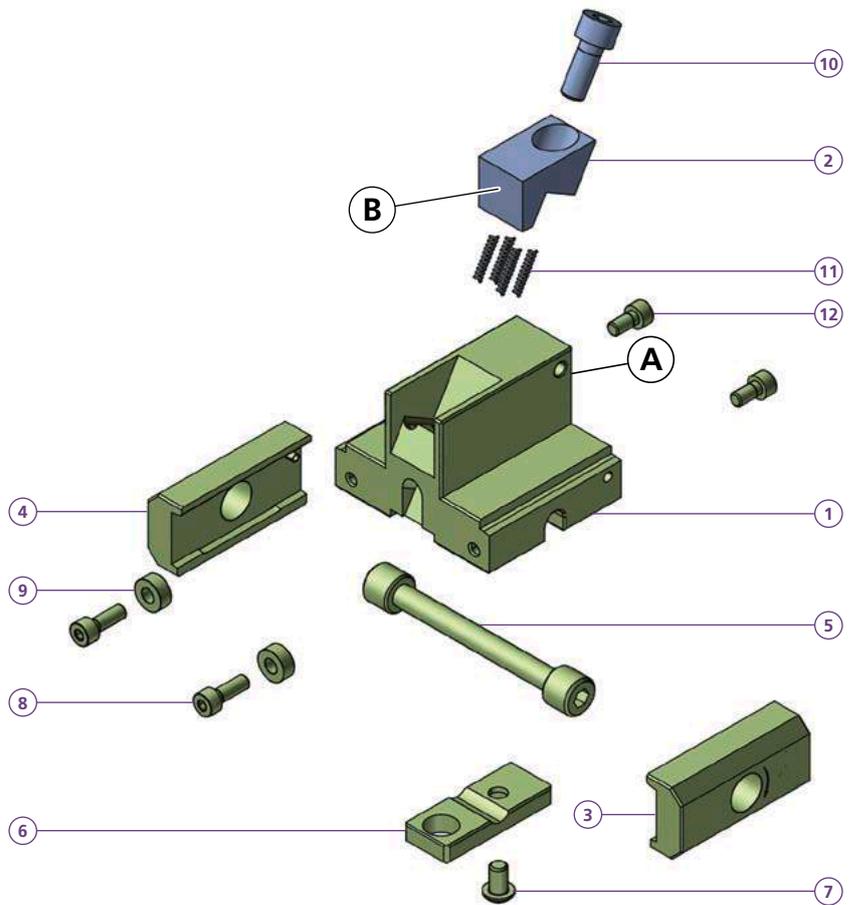
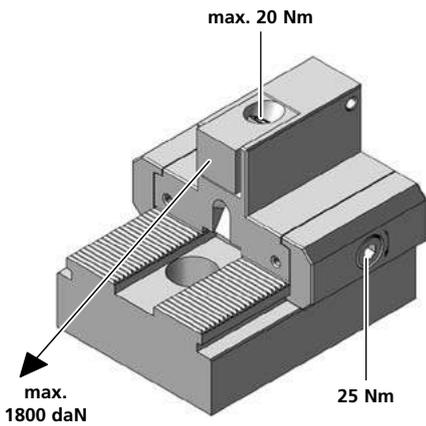
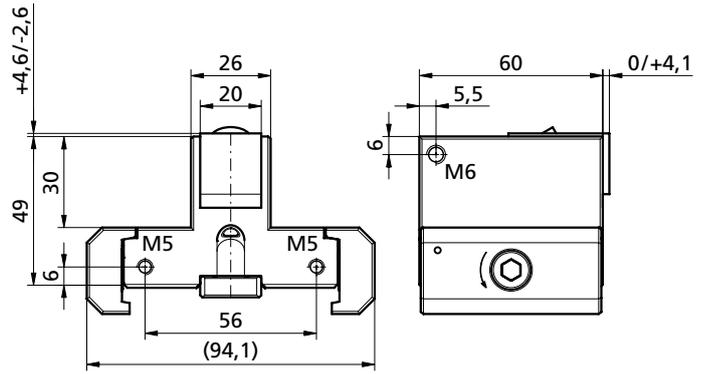
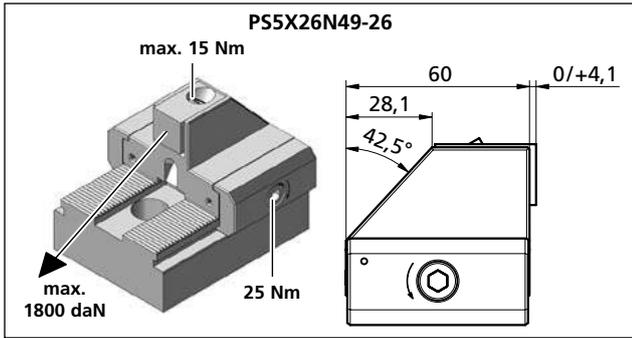
\* = weicher Stahl / soft steel



PS1R/F26N49-26

PS5X26N49-26

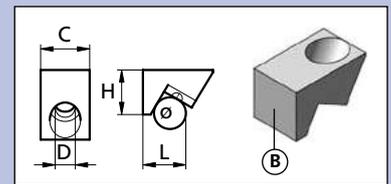
powerCLAMP



<b>PS5X26N49-26</b>	
1	1x TF140453
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,1
<b>PS1F26N49-26</b>	
1	1x TF140451
<b>PS1R26N49-26</b>	
1	1x TF140452
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X20ISO4762
11	4x FED0418
12	2x M5X10ISO4762
kg	~1,2

<b>B</b>	<b>B26</b>	<b>B27</b>	<b>B28</b>
C	20	20	20
H	20	20	20
L	19	19	19
D	9	9	9
ø	12	12	12
i	HV700	HV700	*
	x0,2mm	x0,2mm	
kg	~0,07	~0,07	~0,07

Bestellbeispiel / Ordering example: 1x PS1R26N49-26 & 1x B26

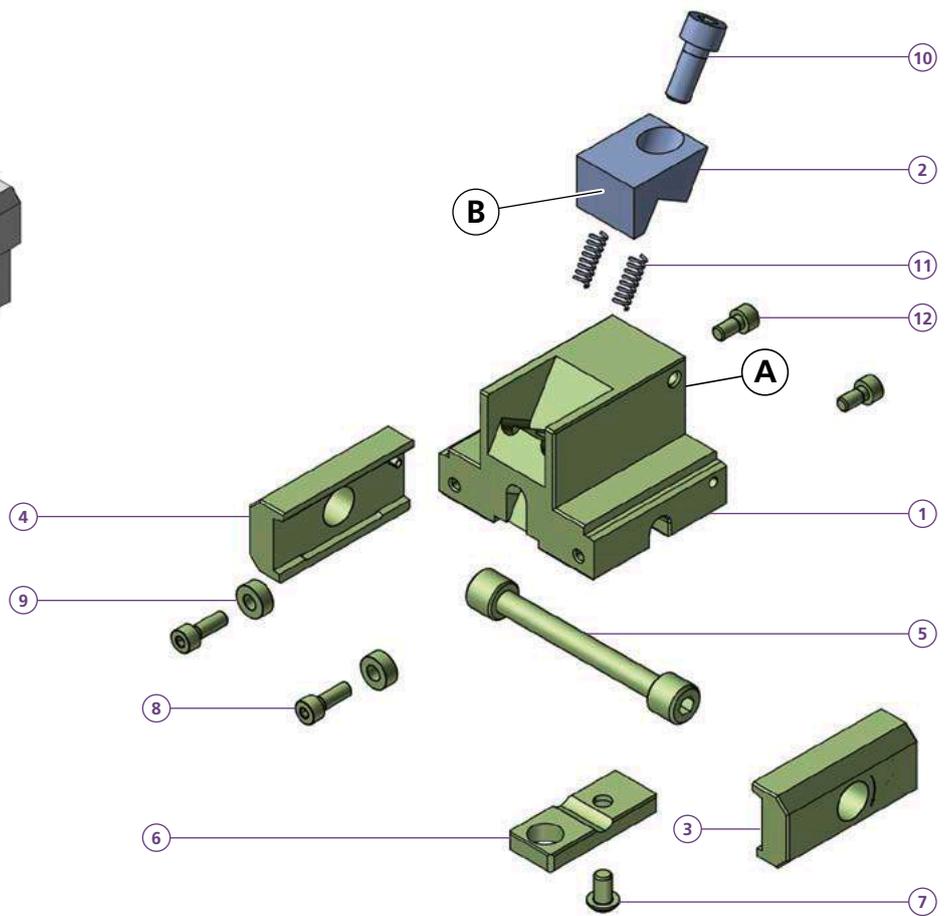
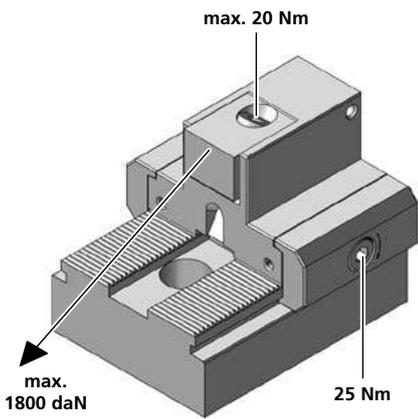
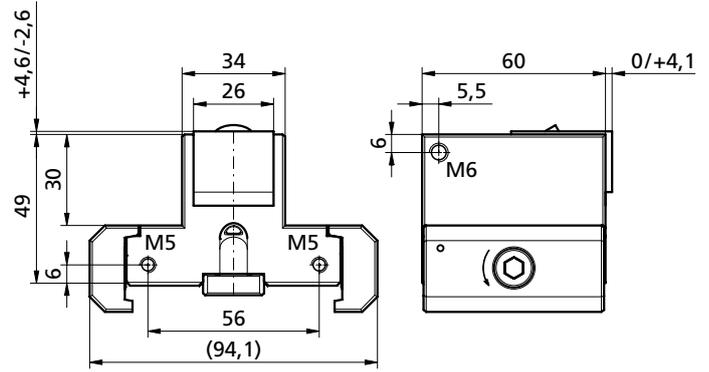
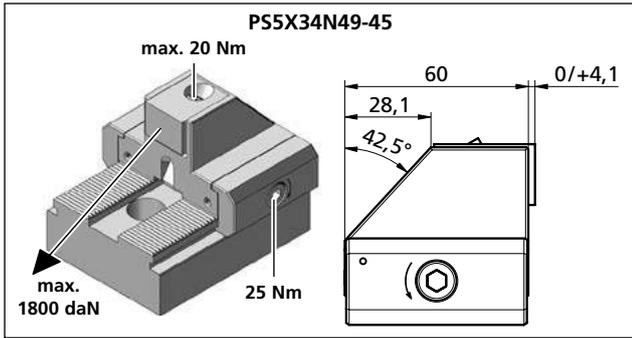




PS1R/F34N49-45

PS5X34N49-45

powerCLAMP



<b>PS5X34N49-45</b>	
1	1x TF140455
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,2
<b>PS1F34N49-45</b>	
1	1x TF191071
<b>PS1R34N49-45</b>	
1	1x TF140454
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X20ISO4762
11	2x FED0618
12	2x M5X10ISO4762
kg	~1,3

Bestellbeispiel / Ordering example: 1x PS5X34N49-45 & 1x B47HM

	B45	B46	B47	B47HM
C	26	26	26	26
H	20	20	20	20
L	19	19	19,1	19,1
D	9	9	9	9
ø	12	12	12	12
i	HV700	HV700	*	HM
	x0,2mm	x0,2mm		
kg	~0,1	~0,1	~0,1	~0,1

\* = weicher Stahl / soft steel

HM = Hartmetallbeschichtet / Carbide coated

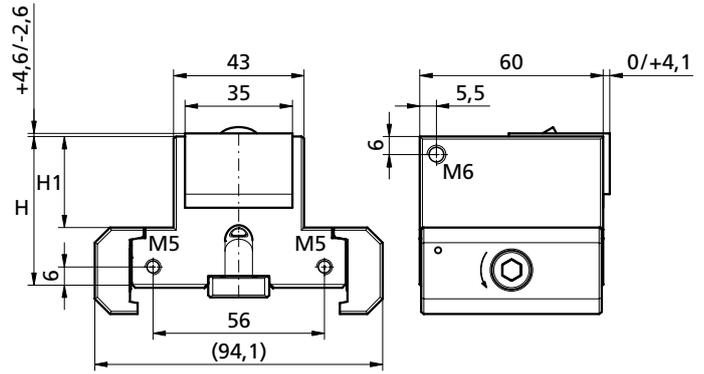
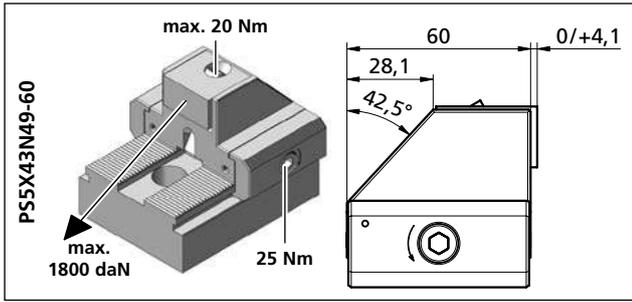


PS1R/F43N49-60

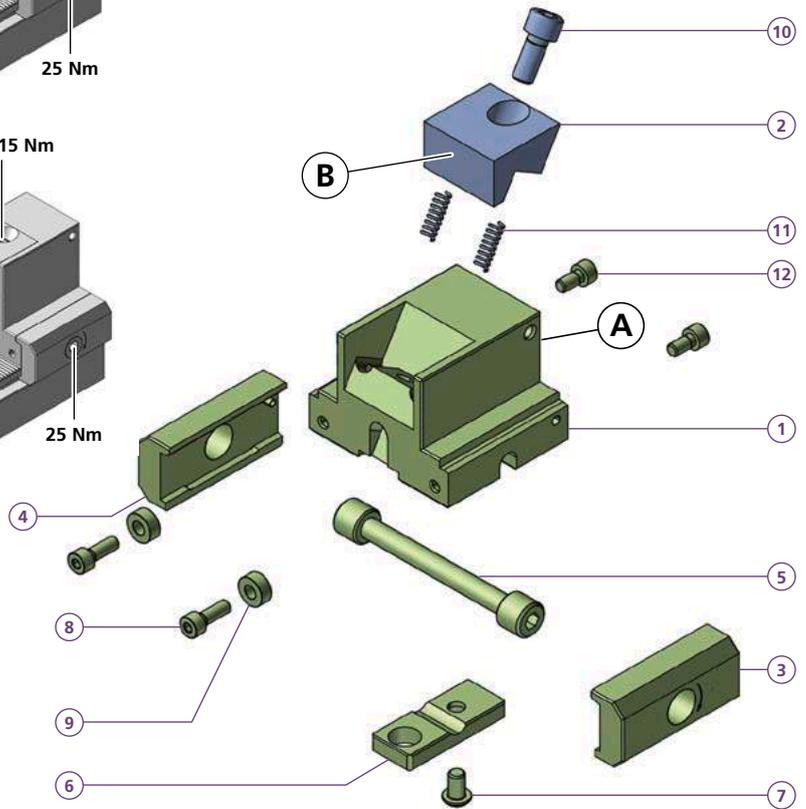
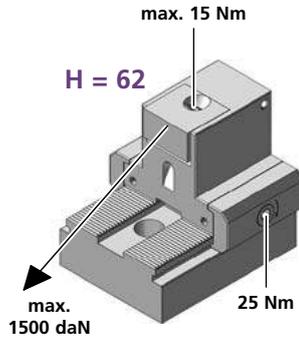
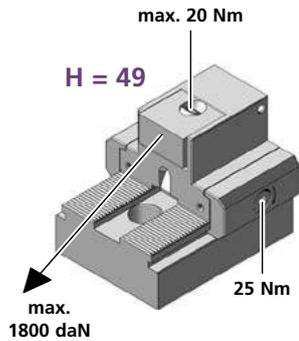
PS1R/F43N62-60

PS5X43N49-60

powerCLAMP

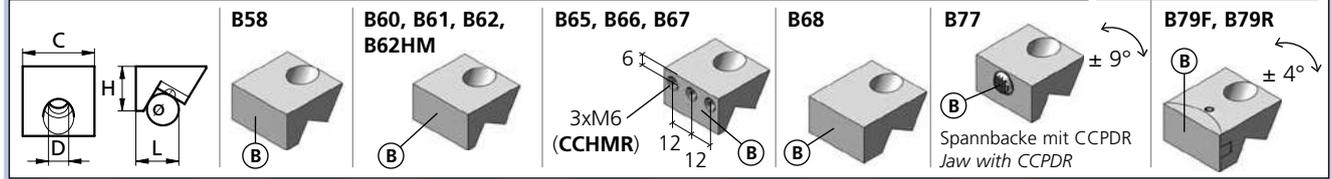
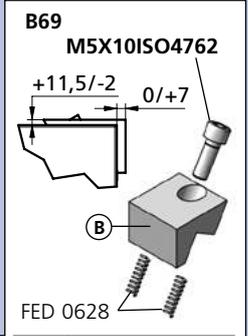


- PS5X43N49-60**
- 1 1x TF140458
  - 9 2x PCD005
  - 8 2x M5X14ISO4762
- kg ~1,3
- PS1F43N49-60**
- 1 1x TF140456
- PS1R43N49-60**
- 1 1x TF140457
  - 2 1x
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2049
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M8X20ISO4762
  - 11 2x FED0618
  - 12 2x M5X10ISO4762
- H = 49  
H1 = 30  
kg ~1,4
- PS1F43N62-60**
- 1 1x TF140459
- PS1R43N62-60**
- 1 1x TF140460
- H = 62  
H1 = 43  
kg ~1,7



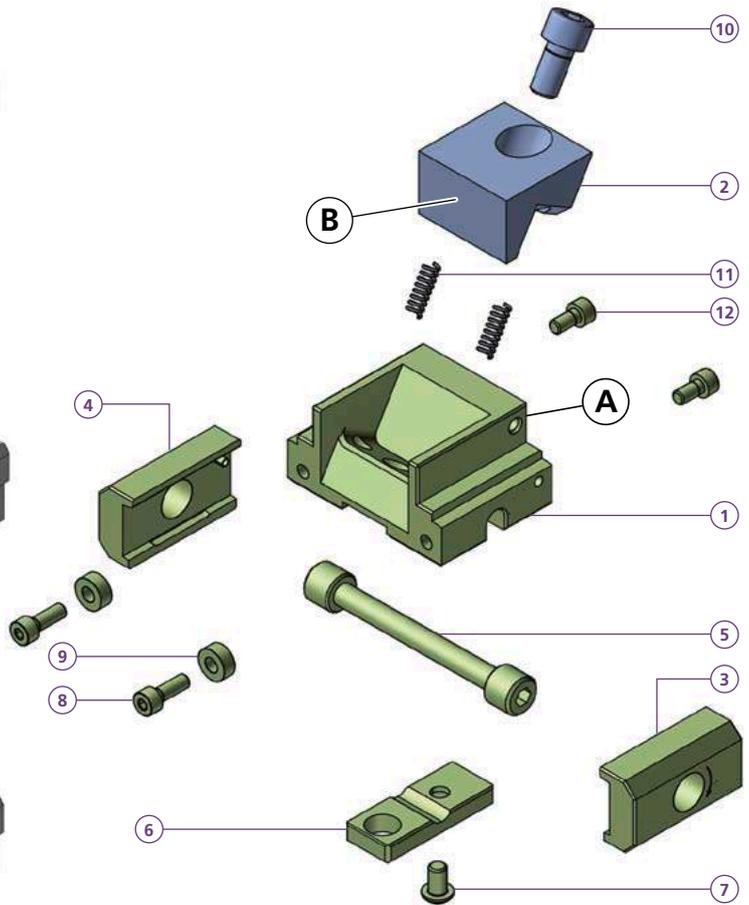
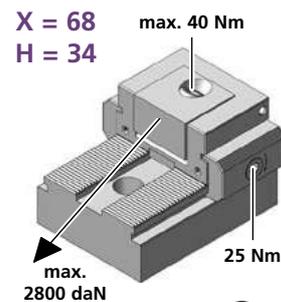
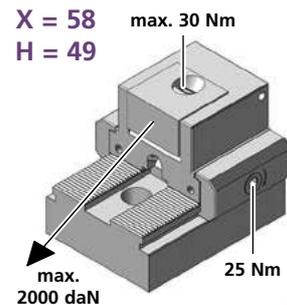
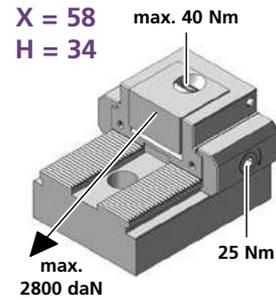
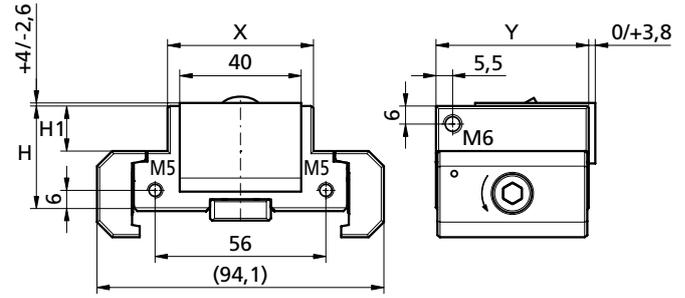
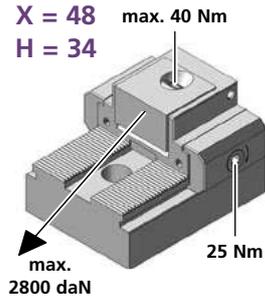
Bestellbeispiel / Ordering example: 1x PS1R43N49-60 & 1x B61

	B58	B60	B61	B62	B62HM	B65	B66	B67	B68	B69	B77	B79F	B79R
C	35	35	35	35	35	35	35	35	35	35	35	35	35
H	20	20	20	20	20	20	20	20	20	25	20	20	20
L	26	19	19	19	19	19	19	24	26	22	22	25	25
D	9	9	9	9	9	9	9	9	9	9	9	9	9
o	12	12	12	12	12	12	12	12	12	12	12	12	12
i	ALU	56HRC	56HRC	*	HM	HV700 x0,2mm	HV700 x0,2mm	HV700 x0,2mm	*	*	56HRC	HV700 x0,2mm	HV700 x0,2mm
kg	~0,07	~0,12	~0,12	~0,12	~0,12	~0,12	~0,12	~0,14	~0,15	~0,15	~0,12	~0,18	~0,18



\* = weicher Stahl / soft steel    HM = Hartmetallbeschichtet / Carbide coated    ALU = ENAW-7022

Separat bestellen / Separate order



- PS1F48N34-80**
- 1 1x TF140461
- PS1R48N34-80**
- 1 1x TF140462
  - 2 1x
  - 3 1x PCSP50R
  - 4 1x PCSP50L
  - 5 1x PCS14
  - 6 1x PCGU2049
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M10X25ISO4762
  - 11 2x FED0618
  - 12 2x M5X10ISO4762
- X = 48  
H = 34  
H1 = 15  
Y = 50  
kg ~0,9

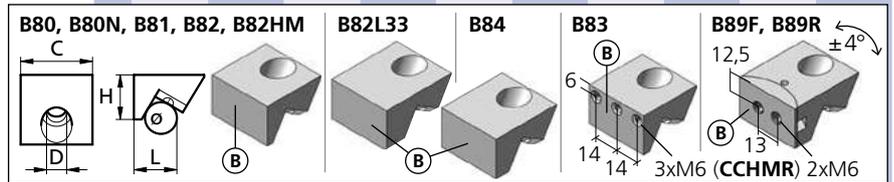
- PS1F58N34-80**
- 1 1x TF140463
- PS1R58N34-80**
- 1 1x TF140464
- X = 58  
H = 34  
H1 = 15  
Y = 50  
kg ~0,9

- PS1R58N49-80**
- 1 1x TK120129
  - 3 1x PCSP60R
  - 4 1x PCSP60L
- X = 58  
H = 49  
H1 = 30  
Y = 60  
kg ~1,6

- PS1F68N34-80**
- 1 1x TF140465
- PS1R68N34-80**
- 1 1x TF140466
- X = 68  
H = 34  
H1 = 15  
Y = 50  
kg ~1,0

Bestellbeispiel / Ordering example: 1x PS1F68N34-80 & 1x B82HM

	B80	B80N	B81	B82	B82L33	B82HM	B83	B84	B89F	B89R
C	40	40	40	40	40	40	40	40	40	40
H	25	25	25	25	25	25	25	25	25	25
L	22	22	22	22,2	33	22,2	22	26,3	29	29
D	11	11	11	11	11	11	11	11	11	11
ø	15	15	15	15	15	15	15	15	15	15
i	56HRC	HV700 x0,2mm	56HRC	*	*	56HRC	HV700 x0,2mm	*	HV700 x0,2mm	HV700 x0,2mm
kg	~0,2	~0,2	~0,2	~0,2	~0,28	~0,2	~0,2	~0,2	~0,24	~0,24



\* = weicher Stahl / soft steel

HM = Hartmetallbeschichtet / Carbide coated

Separat bestellen / Separate order

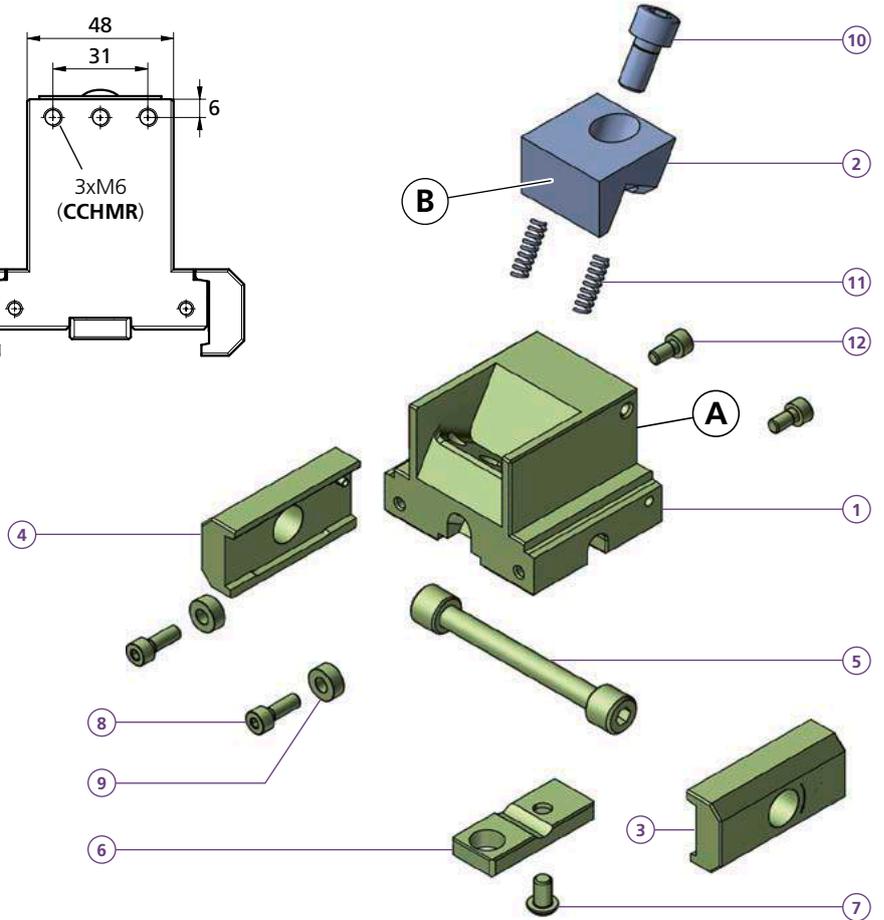
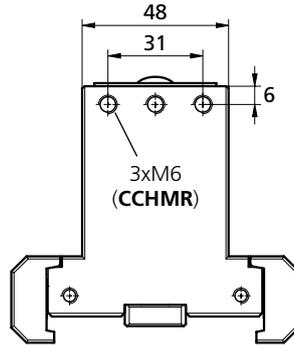
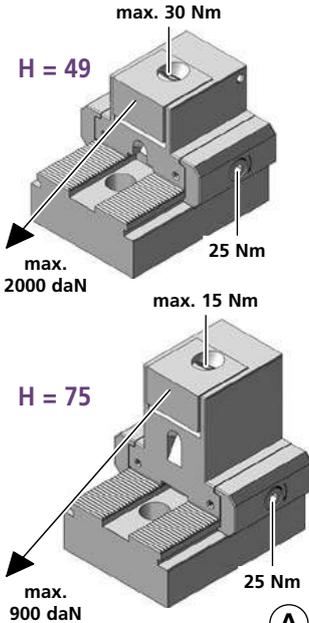
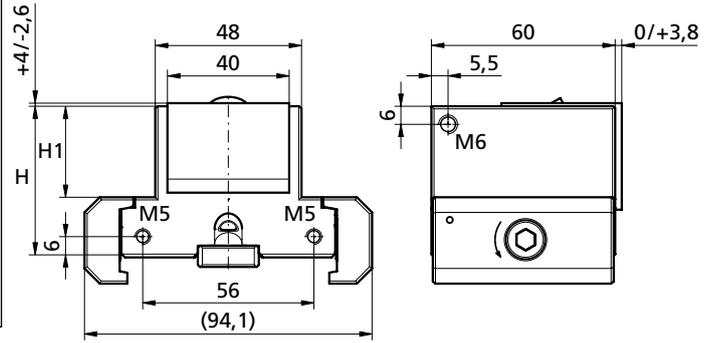
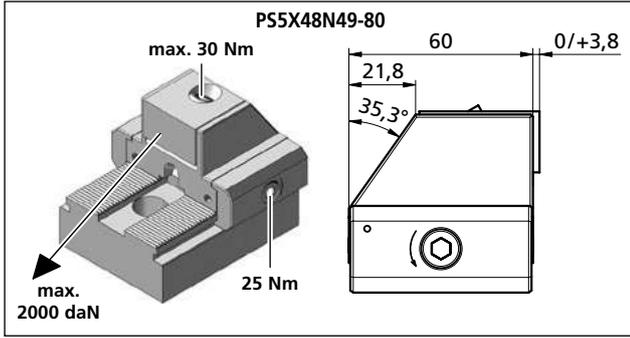


PS1R/F48N49-80

PS1R48N75-80

PS5X48N49-80

powerCLAMP

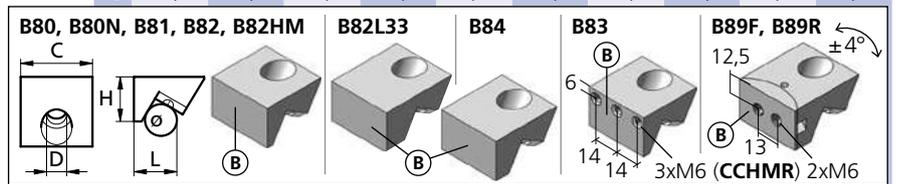


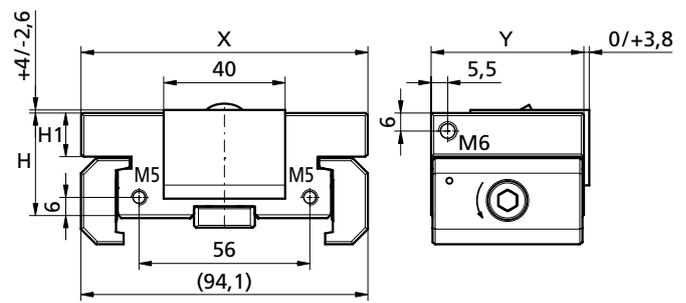
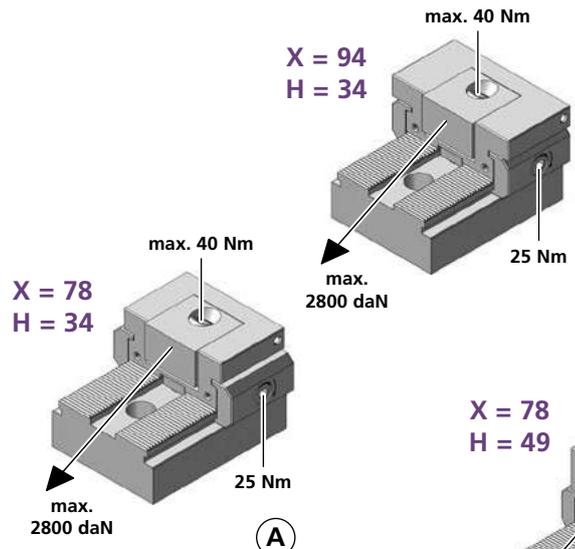
<b>PS5X48N49-80</b>
1 1x TF140469
9 2x PCD005
8 2x M5X14ISO4762
kg ~1,3
<b>PS1F48N49-80</b>
1 1x TF140467
<b>PS1R48N49-80</b>
1 1x TF140468
2 1x
3 1x PCSP60R
4 1x PCSP60L
5 1x PCS14
6 1x PCGU2049
7 1x M6X8ISO7380
8 2x M5X14ISO4762
9 2x PCD005
10 1x M10X25ISO4762
11 2x FED0618
12 2x M5X10ISO4762
H = 49
H1 = 30
kg ~1,4

<b>PS1R48N75-80</b>
1 1x TF140471
H = 75
H1 = 56
kg ~2,0

Bestellbeispiel / Ordering example: 1x PS1F48N49-80 & 1x B80

	B80	B80N	B81	B82	B82L33	B82HM	B83	B84	B89F	B89R
C	40	40	40	40	40	40	40	40	40	40
H	25	25	25	25	25	25	25	25	25	25
L	22	22	22	22,2	33	22,2	22	26,3	29	29
D	11	11	11	11	11	11	11	11	11	11
ø	15	15	15	15	15	15	15	15	15	15
i	56HRC	HV700 x0,2mm	56HRC	*	*	56HRC	HV700 x0,2mm	*	HV700 x0,2mm	HV700 x0,2mm
kg	~0,2	~0,2	~0,2	~0,2	~0,28	~0,2	~0,2	~0,2	~0,24	~0,24

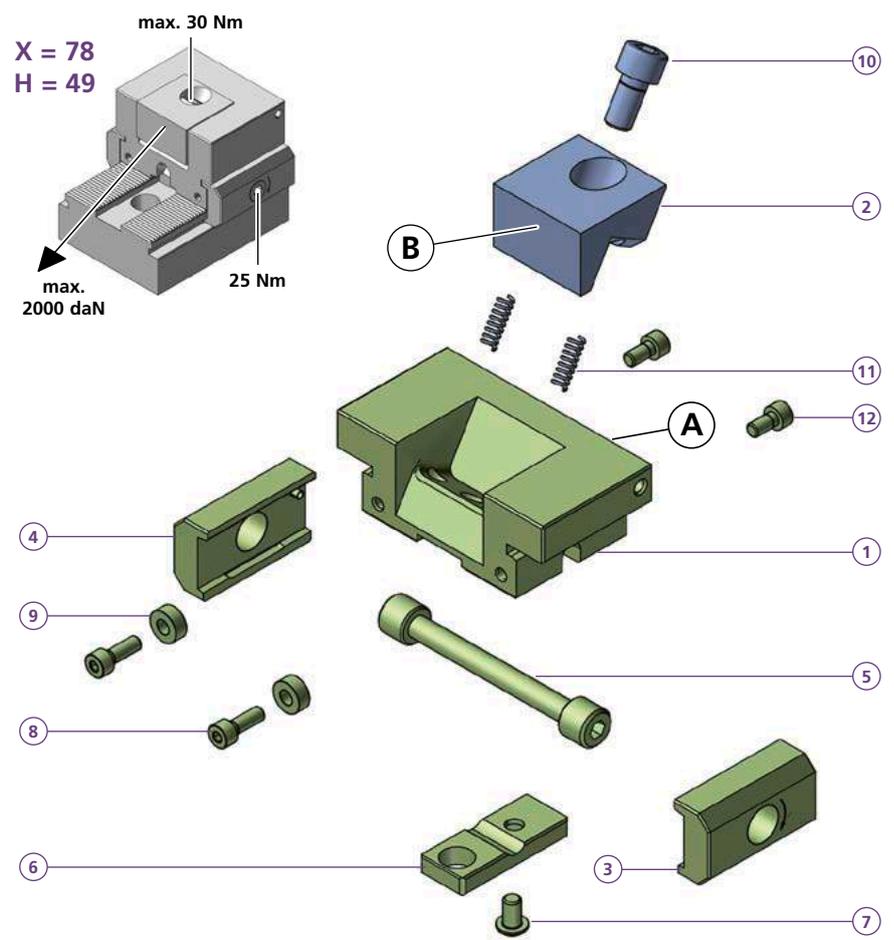




- PS1F78N34-80**
- 1 1x TF140472
- PS1R78N34-80**
- 1 1x TF140473
  - 2 1x
  - 3 1x PCSP50R
  - 4 1x PCSP50L
  - 5 1x PCS14
  - 6 1x PCGU2049
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M10X25ISO4762
  - 11 2x FED0618
  - 12 2x M5X10ISO4762
- X = 48  
H = 34  
H1 = 15  
Y = 50  
kg ~1,1

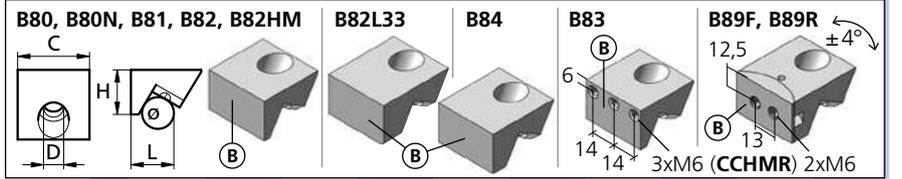
- PS1F94N34-80**
- 1 1x TF140476
- PS1R94N34-80**
- 1 1x TF140477
- X = 94  
H = 34  
H1 = 15  
Y = 50  
kg ~1,1

- PS1F78N49-80**
- 1 1x TF140474
- PS1R78N49-80**
- 1 1x TF140475
  - 3 1x PCSP60R
  - 4 1x PCSP60L
- X = 78  
H = 49  
H1 = 30  
Y = 60  
kg ~1,8



Bestellbeispiel / Ordering example: 1x PS1R94N34-80 & 1x B80

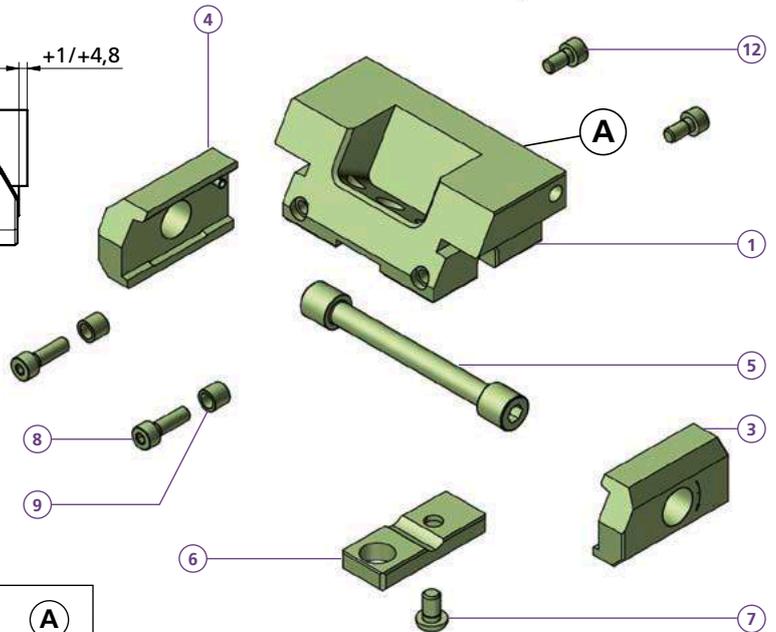
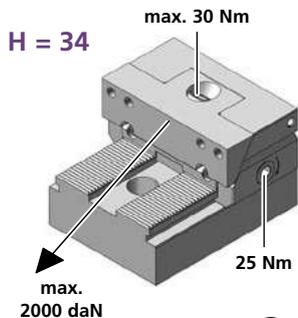
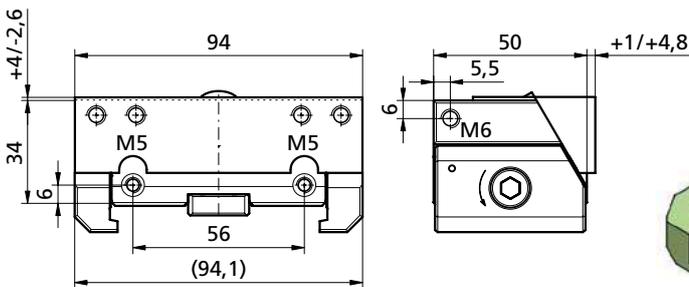
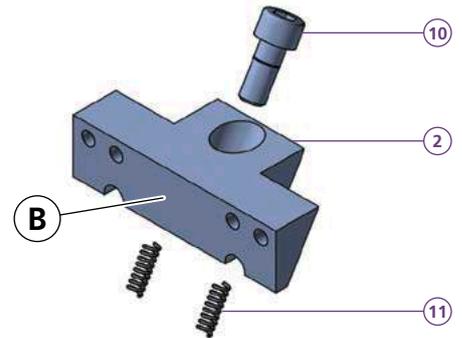
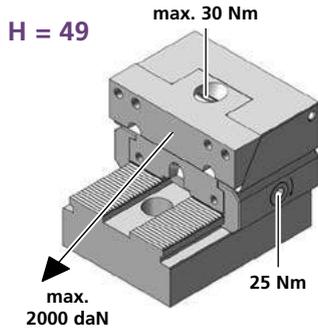
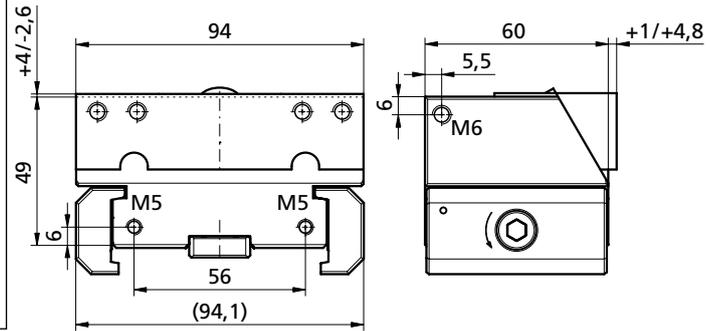
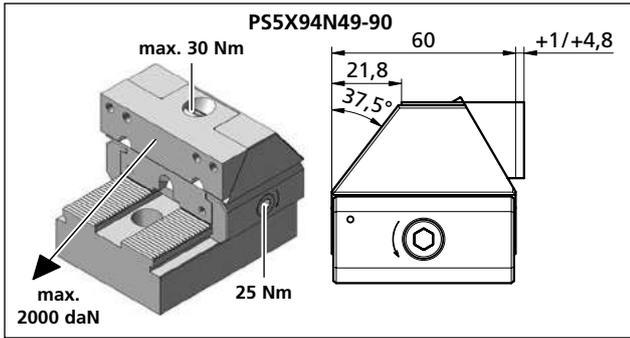
	B80	B80N	B81	B82	B82L33	B82HM	B83	B84	B89F	B89R
C	40	40	40	40	40	40	40	40	40	40
H	25	25	25	25	25	25	25	25	25	25
L	22	22	22	22,2	33	22,2	22	26,3	29	29
D	11	11	11	11	11	11	11	11	11	11
ø	15	15	15	15	15	15	15	15	15	15
i	56HRC	HV700 x0,2mm	56HRC	*	*	56HRC	HV700 x0,2mm	*	HV700 x0,2mm	HV700 x0,2mm
kg	~0,2	~0,2	~0,2	~0,2	~0,28	~0,2	~0,2	~0,2	~0,24	~0,24



\* = weicher Stahl / soft steel

HM = Hartmetallbeschichtet / Carbide coated

Separat bestellen / Separate order

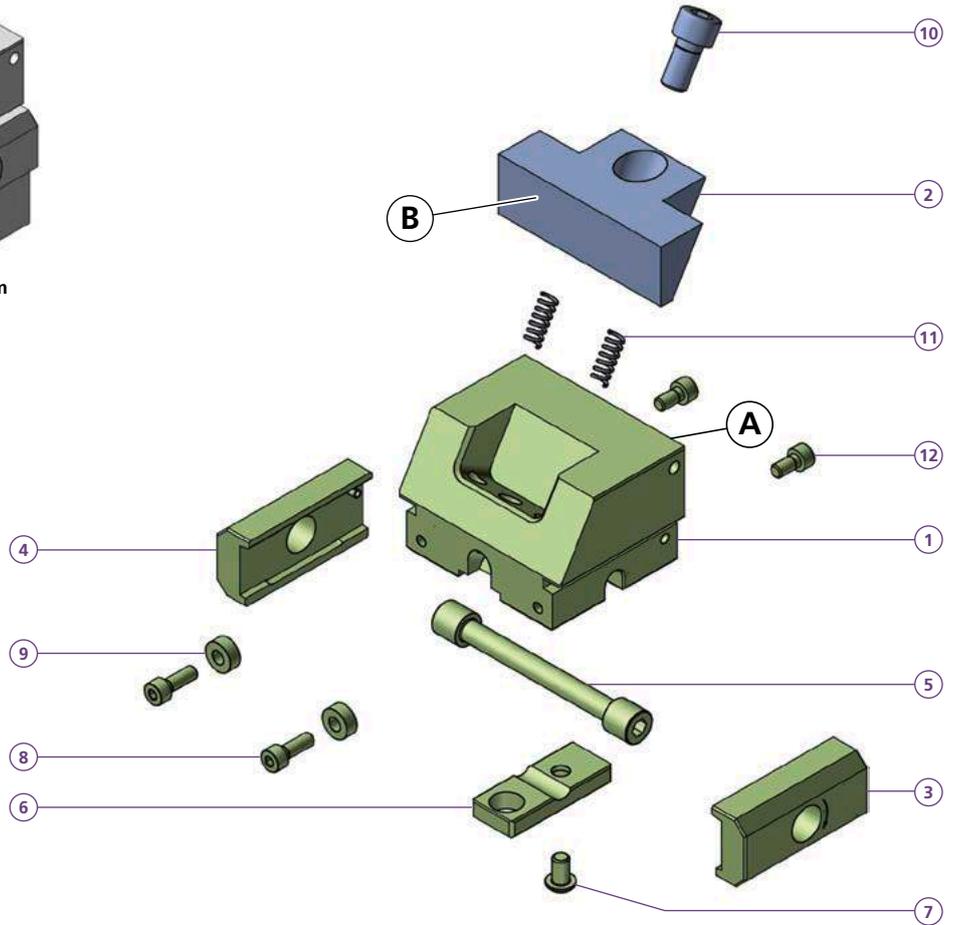
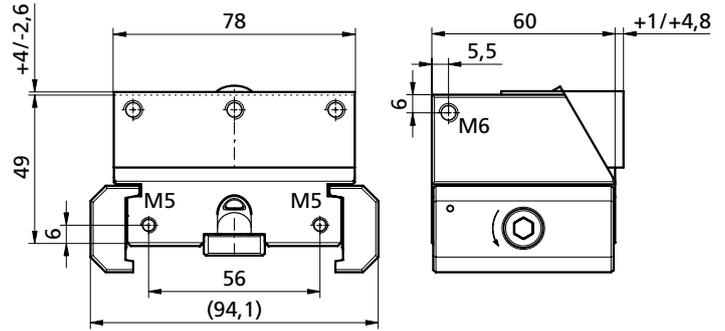
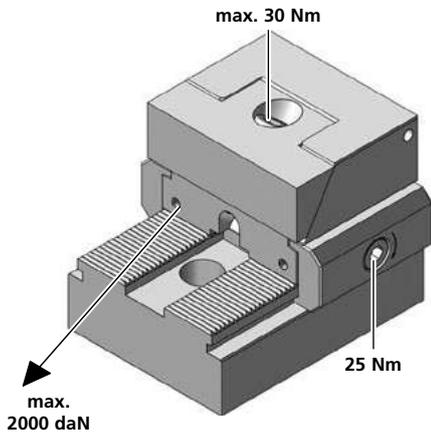


PS1F94N34-90		PS1R94N34-90		PS5X94N49-90	
1	1x TF140478	1	1x TF140479	1	1x TF140482
2	1x	2	1x	3	1x PCSP60R
3	1x PCSP50RF	3	1x PCSP60L	4	1x PCSP60L
4	1x PCSP50LF	4	1x	9	2x PCD005
5	1x PCS14	5	1x	8	2x M5X14ISO4762
6	1x PCGU2049	6	1x	kg	~1,8
7	1x M6X8ISO7380	7	1x	<b>PS1F94N49-90</b>	
8	2x M5X16ISO4762	8	1x	1	1x TF140480
9	2x PCD008	9	1x	2	1x
10	1x M10X25ISO4762	10	1x	<b>PS1R94N49-90</b>	
11	2x FED0618	11	1x	1	1x TF140481
12	2x M5X10ISO4762	12	1x	3	1x PCSP60R
H	= 34	H	= 49	4	1x PCSP60L
kg	~1,0	kg	~2,0	8	2x M5X14ISO4762
				9	2x PCD005

Bestellbeispiel / Ordering example:  
1x PS1F94N34-90 & 1x B91

	B90	B91	B92	B93	B94
C	94	94	94	94	94
H	25	25	25	25	25
L	23	23	23	23	40
D	11	11	11	11	11
e	15	15	15	15	15
i	HV700 x0,2mm	HV700 x0,2mm	*	HV700 x0,2mm	*
kg	~0,33	~0,33	~0,33	~0,33	~0,64

Separat bestellen / Separate order



<b>PS1F78N49-90</b>	
1	1x TH160490
<b>PS1R78N49-90</b>	
1	1x TH160490
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M10X25ISO4762
11	2x FED0618
12	2x M5X10ISO4762
kg	~1,8

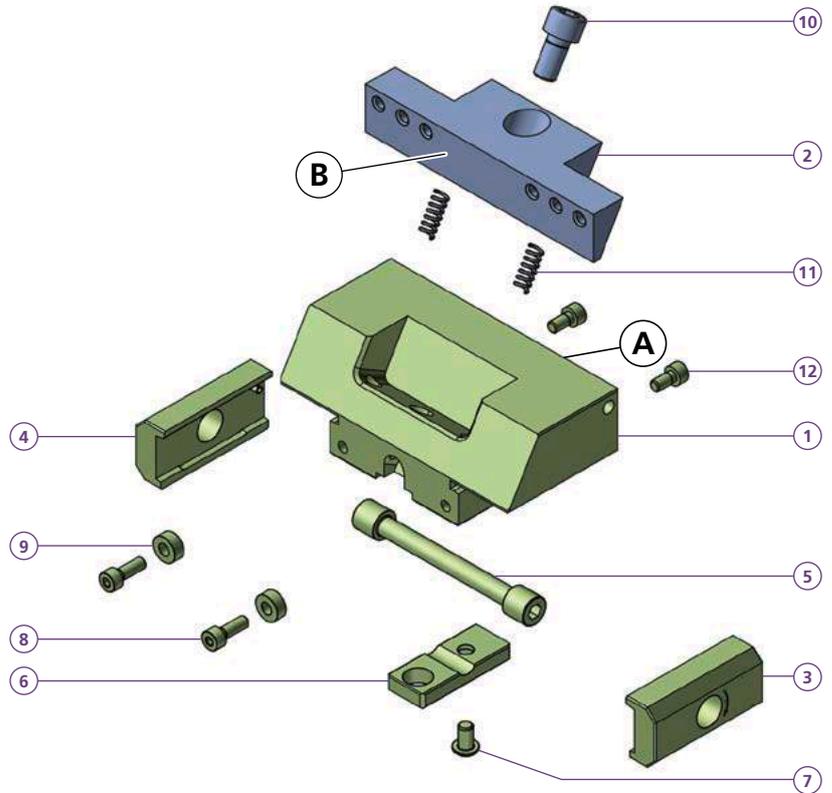
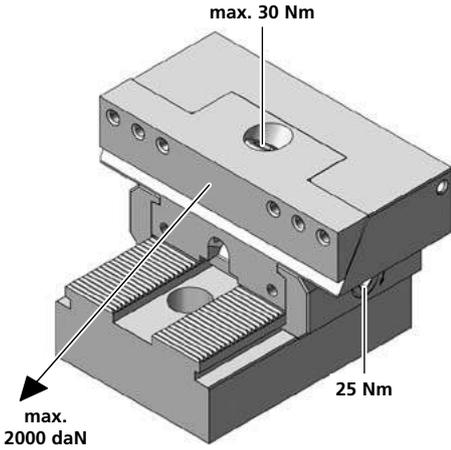
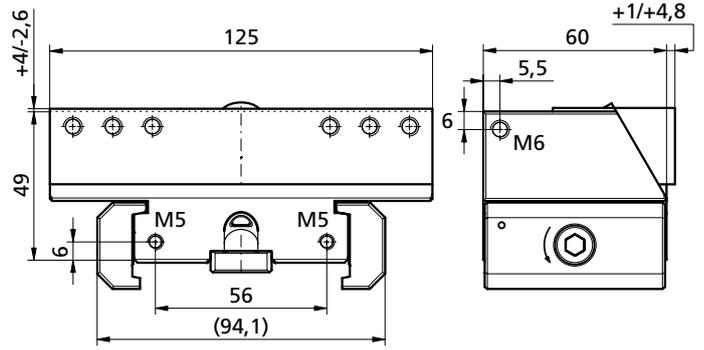
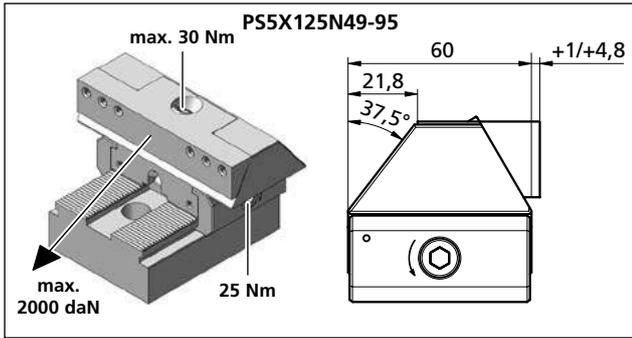
Bestellbeispiel / Ordering example:  
1x PS1F78N49-90 & 1x B90F78

	B90F78	B90W78	B90R78
C	78	78	78
H	25	25	25
L	23	28	23
D	11	11	11
e	15	15	15
i	HV700	*	HV700
	x0,2mm		x0,2mm
kg	~0,3	~0,37	~0,3

**B90R78**

**B90F78, B90W78**

\* = weicher Stahl / soft steel



<b>PS5X125N49-95</b>	
1x TF140485	
2x PCD005	
2x M5X14ISO4762	
kg	~2,0
<b>PS1F125N49-95</b>	
1x TF140483	
<b>PS1R125N49-95</b>	
1x TF140484	
1x PCSP60R	
1x PCSP60L	
1x PCS14	
1x PCGU2049	
1x M6X8ISO7380	
2x M5X14ISO4762	
2x PCD005	
1x M10X25ISO4762	
2x FED0618	
2x M5X10ISO4762	
kg	~2,3

Bestellbeispiel / Ordering example: 1x PS5X125N49-95 & 1x B95

	B95	B96	B97	B98	B99
C	125	125	125	125	125
H	25	25	25	25	25
L	23	23	23	30	23
D	11	11	11	11	11
ø	15	15	15	15	15
i	HV700	HV700	*	*	HV700
	x0,2mm	x0,2mm			x0,2mm
kg	~0,46	~0,45	~0,46	~0,63	~0,45

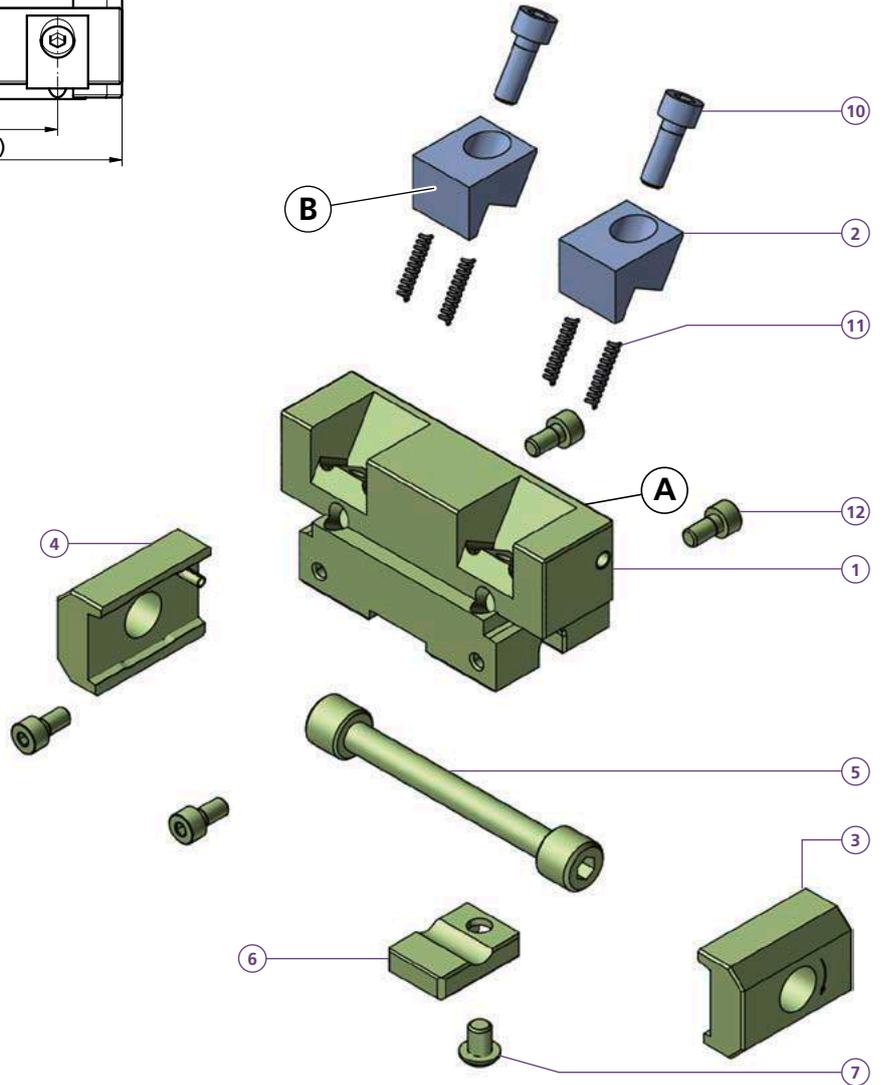
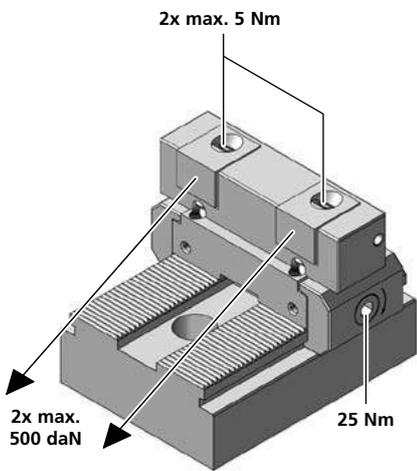
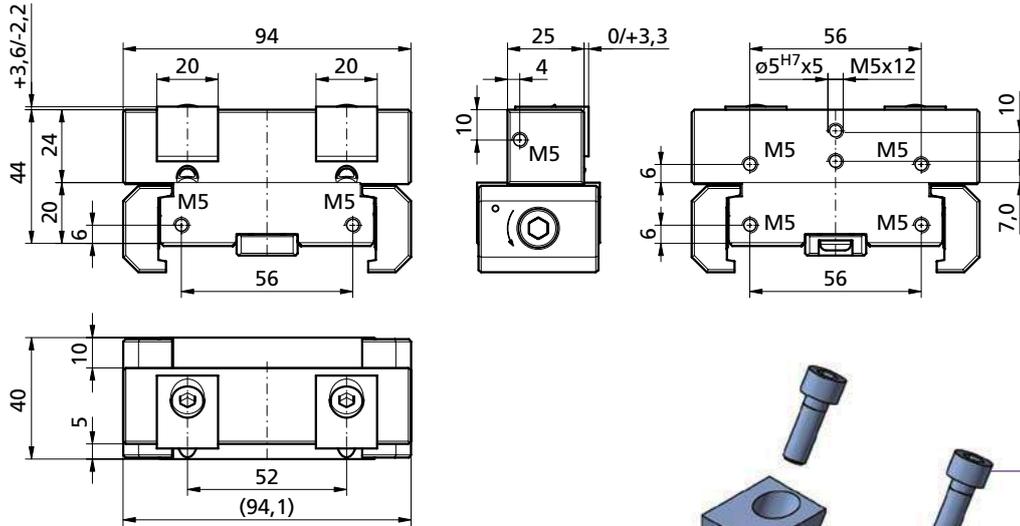
B95, B96, B97, B99		B98	
6xM6 (CCHMR)		110	
		84	
		58	
		6	

Separat bestellen / Separate order



# PS2G94N44-13

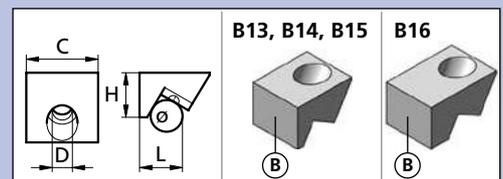
powerCLAMP



PS2G94N44-13	
1	1x TF140486
2	2x
3	1x PCSP40R
4	1x PCSP40L
5	1x PCS14
6	1x PCGU2030
7	1x M6X8ISO7380
10	2x M6X16ISO4762
11	4x FED0318
12	4x M5X10ISO4762
kg	~1,0

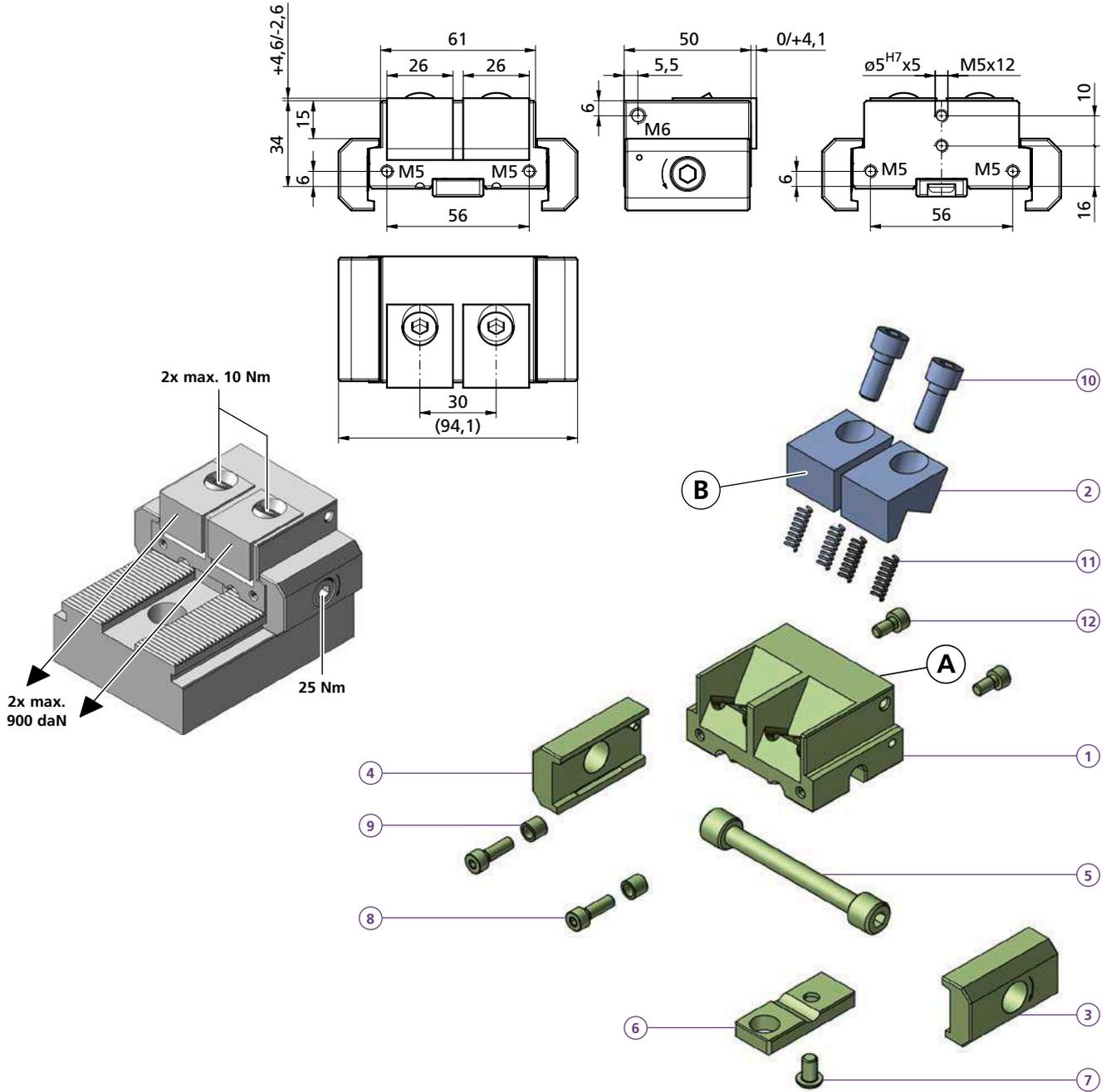
	B13	B14	B15	B16
C	20	20	20	20
H	16	16	16	16
L	13,8	13,8	13,8	19
D	6,5	6,5	6,5	6,5
ø	10	10	10	10
i	HV700	HV700	*	*
	x0,2mm	x0,2mm		
kg	~0,05	~0,05	~0,05	~0,06

Bestellbeispiel / Ordering example: 1x PS2G94N44-13 & 2x B14



\* = weicher Stahl / soft steel

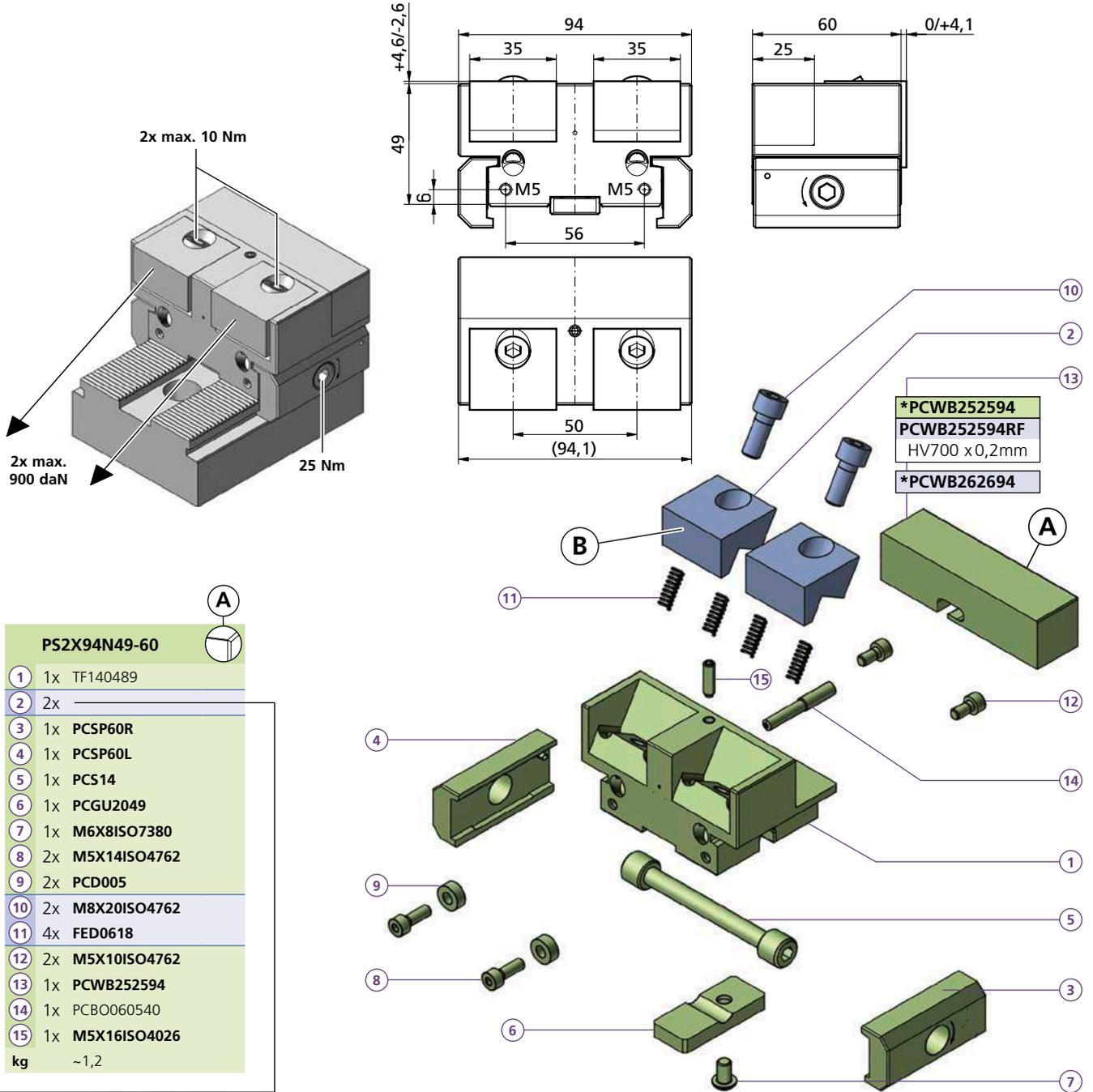
Separat bestellen / Separate order



<b>PS2F61N34-45</b>	
①	1x TF140487
<b>PS2R61N34-45</b>	
①	1x TF140488
②	2x
③	1x PCSP50R
④	1x PCSP50L
⑤	1x PCS14
⑥	1x PCGU2049
⑦	1x M6X8ISO7380
⑧	2x M5X16ISO4762
⑨	2x PCD008
⑩	2x M8X20ISO4762
⑪	4x FED0618
⑫	2x M5X10ISO4762
kg	~1,0

**Bestellbeispiel / Ordering example: 1x PS2R61N34-45 & 2x B47HM**

	B45	B46	B47	B47HM
③	26	26	26	26
④	20	20	20	20
⑤	19	19	19,1	19,1
⑥	9	9	9	9
⑦	12	12	12	12
⑧	HV700	HV700	*	HM
	x0,2mm	x0,2mm		
kg	~0,1	~0,1	~0,1	~0,1

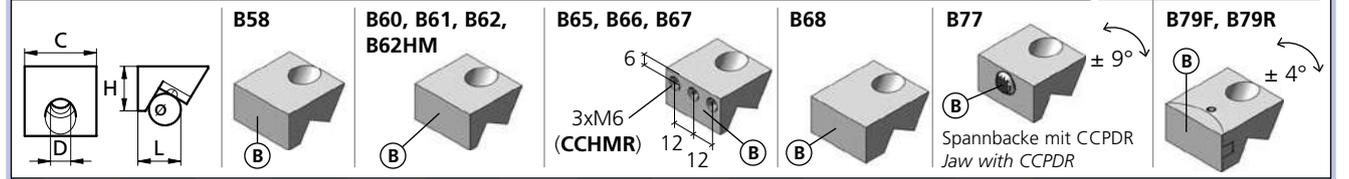
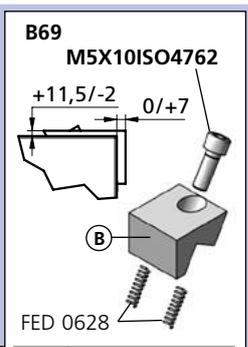


**PS2X94N49-60**

1	1x	TF140489
2	2x	
3	1x	PCSP60R
4	1x	PCSP60L
5	1x	PCS14
6	1x	PCGU2049
7	1x	M6X8ISO7380
8	2x	M5X14ISO4762
9	2x	PCD005
10	2x	M8X20ISO4762
11	4x	FED0618
12	2x	M5X10ISO4762
13	1x	PCWB252594
14	1x	PCBO060540
15	1x	M5X16ISO4026
kg		~1,2

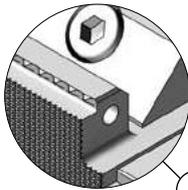
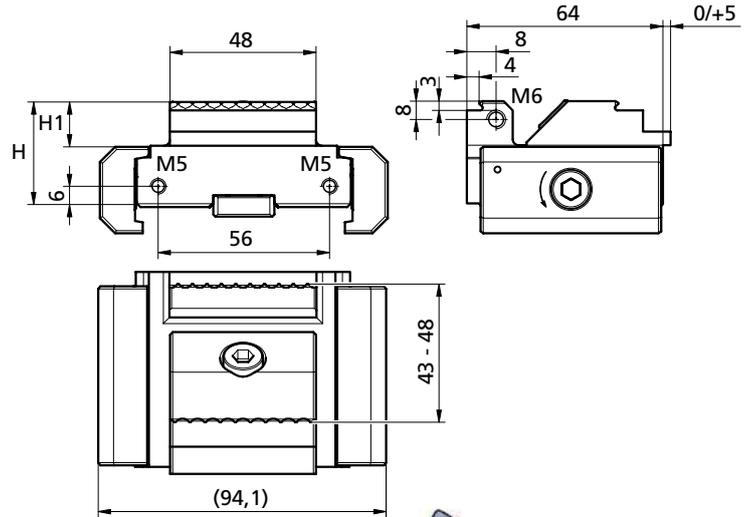
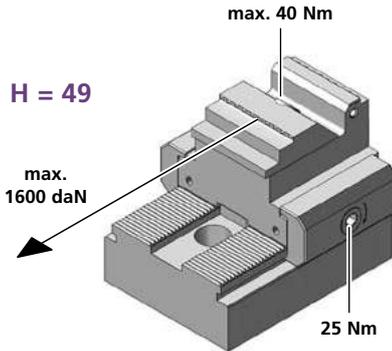
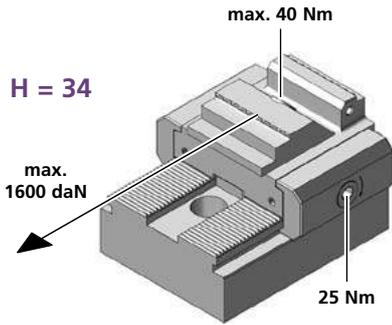
**Bestellbeispiel / Ordering example:** 1x PS2X94N49-60 & 2x B58

	B58	B60	B61	B62	B62HM	B65	B66	B67	B68	B69	B77	B79F	B79R
<b>C</b>	35	35	35	35	35	35	35	35	35	35	35	35	35
<b>H</b>	20	20	20	20	20	20	20	20	20	25	20	20	20
<b>L</b>	26	19	19	19	19	19	19	24	26	22	22	25	25
<b>D</b>	9	9	9	9	9	9	9	9	9	9	9	9	9
<b>o</b>	12	12	12	12	12	12	12	12	12	12	12	12	12
<b>i</b>	ALU	56HRC	56HRC	*	HM	HV700 x0,2mm	HV700 x0,2mm	HV700 x0,2mm	*	*	56HRC	HV700 x0,2mm	HV700 x0,2mm
<b>kg</b>	~0,07	~0,12	~0,12	~0,12	~0,12	~0,12	~0,12	~0,14	~0,15	~0,15	~0,12	~0,18	~0,18



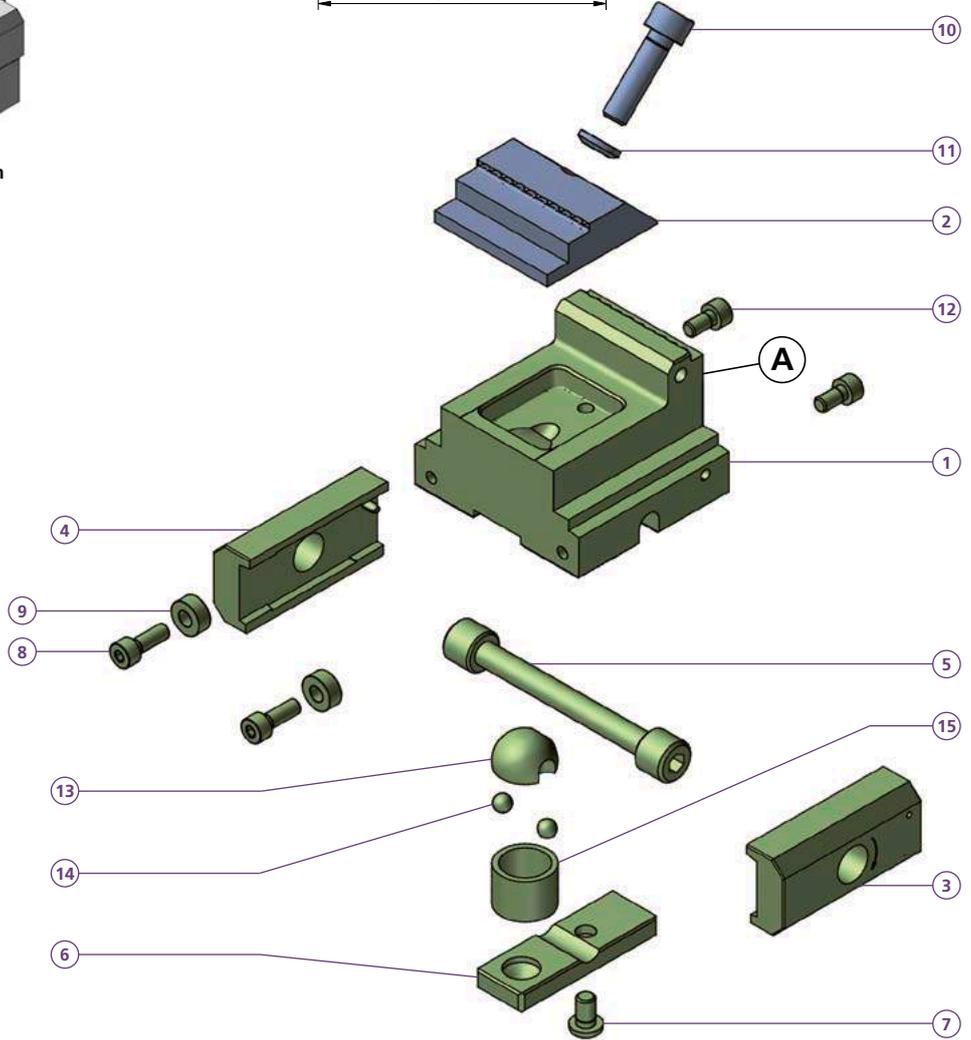
\* = weicher Stahl / soft steel      HM = Hartmetallbeschichtet / Carbide coated      ALU = ENAW-7022

Separat bestellen / Separate order



PS1P48L34-105

- 1 1x TW100098-01
- 2 1x
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2059
- 7 1x M6X8ISO7380
- 8 2x M5X14ISO4762
- 9 2x PCD005
- 10 1x M8X28ISO4762
- 11 1x PCUSR16
- 12 2x M5X10ISO4762
- 13 1x PCKMR45M8
- 14 2x D=6 DIN 5401
- H = 34
- H1 = 15
- kg ~1,0



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PS1PF48L34-105

- 1 1x TK140780
- H = 49
- H1 = 30
- kg ~1,0

PS1P48L49-105

- 1 1x TK120011
- 15 1x PCD20L15
- H = 49
- H1 = 30
- kg ~1,4

PS1PF48L49-105

- 1 1x TK140781
- 15 1x PCD20L15
- H = 49
- H1 = 30
- kg ~1,4

Bestellbeispiel / Ordering example:  
1x PS1P48L34-105 & 1x B115

Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

PS1P94L34-105

PS1P694L34-105

PS1P94L49-105

PS1PF94L49-105

PS1PF94L34-105

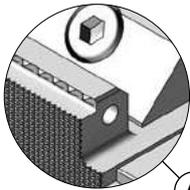
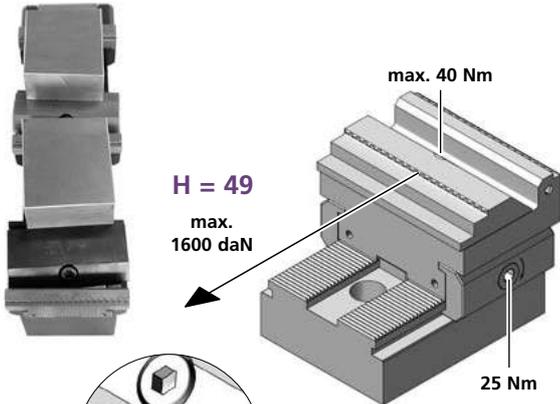
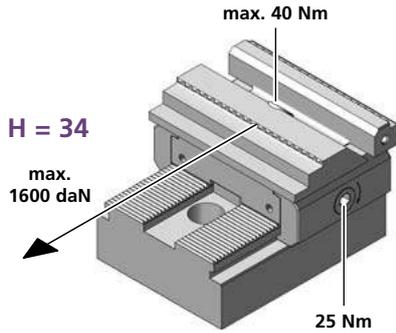
Linear



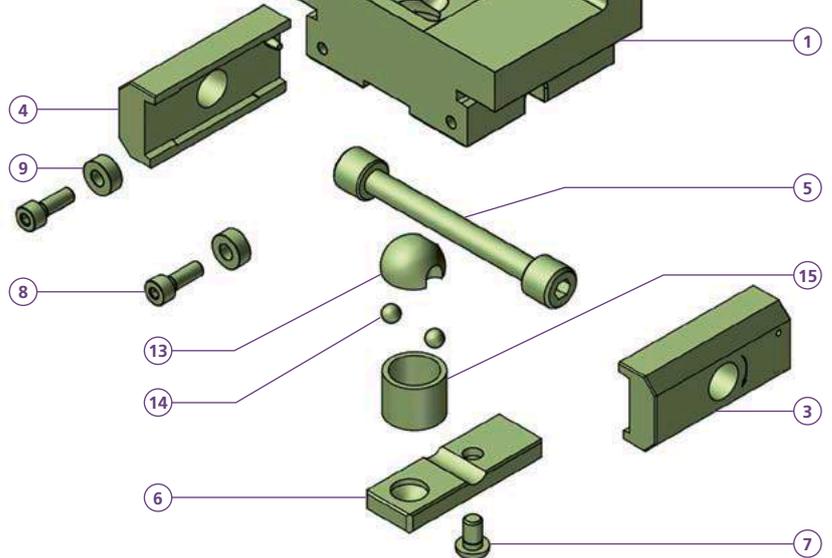
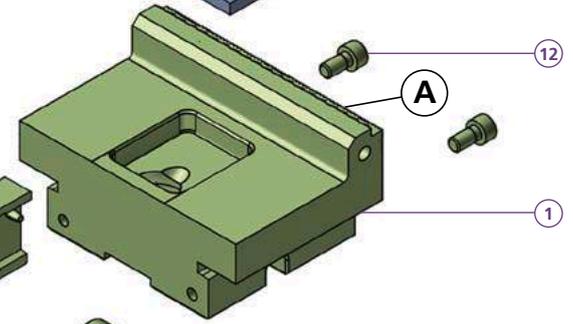
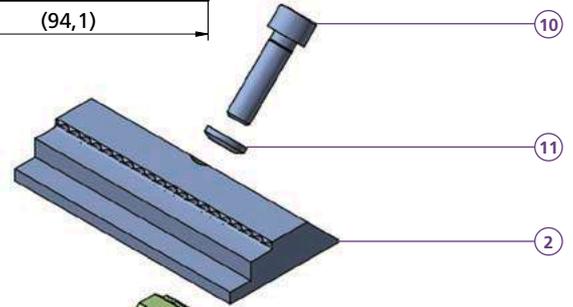
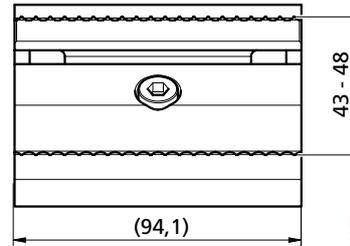
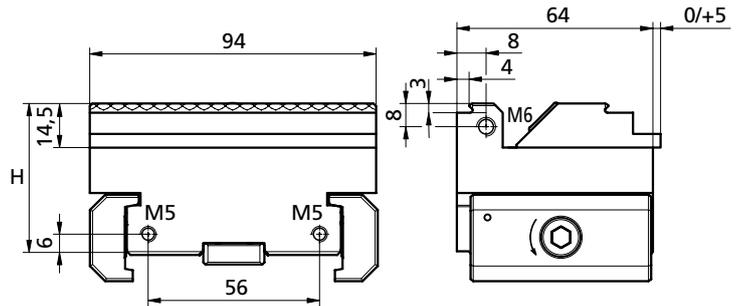
prägen  
stamping



powerCLAMP



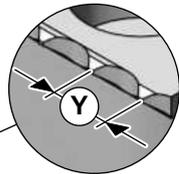
A



PS1P94L34-105

- 1 1x TW100100-01
  - 2 1x
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2059
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M8X28ISO4762
  - 11 1x PCUSR16
  - 12 2x M5X10ISO4762
  - 13 1x PCKMR45M8
  - 14 2x D=6 DIN 5401
- H = 34  
kg ~1,1

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Y

PS1P694L34-105

- 1 1x TW100100-02
  - Y 6,0 mm
- kg ~1,1

PS1PF94L34-105

- 1 1x TK140782
- H = 49  
kg ~1,1

PS1P94L49-105

- 1 1x TK120857
  - 15 1x PCD20L15
- H = 49  
kg ~1,8

PS1PF94L49-105

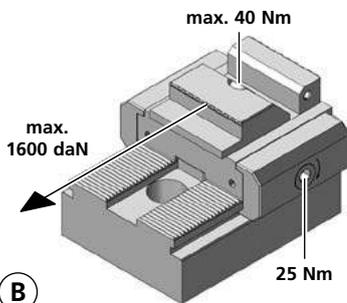
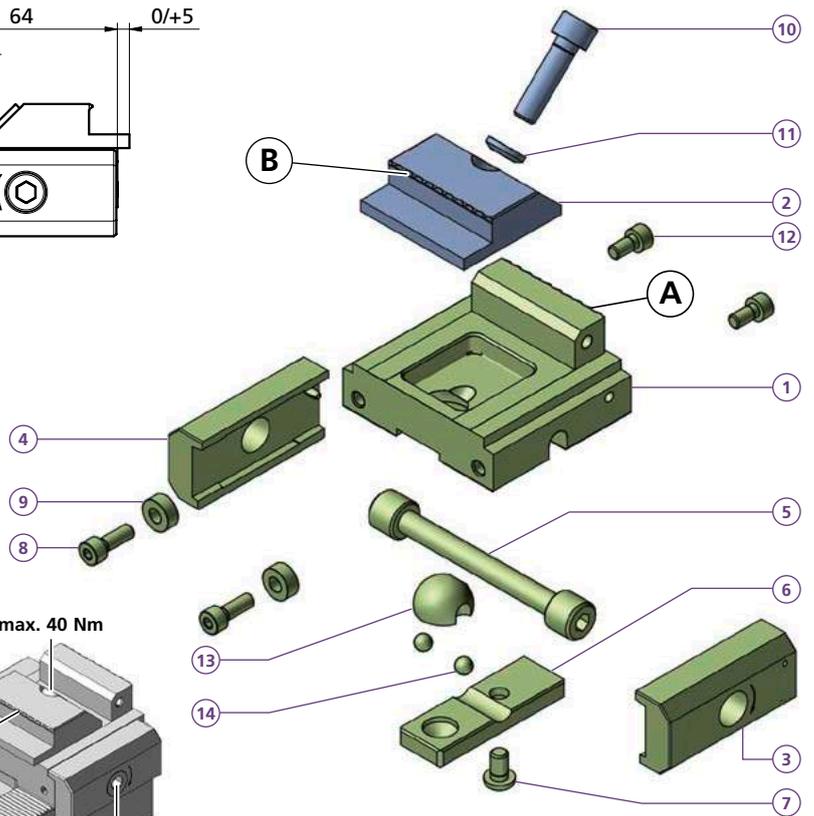
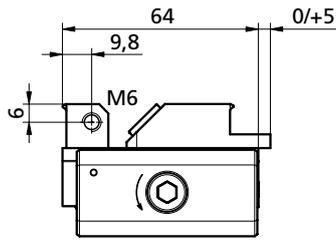
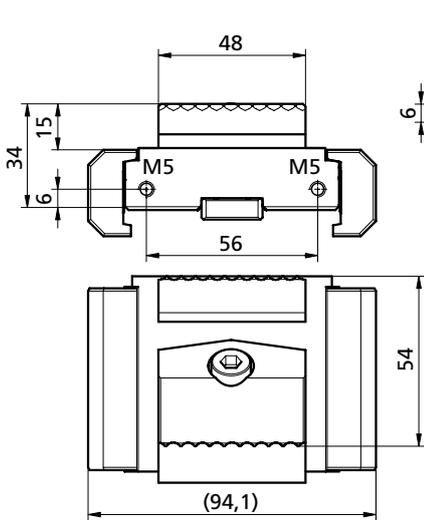
- 1 1x TK140783
  - 15 1x PCD20L15
- H = 49  
kg ~1,8

Bestellbeispiel / Ordering example:  
1x PS1P94L34-105 & 1x B120

Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

Separat bestellen / Separate order

PS1PV48L34-105  
PS1R/F48L34-105

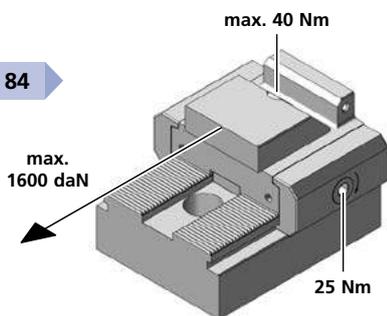
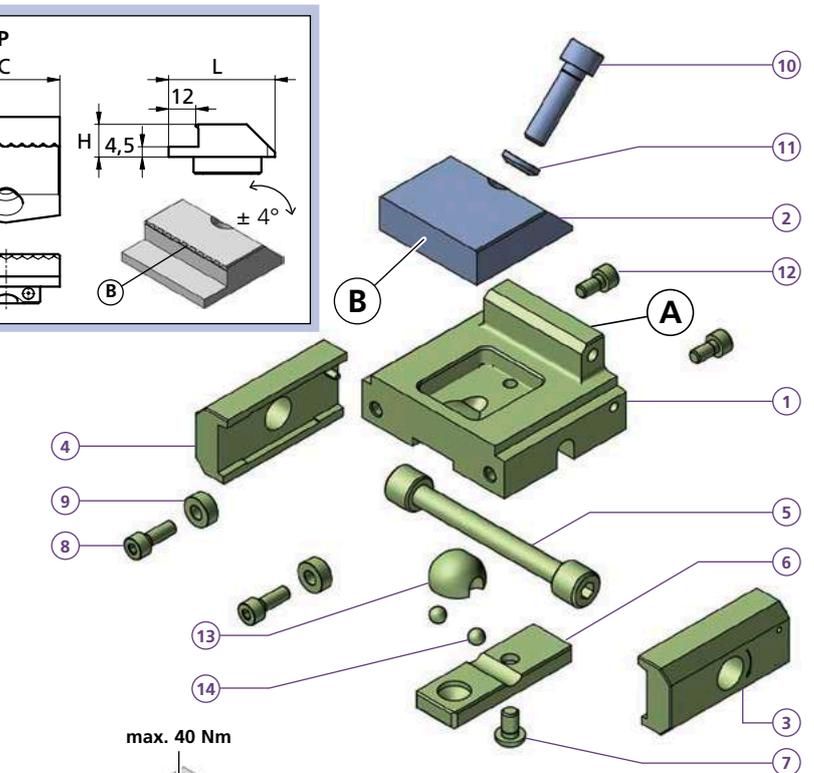


**PS1PV48L34-105**

1	1x	TK140762
2	1x	
3	1x	PCSP60R
4	1x	PCSP60L
5	1x	PCS14
6	1x	PCGU2059
7	1x	M6X8ISO7380
8	2x	M5X14ISO4762
9	2x	PCD005
10	1x	M8X28ISO4762
11	1x	PCUSR16
12	2x	M5X10ISO4762
13	1x	PCKMR45M8
14	2x	D=6 DIN 5401
kg		~1,0

**B123P**

C	48
H	14,5
L	47
i	56HRC
kg	~0,21



**PS1R48L34-105**

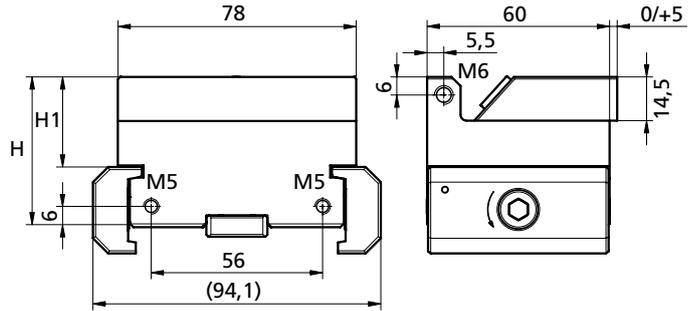
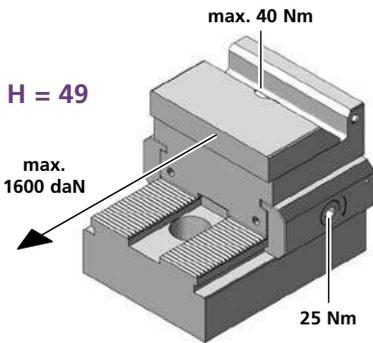
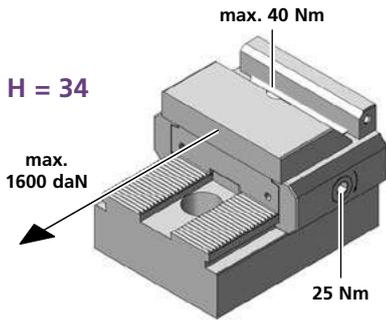
**PS1F48L34-105**

1	1x	TF140573
2	1x	
3	1x	PCSP60R
4	1x	PCSP60L
5	1x	PCS14
6	1x	PCGU2059
7	1x	M6X8ISO7380
8	2x	M5X14ISO4762
9	2x	PCD005
10	1x	M8X30ISO4762
11	1x	PCUSR14
12	2x	M5X10ISO4762
13	1x	PCKMR45M8
14	2x	D=6 DIN 5401
kg		~1,0

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Bestellbeispiel / Ordering example:  
1x PS1R48L34-105 & 1x B123P

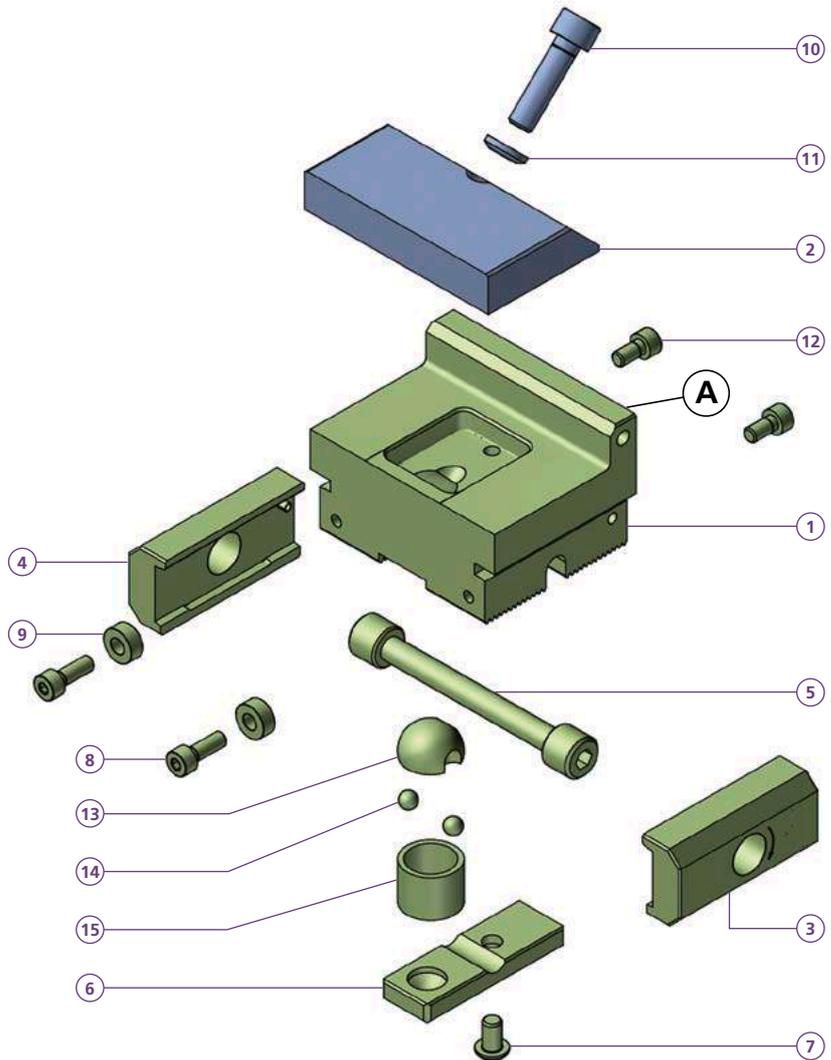
Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6



- PS1R78L34-105**
- 1 1x TF140575
- PS1F78L34-105**
- 1 1x TF140574
  - 2 1x
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2059
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M8X30ISO4762
  - 11 1x PCUSR14
  - 12 2x M5X10ISO4762
  - 13 1x PCKMR45M8
  - 14 2x D=6 DIN 5401
- H = 34  
H1 = 15  
kg ~1,0

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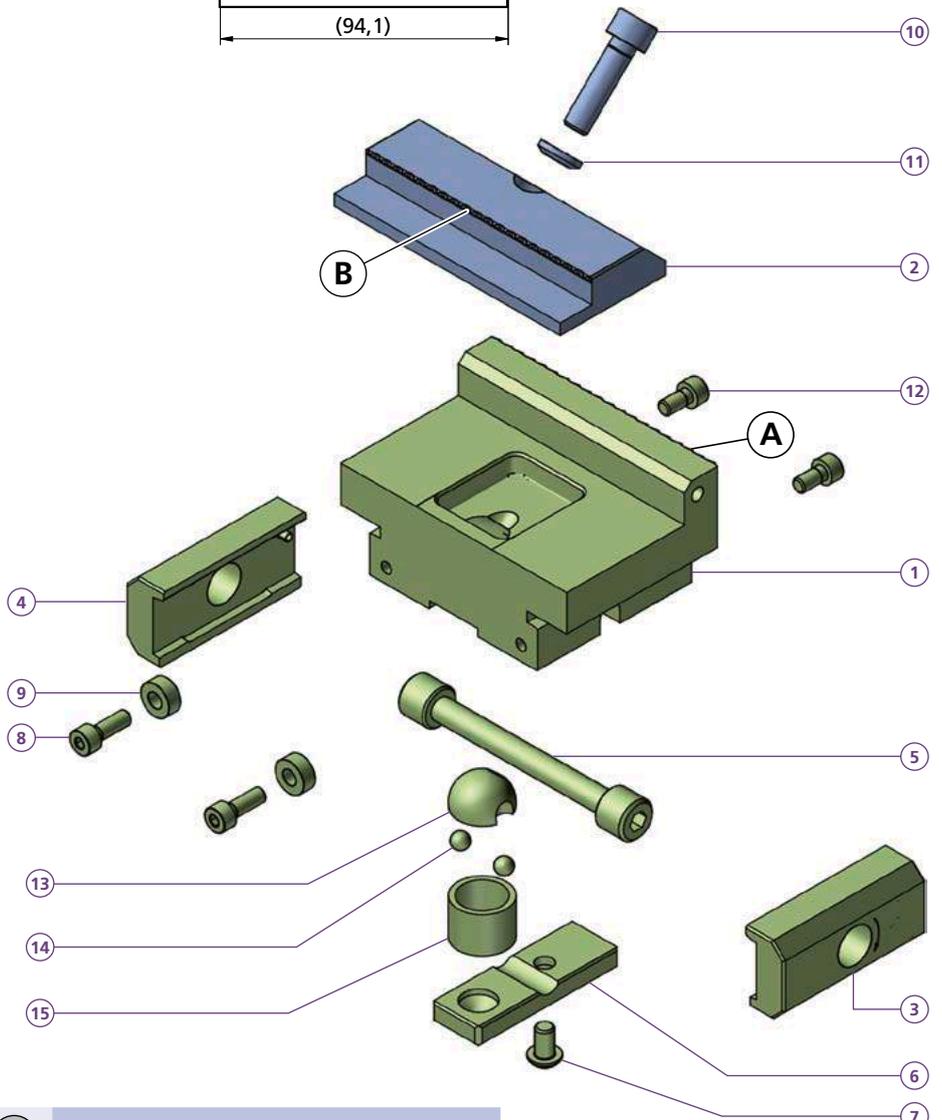
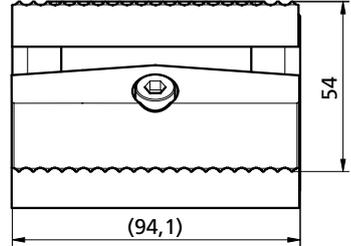
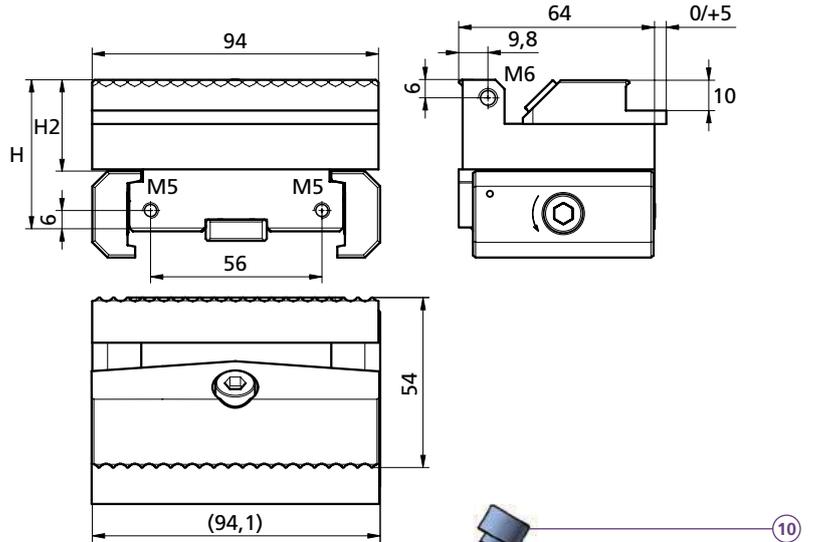
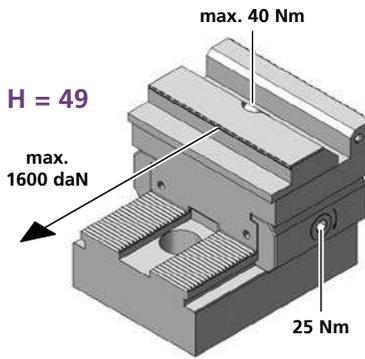
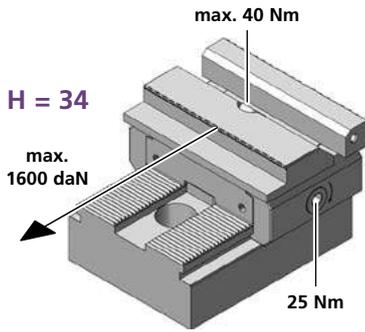
- PS1R78L49-105**
- 1 1x TK110399
  - 15 2x PCD20L15
- PS1F78L49-105**
- 1 1x TK110400
  - 15 2x PCD20L15
- H = 49  
H1 = 30  
kg ~1,5



Bestellbeispiel / Ordering example:  
1x PS1R48L34-105 & 1x B105

Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

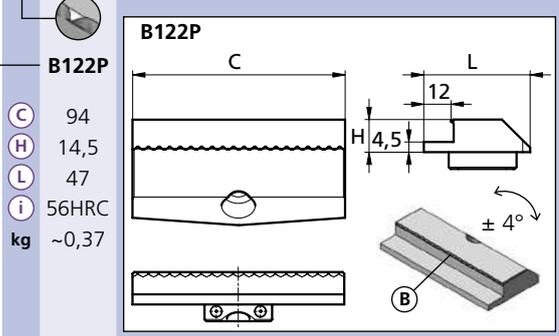
Separat bestellen / Separate order



PS1PV94L34-105	
1	1x TK120230
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X28ISO4762
11	1x PCUSR16
12	2x M5X10ISO4762
13	1x PCKMR45M8
14	2x D=6 DIN 5401
H	= 34
H1	= 15
kg	~1,1

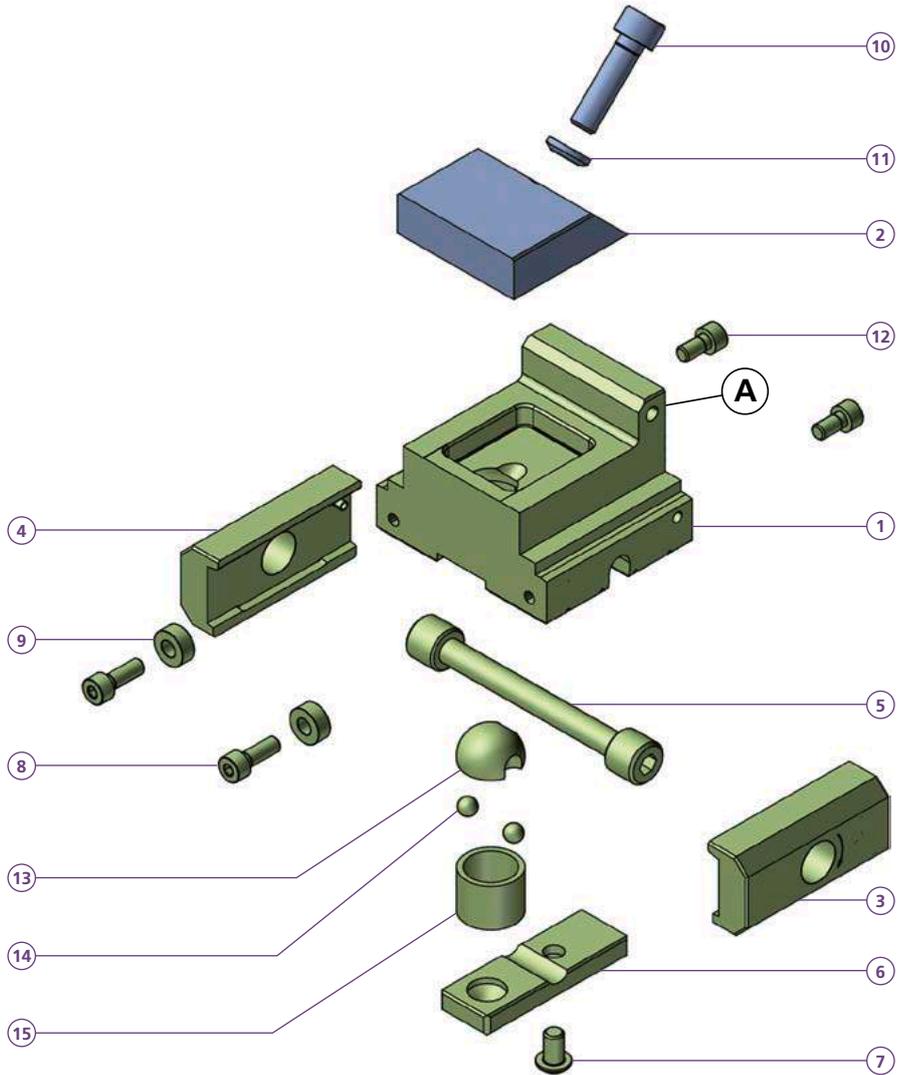
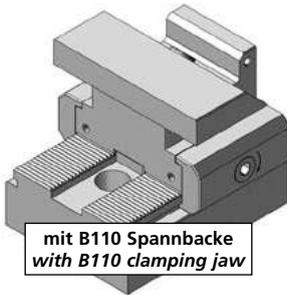
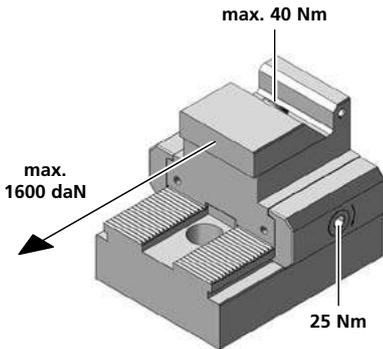
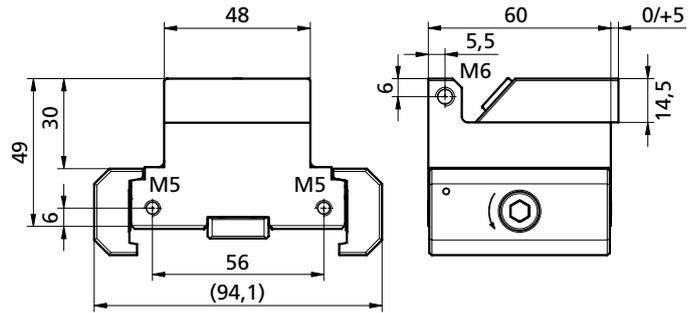
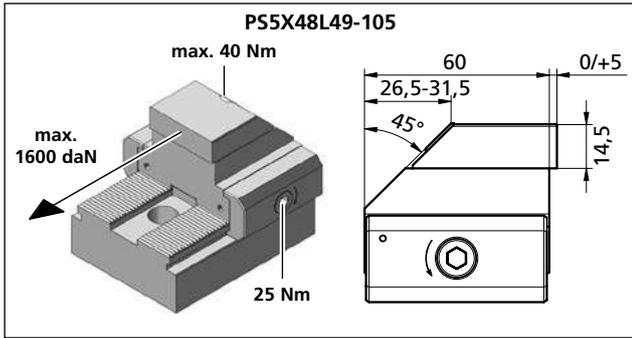
PS1PV94L49-105	
1	1x TK110250
15	1x PCD20L15
H	= 49
H1	= 30
kg	~1,8



Bestellbeispiel / Ordering example:  
1x PS1PV94L49-105 & 1x B122P

Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

Separat bestellen / Separate order



- A**
- PS5X48L49-105**
- 1 1x TF190651
  - 9 2x PCD005
  - 8 2x M5X14ISO4762
- kg ~1,2
- PS1F48L49-105**
- 1 1x TF140673
- PS1R48L49-105**
- 1 1x TF140672
- PS1F48L49-105**
- 2 1x
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2059
  - 7 1x M6X8ISO7380
  - 8 2x M5X14ISO4762
  - 9 2x PCD005
  - 10 1x M8X30ISO4762
  - 11 1x PCUSR14
  - 12 2x M5X10ISO4762
  - 13 1x PCKMR45M8
  - 14 2x D=6 DIN 5401
  - 15 1x PCD20L15
- kg ~1,3

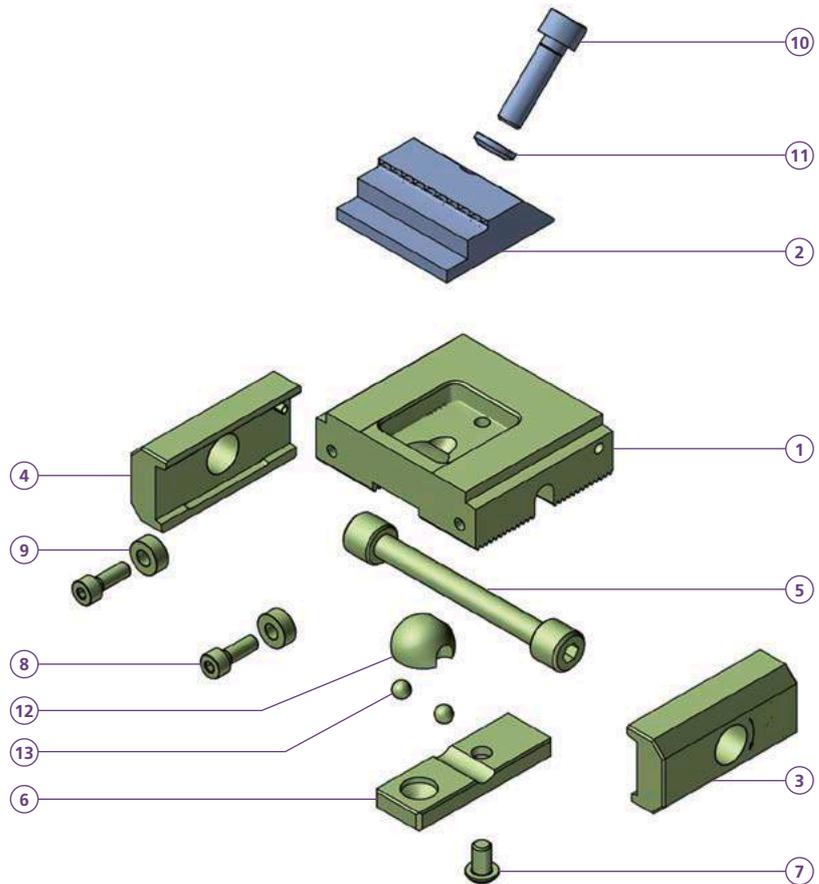
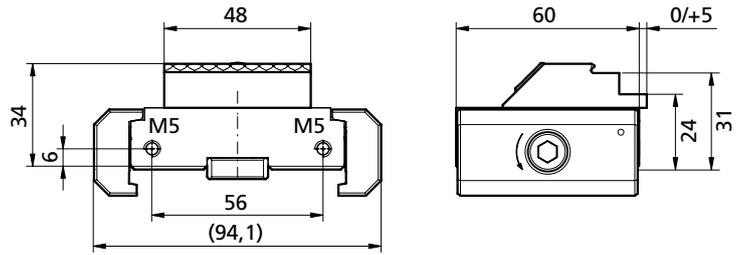
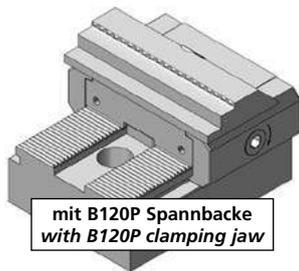
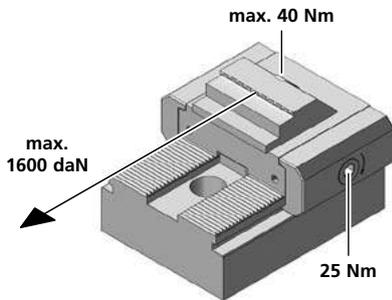
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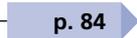


Bestellbeispiel / Ordering example:  
1x PS1F48L49-105 & 1x B105

Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

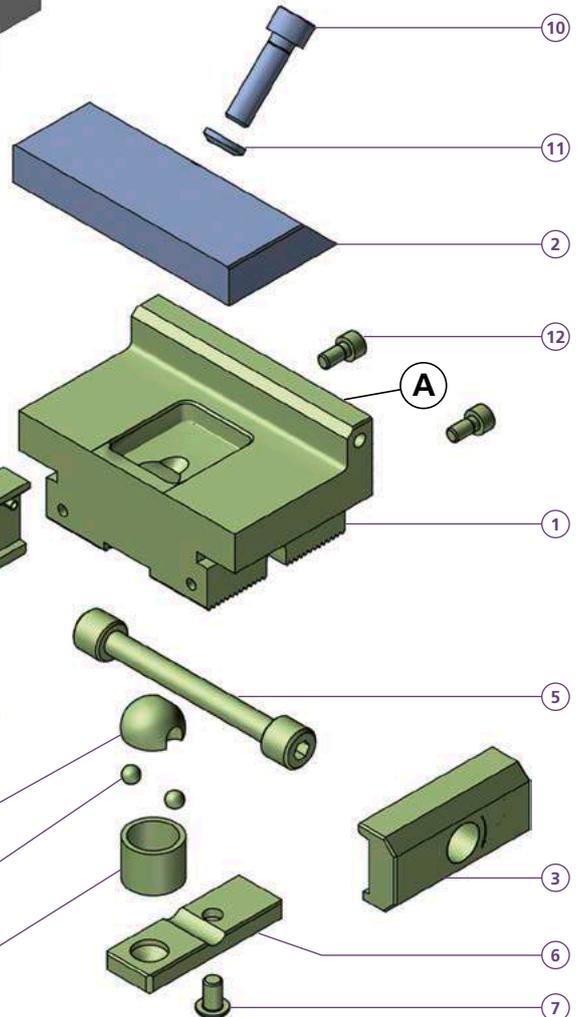
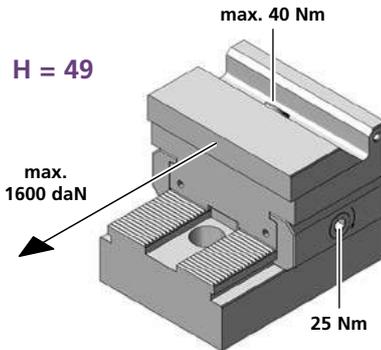
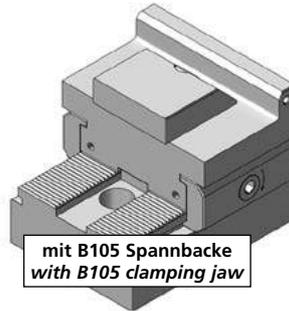
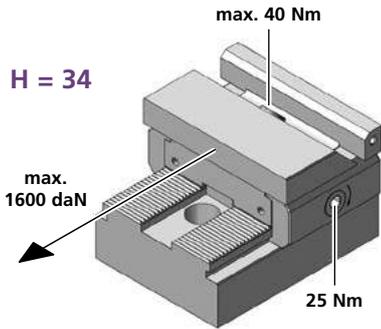
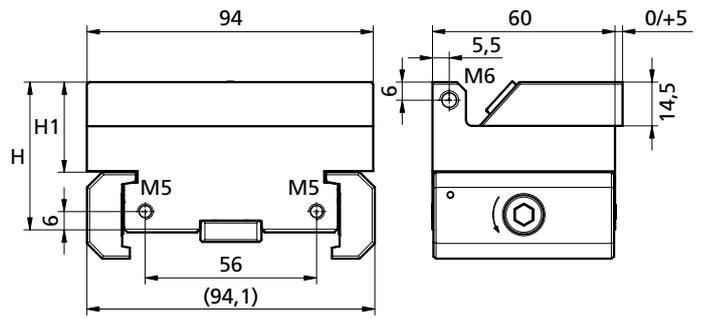
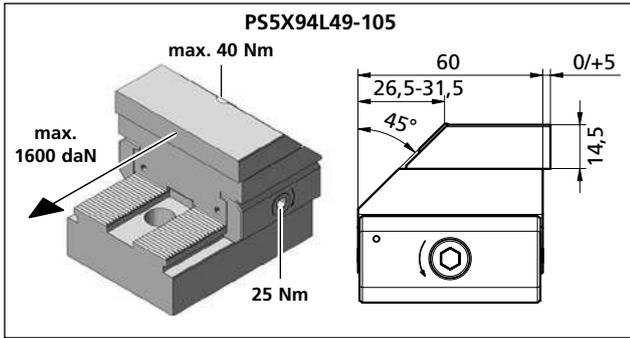
PS5X48L34-105



PS5X48L34-105	
1	1x T00365
2	1x 
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X28ISO4762
11	1x PCUSR16
12	1x PCKMR45M8
13	2x D=6 DIN 5401
kg	~0,9

Bestellbeispiel / Ordering example:  
1x PS5X48L34-105 & 1x B105

Drehmoment Torque	Spannkraft Workholding force		
	Nm (lb-ft)	~daN	~(lb) ~t
10	7,4 =	400 880	0,4
20	14,8 =	800 1'760	0,8
30	22,2 =	1'200 2'650	1,2
40	29,6 =	1'600 3'530	1,6



	<b>PS5X94L49-105</b>
1	1x TW100186
15	2x PCD20L15
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,5
	<b>PS1F94L34-105</b>
1	1x TH130785
	<b>PS1R94L34-105</b>
1	1x TH130786
2	1x <b>p. 84</b>
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X30ISO4762
11	1x PCUSR14
12	2x M5X10ISO4762
13	1x PCKMR45M8
14	2x D=6 DIN 5401
H	= 34
H1	= 15
kg	~1,0

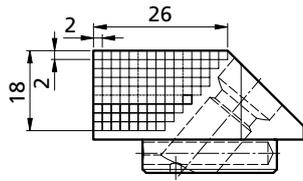
	<b>PS1F94L49-105</b>
1	1x TF140674
15	2x PCD20L15
	<b>PS1R94L49-105</b>
1	1x TF140675
15	2x PCD20L15
H	= 49
H1	= 30
kg	~1,7

Bestellbeispiel / Ordering example:  
1x PS1R94L49-105 & 1x B105

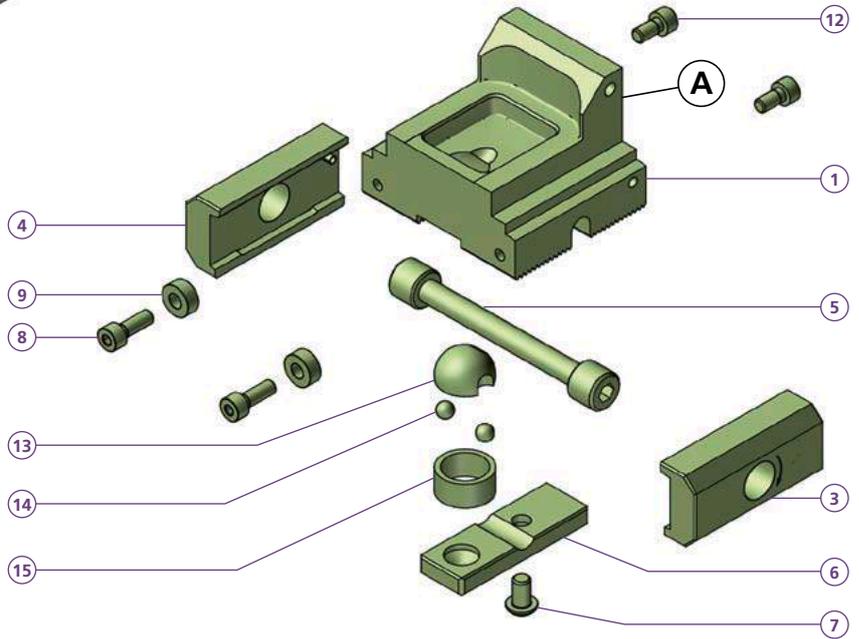
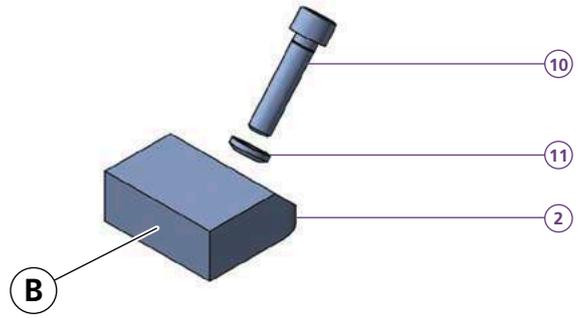
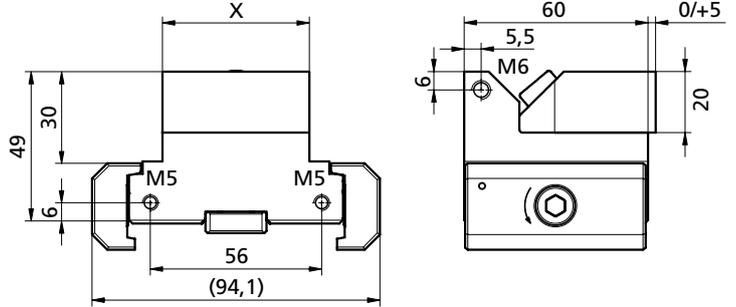
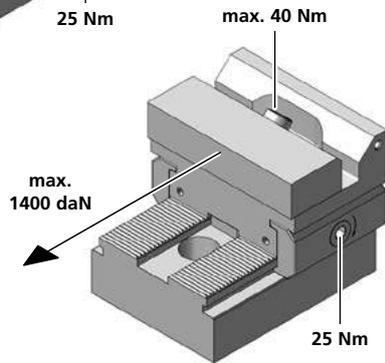
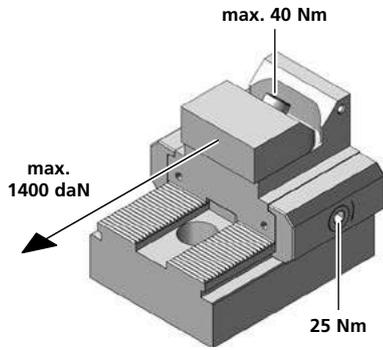
Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

PS1R48L49-105H20

PS1R94L49-105H20



Zum Erstellen Ihrer individuellen Formbacke: *If a dedicated jaw is being machined:*  
Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe *Sectional drawing to determine the maximum machining depth*



**PS1R48L49-105H20**

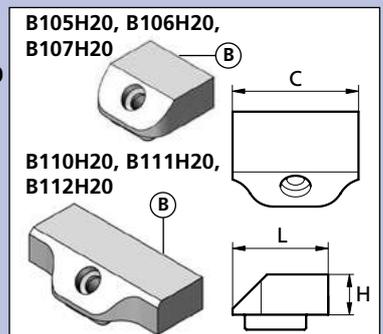
1	1x	TW100161-01
2	1x	
3	1x	PCSP60R
4	1x	PCSP60L
5	1x	PCS14
6	1x	PCGU2059
7	1x	M6X8ISO7380
8	2x	M5X14ISO4762
9	2x	PCD005
10	1x	M8X35ISO4762
11	1x	PCUSR14
12	2x	M5X10ISO4762
13	1x	PCKMR45M8
14	2x	D=6 DIN 5401
15	1x	PCD20L095
X	=	48
kg		~1,2

**PS1R94L49-105H20**

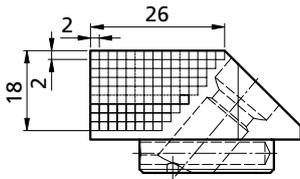
1	1x	TW100161-07
X	=	94
kg		~1,5

Bestellbeispiel / Ordering example: 1x PS1R48L49-105H20 & 1x B107H20

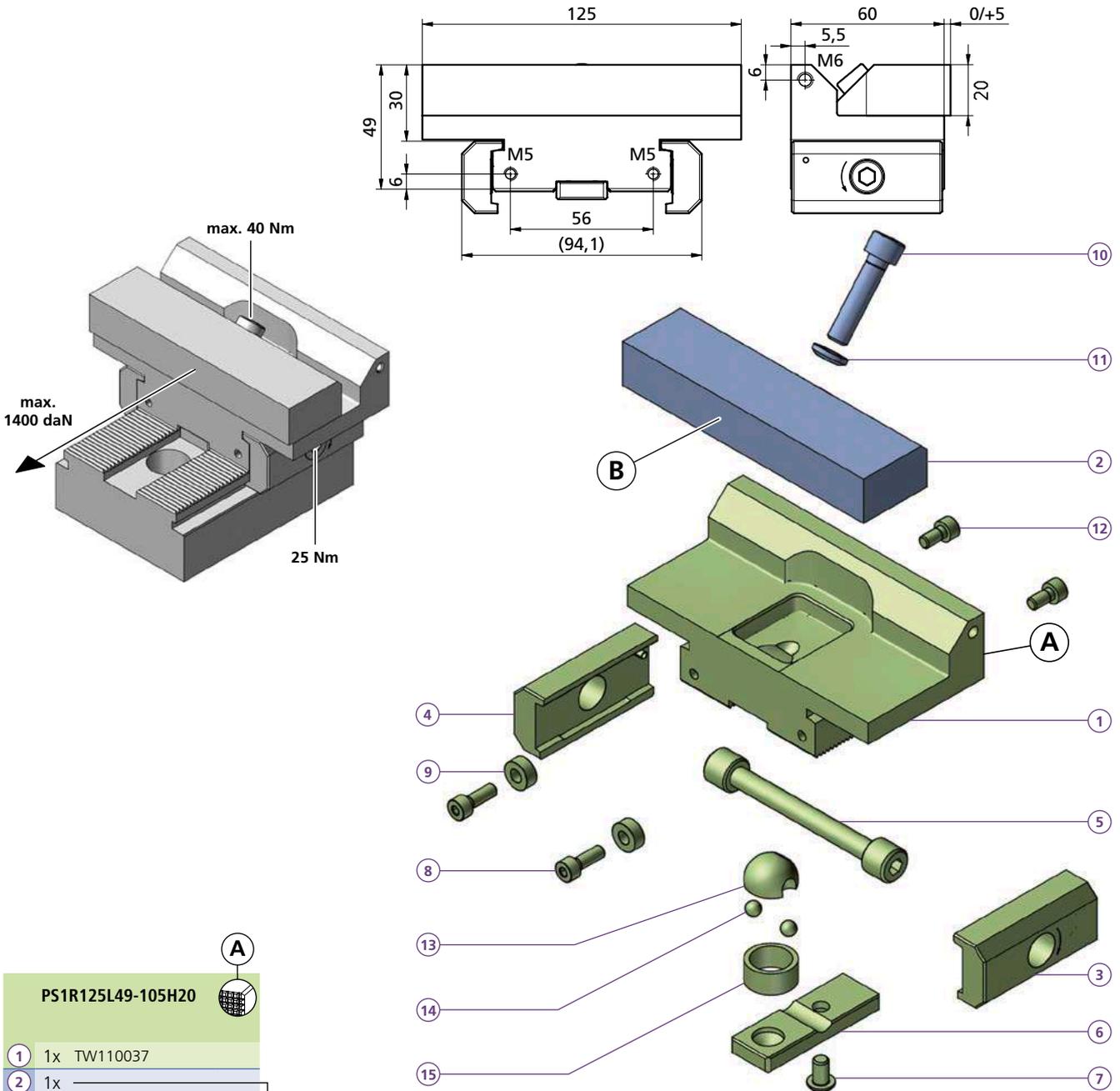
	B105H20	B106H20	B107H20	B110H20	B111H20	B112H20
C	48	48	48	94	94	94
H	20	20	20	20	20	20
L	47	47	47	47	47	47
i	HV700 x0,2mm	HV700 x0,2mm	*	HV700 x0,2mm	HV700 x0,2mm	*
kg	~0,38	~0,38	~0,38	~0,57	~0,56	~0,56



Separat bestellen / Separate order



Zum Erstellen Ihrer individuellen Formbacke: *If a dedicated jaw is being machined:*  
 Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe  
*Sectional drawing to determine the maximum machining depth*



PS1R125L49-105H20	
1	1x TW110037
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X35ISO4762
11	1x PCUSR14
12	2x M5X10ISO4762
13	1x PCKMR45M8
14	2x D=6 DIN 5401
15	1x PCD20L095
kg	~1,7

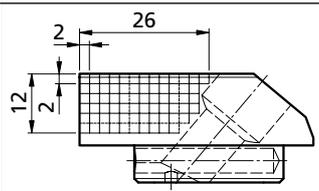
Bestellbeispiel / Ordering example: 1x PS1R125L49-105H20 & 1x B132H20P

	B130H20P	B131H20P	B132H20P
C	125	125	125
H	20	20	20
L	47	47	47
i	HV700 x0,2mm	HV700 x0,2mm	*
kg	~0,71	~0,71	~0,71

B130H20P, B131H20P, B132H20P

\* = weicher Stahl / soft steel

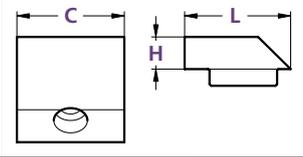
Separat bestellen / Separate order



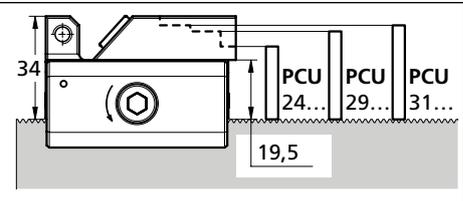
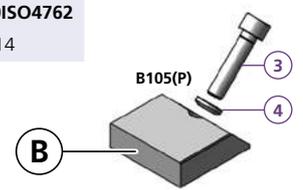
Zum Erstellen Ihrer individuellen Formbacke: *If a dedicated jaw is being machined:*  
 Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe *Sectional drawing to determine the maximum machining depth*

für / for B107, B107P, B112, B112P, B112E, B112EP, 112HG

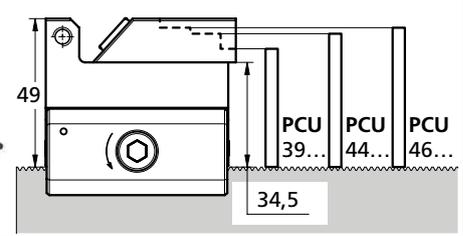
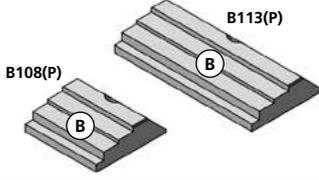
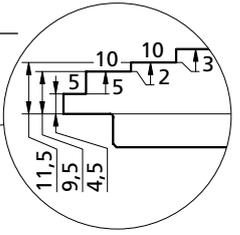
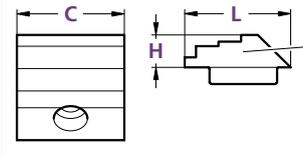
**B105... , B106P, B107... , B110... , B111... , B112..., B140... , B141...**



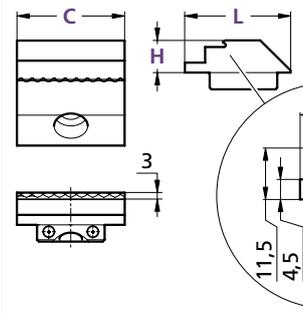
- 3 1x M8X30ISO4762
- 4 1x PCUSR14



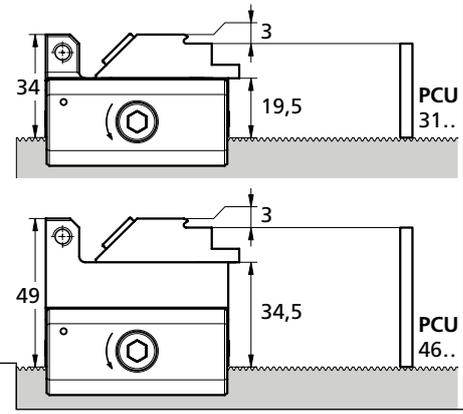
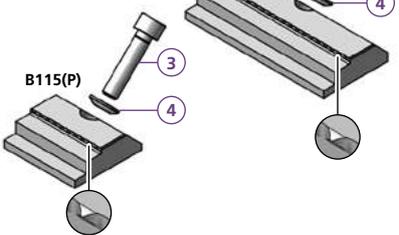
**B108... , B113...**



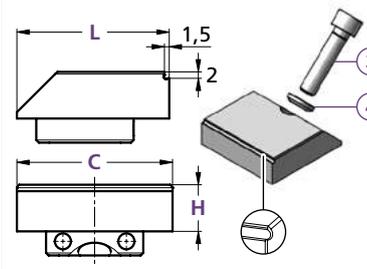
**B115... , B120...**



- 3 1x M8X28ISO4762
- 4 1x PCUSR16

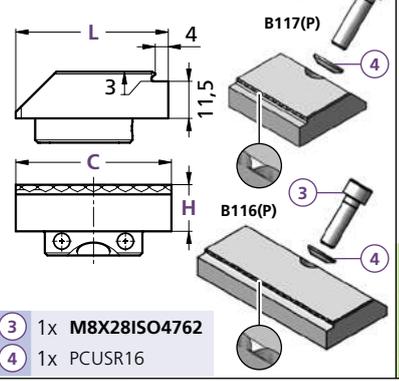


**B105-15**



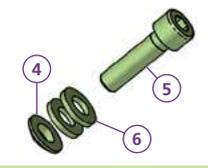
- 3 1x M8X30ISO4762
- 4 1x PCUSR14

**B116P, B117P**



- 3 1x M8X28ISO4762
- 4 1x PCUSR16

Krafterhaltung mit Nachfederung  
 Spring loaded mechanism to maintain clamping force

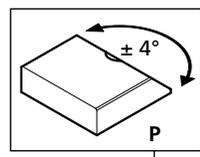


- PF-SET**
- 4 1x PCUSR16
  - 5 1x M8X30ISO4762
  - 6 2x TH160577

Tellerfedern gegenläufig montieren  
 Mount the clamping disc springs in opposite directions

Für Prägebacken  
 For stamping jaws

B



	B105	B105-15	B106	B107	B108	B110	B111	B112	B112E	B113	B115	B116P	B117P	B120	B140	B141	
	B105P		B106P	B107P	B108P	B110P	B111P	B112P	B112EP	B113P	B115P	B116P	B117P	B120P	B140P	B141P	
C	48	48	48	48	48	94	94	94	94	94	48	48	94	94	78	78	
H	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	
L	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
i	HV700	HV700	HV700	*	HV700	HV700	HV700	*	**	HV700	57HRC	57HRC	57HRC	57HRC	57HRC	HV700	HV700
	x0,2mm	x0,2mm	x0,2mm		x0,2mm	x0,2mm	x0,2mm			x0,2mm						x0,2mm	x0,2mm
kg	~0,27	~0,27	~0,27	~0,27	~0,22	~0,49	~0,48	~0,49	~0,47	~0,39	~0,21	~0,25	~0,46	~0,4	~0,41	~0,41	

Separat bestellen / Separate order

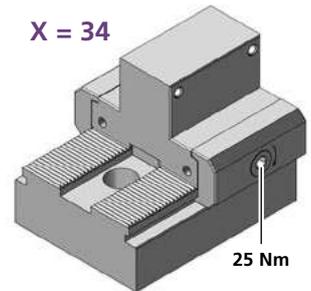
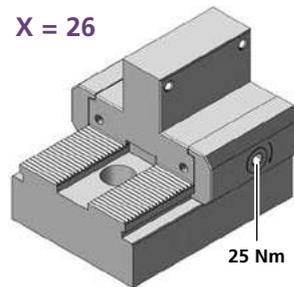
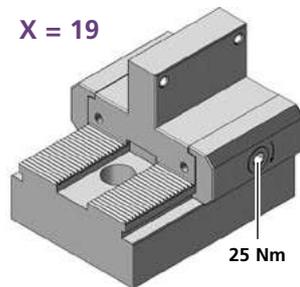
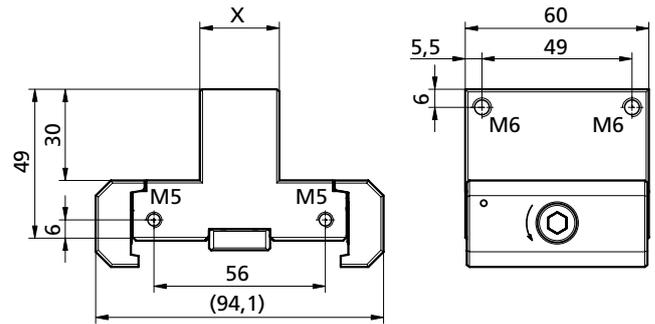
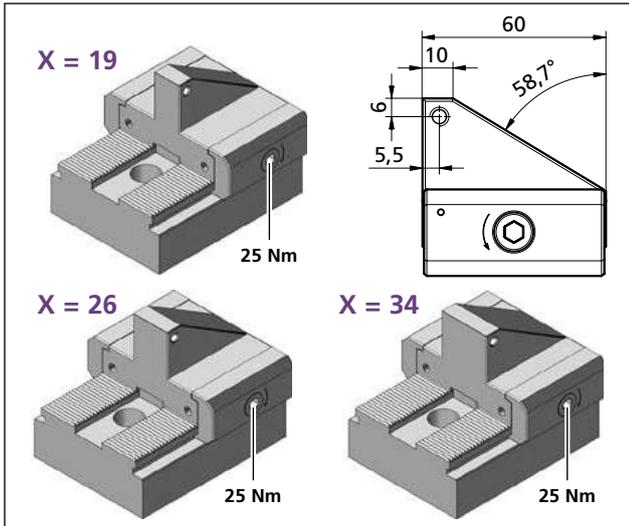
**Anschlagmodule**  
**End module**

**PAND19-49**  
**PAND26-49**  
**PAND34-49**

**PA5X19-49R/F**  
**PA5X26-49R/F**  
**PA5X34-49R/F**

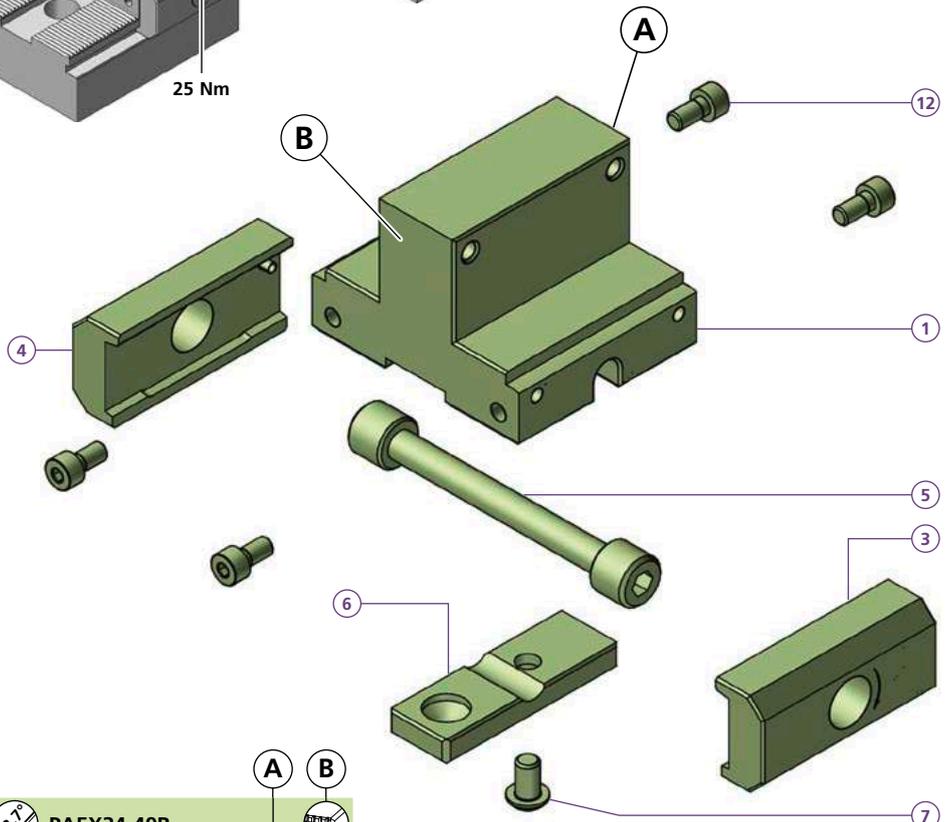


**powerCLAMP**



	<b>PA5X19-49R</b>	
	1x TF140617	
	2x M5X10ISO4762	
	<b>PA5X19-49F</b>	
	1x TF140618	
	2x M5X10ISO4762	
kg	~1,1	
	<b>PAND19-49</b>	
	1x TF140619	
	1x PCSP60R	
	1x PCSP60L	
	1x PCS14	
	1x PCGU2049	
	1x M6X8ISO7380	
	4x M5X10ISO4762	
X	= 19	
kg	~1,2	
	<b>PA5X26-49R</b>	
	1x TF140621	
	2x M5X10ISO4762	
	<b>PA5X26-49F</b>	
	1x TF140620	
	2x M5X10ISO4762	
kg	~1,2	
	<b>PAND26-49</b>	
	1x TF140622	
X	= 26	
kg	~1,3	

	<b>PA5X34-49R</b>	
	1x TF140024	
	2x M5X10ISO4762	
	<b>PA5X34-49F</b>	
	1x TF140023	
	2x M5X10ISO4762	
kg	~1,3	
	<b>PAND34-49</b>	
	1x TF140625	
X	= 34	
kg	~1,6	

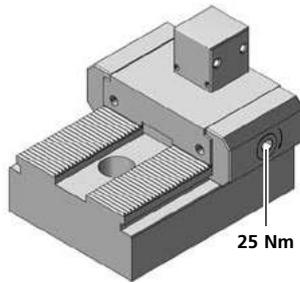
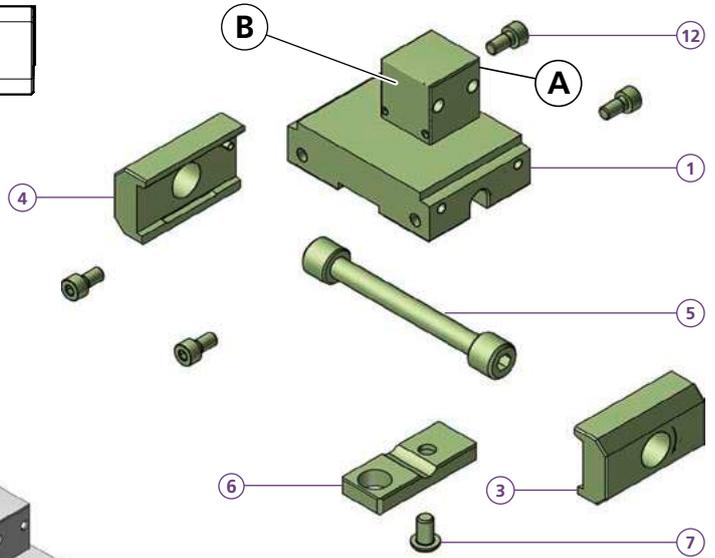
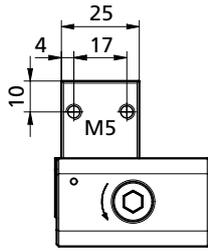
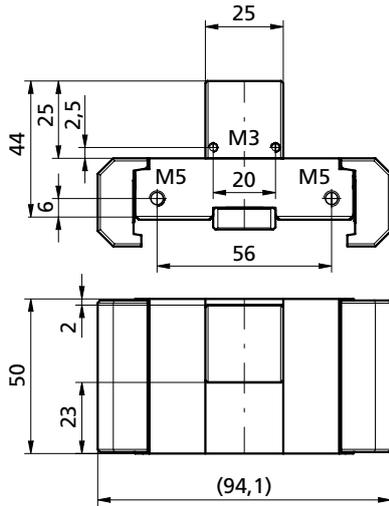


Bestellbeispiel / Ordering example: **PAND19-49**

**PAND25-44**  
**PAND94-44**

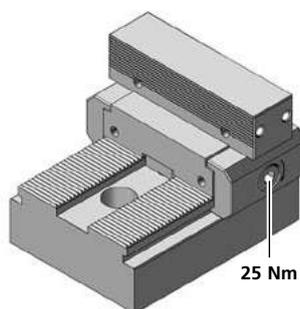
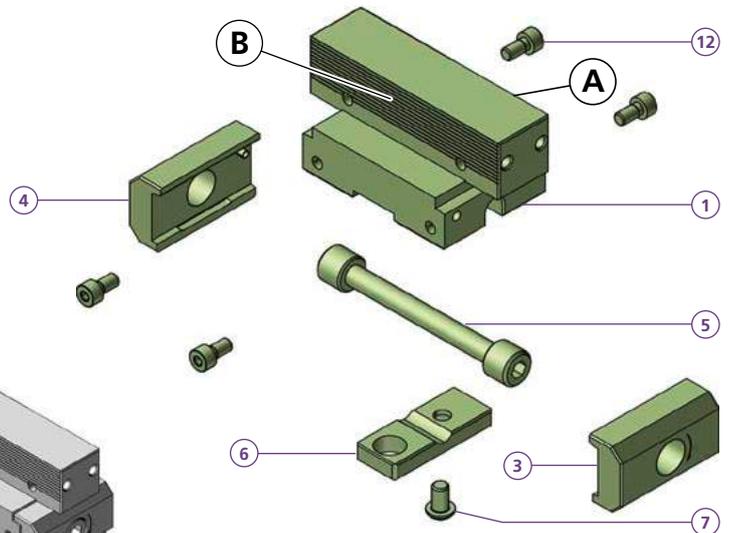
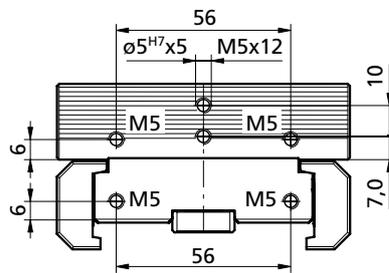
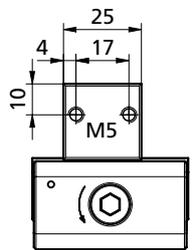
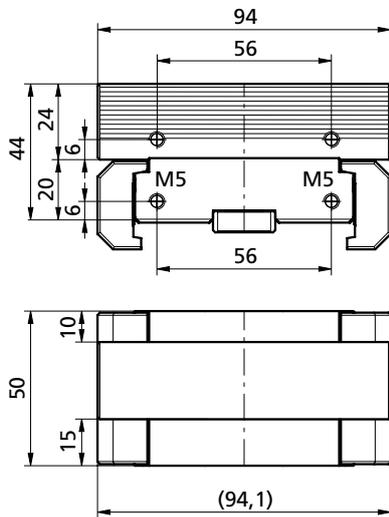


**powerCLAMP**



- PAND25-44**
- ① 1x TF140626
  - ③ 1x PCSP50R
  - ④ 1x PCSP50L
  - ⑤ 1x PCS14
  - ⑥ 1x PCGU2049
  - ⑦ 1x M6X8ISO7380
  - ⑫ 4x M5X10ISO4762
- kg ~0,9

Bestellbeispiel / Ordering example: **PAND25-44**



- PAND94-44**
- ① 1x TF140627
  - ③ 1x PCSP50R
  - ④ 1x PCSP50L
  - ⑤ 1x PCS14
  - ⑥ 1x PCGU2049
  - ⑦ 1x M6X8ISO7380
  - ⑫ 4x M5X10ISO4762
- kg ~1,3

Bestellbeispiel / Ordering example: **PAND94-44**

PAND48-34

PAND48-75

PAND58-34

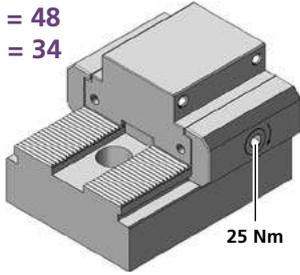
PAND58-49

PAND61-34



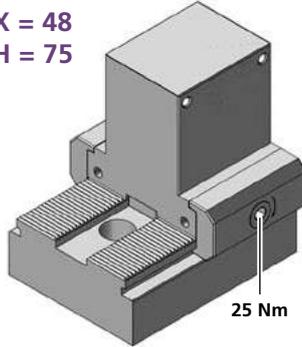
powerCLAMP

X = 48  
H = 34

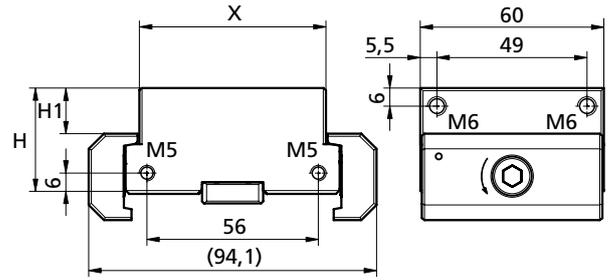


25 Nm

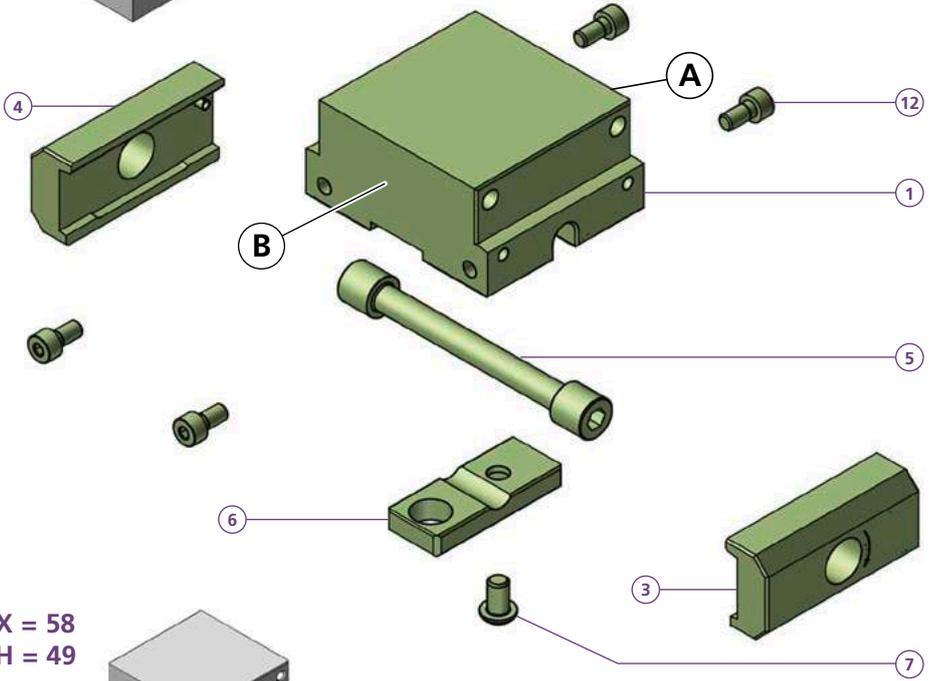
X = 48  
H = 75



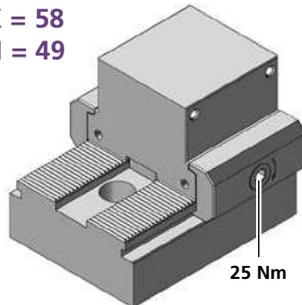
25 Nm



	A	B
<b>PAND48-34</b>		
1	1x TF140628	
3	1x PCSP60R	
4	1x PCSP60L	
5	1x PCS14	
6	1x PCGU2049	
7	1x M6X8ISO7380	
12	4x M5X10ISO4762	
X	= 48	
H	= 34	
H1	= 15	
kg	~1,3	
<b>PAND48-75</b>		
1	1x TK120053	
X	= 48	
H	= 75	
H1	= 56	
kg	~2,2	
<b>PAND58-34</b>		
1	1x TF140629	
X	= 58	
H	= 34	
H1	= 15	
kg	~1,4	
<b>PAND58-49</b>		
1	1x TK120130	
X	= 58	
H	= 49	
H1	= 30	
kg	~1,8	
<b>PAND61-34</b>		
1	1x TF140630	
X	= 61	
H	= 34	
H1	= 15	
kg	~1,4	

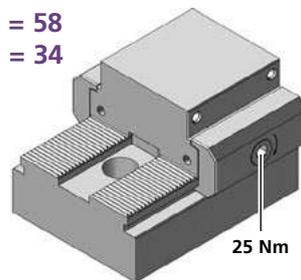


X = 58  
H = 49



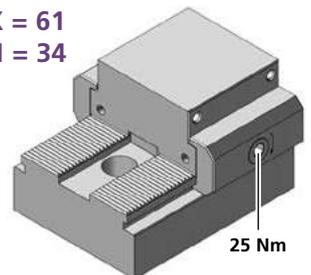
25 Nm

X = 58  
H = 34



25 Nm

X = 61  
H = 34



25 Nm

Bestellbeispiel / Ordering example: PAND61-34

PAND68-34

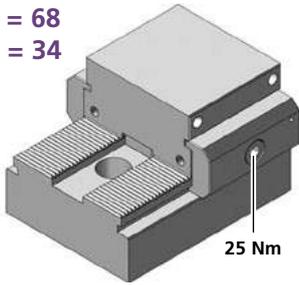
PAND94-34

PAND78-49

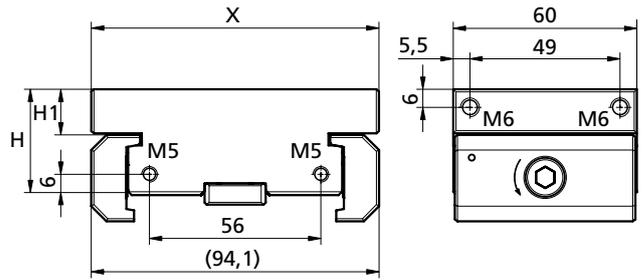


powerCLAMP

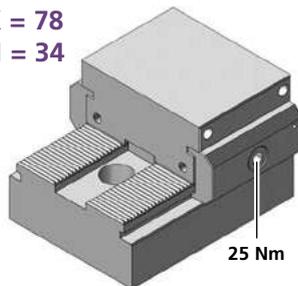
X = 68  
H = 34



25 Nm



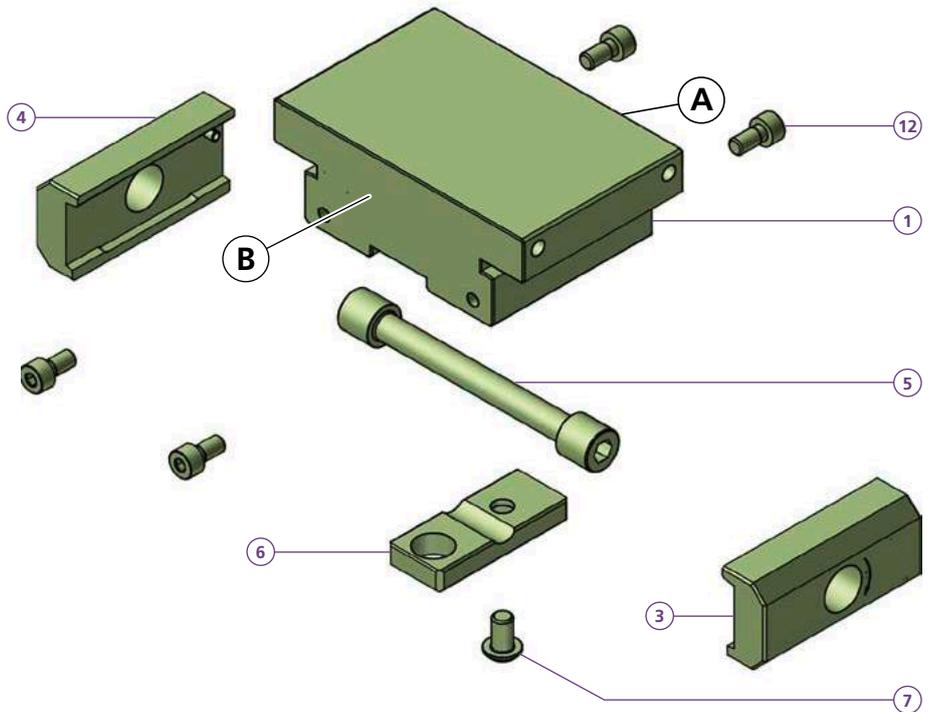
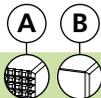
X = 78  
H = 34



25 Nm

**PAND68-34**

- ① 1x TF140631
- ③ 1x PCSP60R
- ④ 1x PCSP60L
- ⑤ 1x PCS14
- ⑥ 1x PCGU2049
- ⑦ 1x M6X8ISO7380
- ⑫ 4x M5X10ISO4762
- X = 68
- H = 34
- H1 = 15
- kg ~1,4

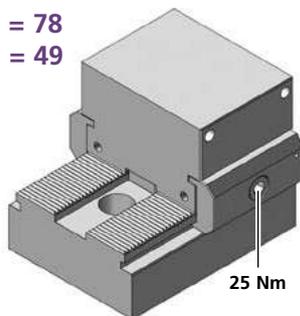


**PAND78-34**

- ① 1x TF140632
- X = 78
- H = 34
- H1 = 15
- kg ~1,5



X = 78  
H = 49



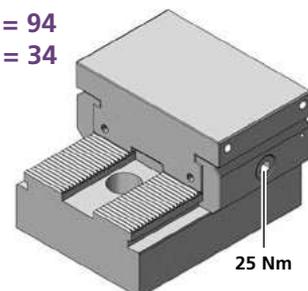
25 Nm

**PAND78-49**

- ① 1x TF140634
- X = 78
- H = 49
- H1 = 30
- kg ~2,0



X = 94  
H = 34



25 Nm

**PAND94-34**

- ① 1x TF140633
- X = 94
- H = 34
- H1 = 15
- kg ~2,3



Bestellbeispiel / Ordering example: PAND94-34

PAND43-49

PAND125-49

PA5X94-49R/F

PAND48-49

PA5X43-49R/F

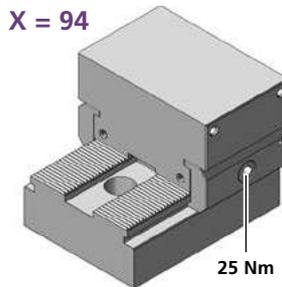
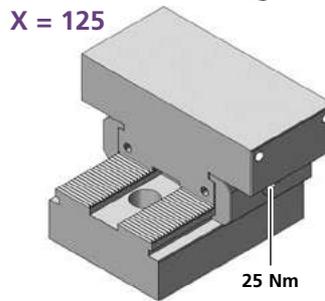
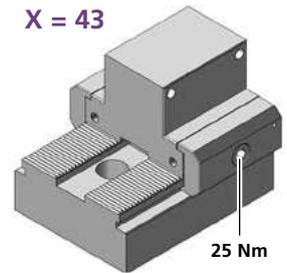
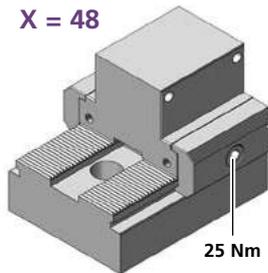
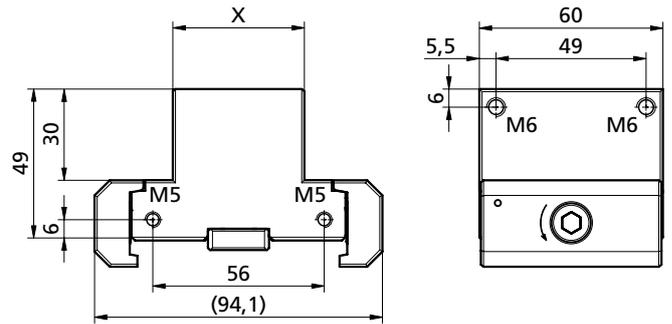
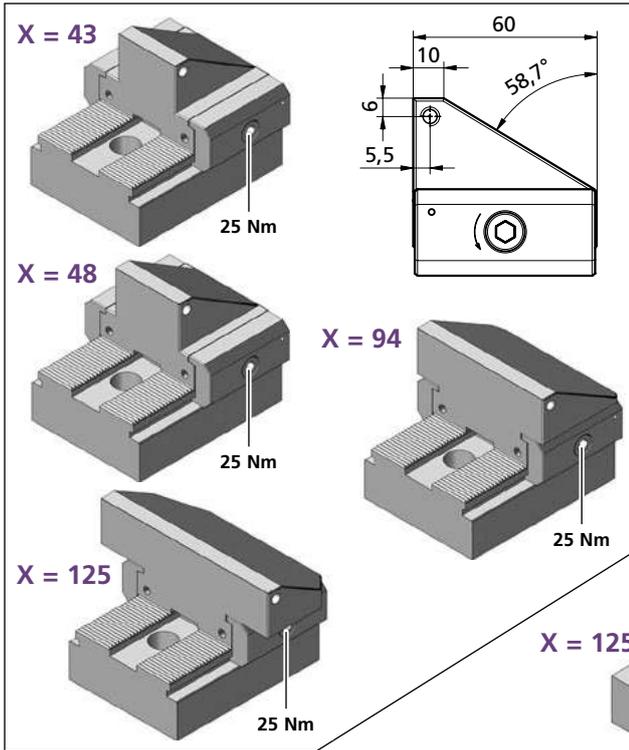
PA5X125-49R/F

PAND94-49

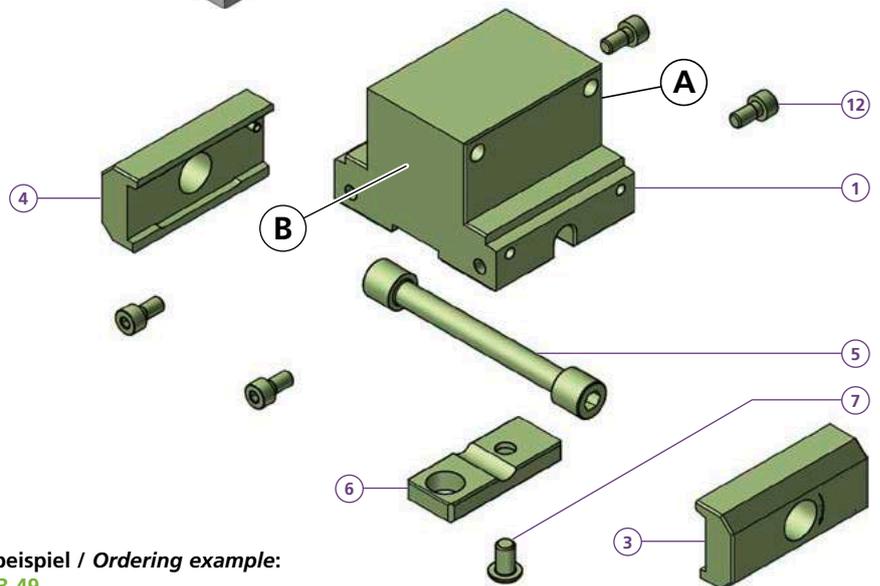
PA5X48-49R/F



powerCLAMP



	<b>PA5X43-49R</b>	
	1x TF140651	
	2x M5X10ISO4762	
	<b>PA5X43-49F</b>	
	1x TF140652	
	2x M5X10ISO4762	
kg	~1,3	
	<b>PAND43-49</b>	
	1x TF140659	
	1x PCSP60R	
	1x PCSP60L	
	1x PCS14	
	1x PCGU2049	
	1x M6X8ISO7380	
	4x M5X10ISO4762	
X	= 43	
kg	~1,6	
	<b>PA5X48-49R</b>	
	1x TF140653	
	2x M5X10ISO4762	
	<b>PA5X48-49F</b>	
	1x TF140654	
	2x M5X10ISO4762	
kg	~1,3	
	<b>PAND48-49</b>	
	1x TF140660	
X	= 48	
kg	~1,6	



Bestellbeispiel / Ordering example:  
PAND43-49

	<b>PA5X94-49R</b>	
	1x TF140655	
	2x M5X10ISO4762	
	<b>PA5X94-49F</b>	
	1x TF140656	
	2x M5X10ISO4762	
kg	~1,7	
	<b>PAND94-49</b>	
	1x TB150451	
X	= 94	
kg	~2,3	

	<b>PA5X125-49R</b>	
	1x TF140657	
	2x M5X10ISO4762	
	<b>PA5X125-49F</b>	
	1x TF140658	
	2x M5X10ISO4762	
kg	~2,0	
	<b>PAND125-49</b>	
	1x TF140662	
X	= 125	
kg	~2,7	



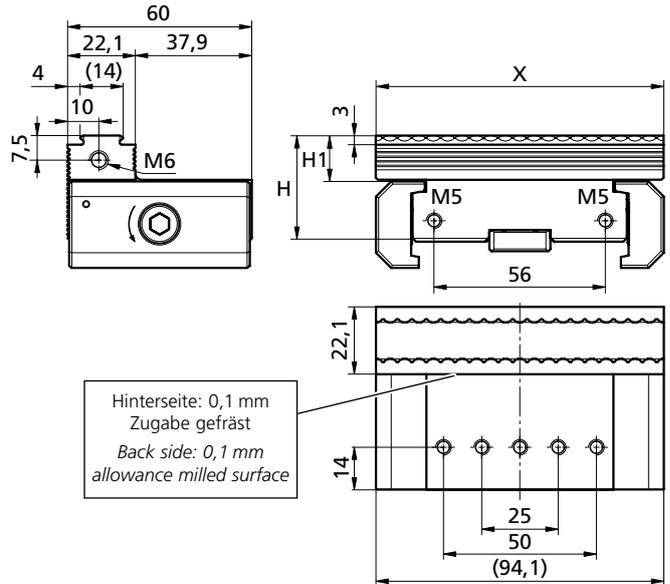
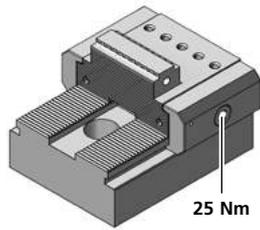
**PAND48-34PRG-A1**   

**1** 1x TH120684

**PAND48-34PRF-A1**  

**1** 1x TK140239  
**3** 1x PCSP60R  
**4** 1x PCSP60L  
**5** 1x PCS14  
**6** 1x PCGU2049  
**7** 1x M6X8ISO7380  
**12** 4x M5X10ISO4762

X = 48  
 H = 34  
 H1 = 15  
 kg ~1,1



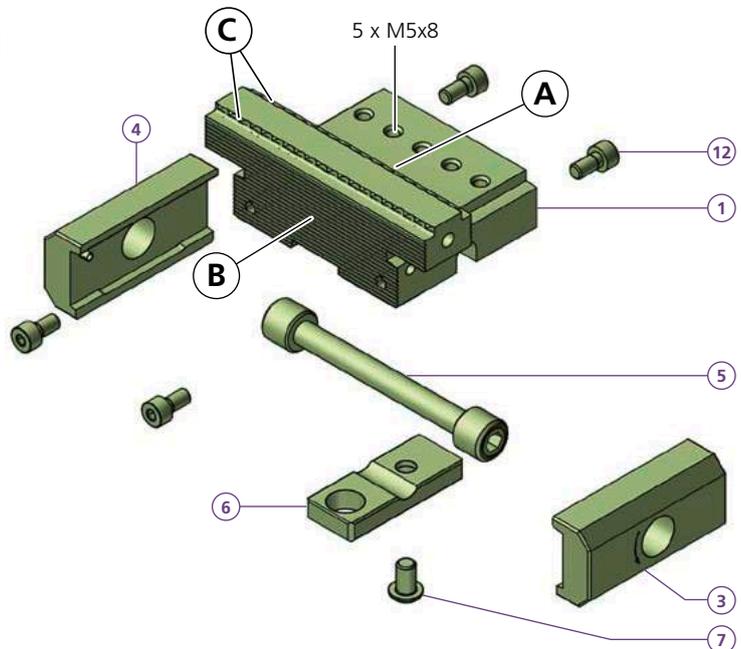
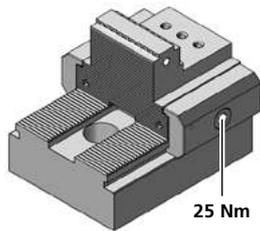
**PAND48-49PRG-A1**  

**1** 1x TH120685

**PAND48-49PRF-A1**  

**1** 1x TK140597

X = 48  
 H = 49  
 H1 = 30  
 kg ~1,3



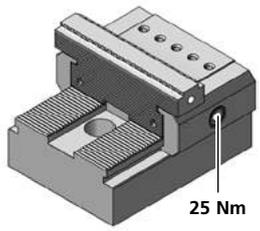
**PAND94-34PRG-A1**   

**1** 1x TH120686

**PAND94-34PRF-A1**  

**1** 1x TH140185

X = 94  
 H = 34  
 H1 = 15  
 kg ~1,2



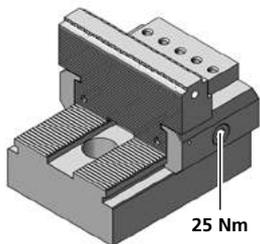
**PAND94-49PRG-A1**  

**1** 1x TH120687

**PAND94-49PRF-A1**  

**1** 1x TH130754

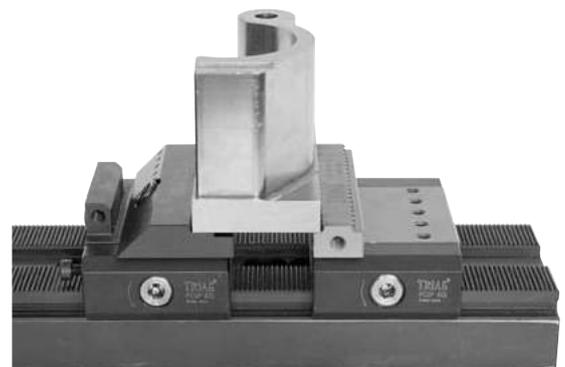
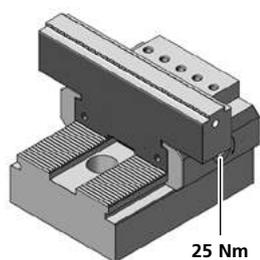
X = 94  
 H = 49  
 H1 = 30  
 kg ~1,6



**PAND125-49PRG-A1**   

**1** 1x TB160295

X = 125  
 H = 49  
 H1 = 30  
 kg ~1,7



Bestellbeispiel / Ordering example: PAND94-34PRG-A1

PAND125-34PRG-A1

PAND150-34PRG-A1

PAND94-34PRGV

PAND94-49PRGV

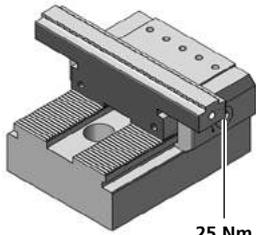


prägen  
stamping

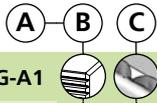


powerCLAMP

X = 125



25 Nm



PAND125-34PRG-A1

1 1x TB180899

X = 125

kg ~1,2

PAND150-34PRG-A1

1 1x TB160145

3 1x PCSP50R

4 1x PCSP50L

5 1x PCS14

6 1x PCGU2049

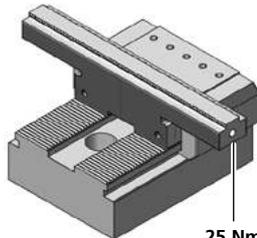
7 1x M6X8ISO7380

12 4x M5X10ISO4762

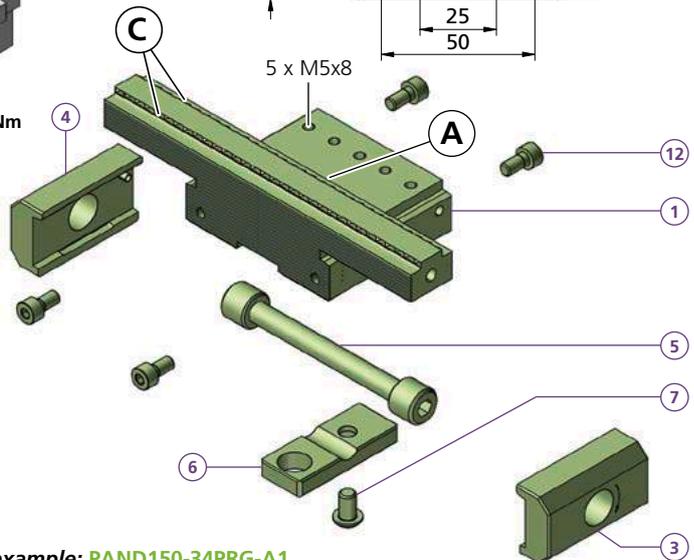
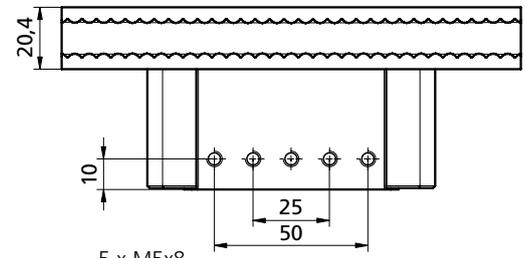
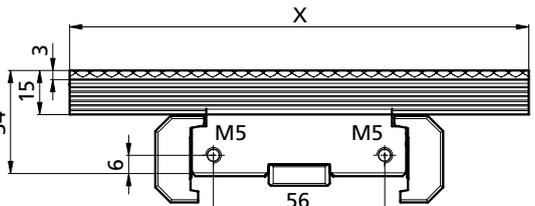
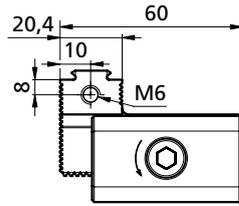
X = 150

kg ~1,2

X = 150

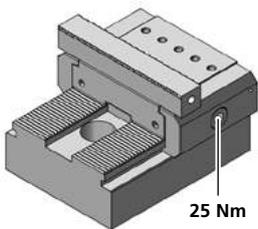


25 Nm



Bestellbeispiel / Ordering example: PAND150-34PRG-A1

H = 34



25 Nm



PAND94-34PRGV

1 1x TH171180

3 1x PCSP60R

4 1x PCSP60L

5 1x PCS14

6 1x PCGU2059

7 1x M6X8ISO7380

12 4x M5X10ISO4762

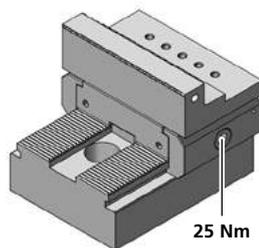
H = 34

H1 = 15

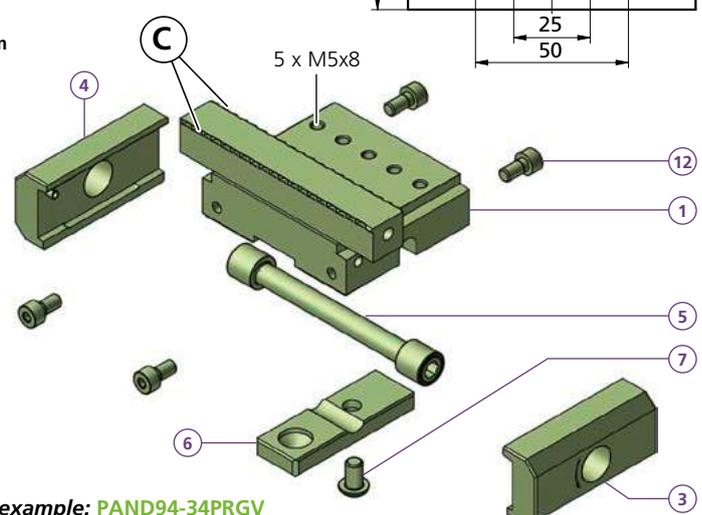
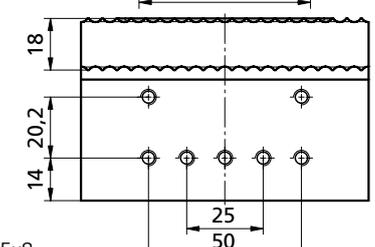
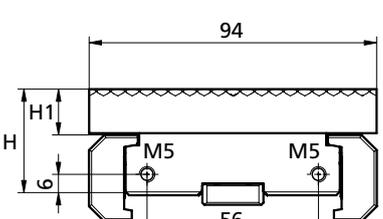
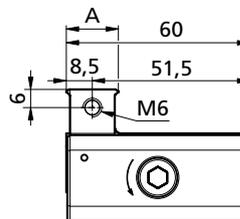
A = 17,5

kg ~1,2

H = 49



25 Nm



Bestellbeispiel / Ordering example: PAND94-34PRGV

PAND94-49PRGV

1 1x TH171179

H = 49

H1 = 30

A = 17

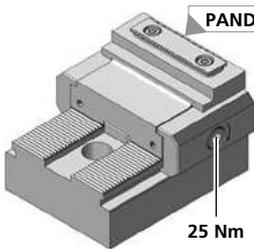
kg ~1,6



prägen  
stamping

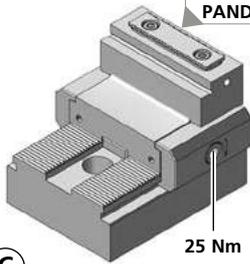


powerCLAMP



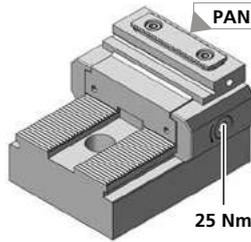
PAND78-34UPRG

25 Nm



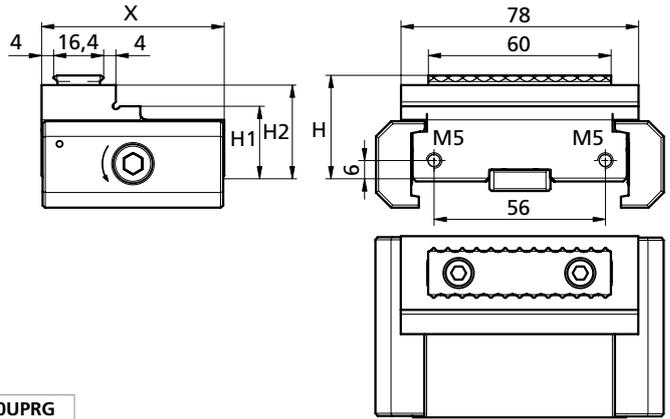
PAND78-49UPRG

25 Nm



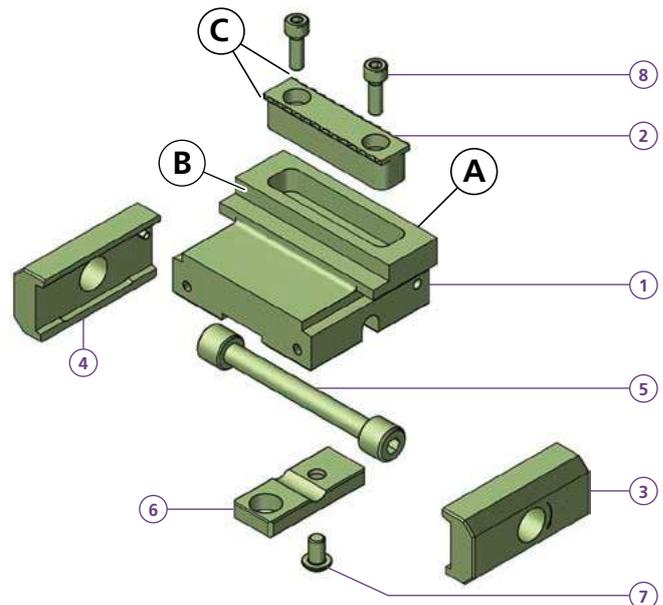
PAND78-34X50UPRG

25 Nm

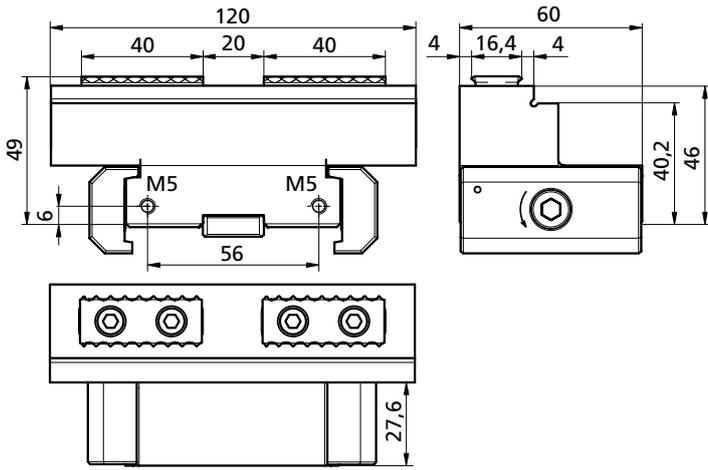


- |                      | A               | B | C |
|----------------------|-----------------|---|---|
| <b>PAND78-34UPRG</b> |                 |   |   |
| 1                    | 1x TH140038     |   |   |
| 2                    | 1x MAND58-14PRG |   |   |
| 3                    | 1x PCSP60R      |   |   |
| 4                    | 1x PCSP60L      |   |   |
| 5                    | 1x PCS14        |   |   |
| 6                    | 1x PCGU2049     |   |   |
| 7                    | 1x M6X8ISO7380  |   |   |
| 8                    | 2x M5X16ISO4762 |   |   |
| H                    | = 34            |   |   |
| H1                   | = 24            |   |   |
| H2                   | = 31            |   |   |
| X                    | = 60            |   |   |
| kg                   | ~1,2            |   |   |
- 
- |                      | A           | B | C |
|----------------------|-------------|---|---|
| <b>PAND78-49UPRG</b> |             |   |   |
| 1                    | 1x TH140039 |   |   |
| H                    | = 49        |   |   |
| H1                   | = 39        |   |   |
| H2                   | = 46        |   |   |
| X                    | = 60        |   |   |
| kg                   | ~1,5        |   |   |

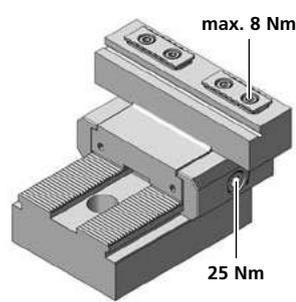
- |                         | A           | B | C |
|-------------------------|-------------|---|---|
| <b>PAND78-34X50UPRG</b> |             |   |   |
| 1                       | 1x TB161227 |   |   |
| 3                       | 1x PCSP50R  |   |   |
| 4                       | 1x PCSP50L  |   |   |
| H                       | = 34        |   |   |
| H1                      | = 24        |   |   |
| H2                      | = 31        |   |   |
| X                       | = 50        |   |   |
| kg                      | ~0,98       |   |   |



Bestellbeispiel / Ordering example: PAND78-34UPRG

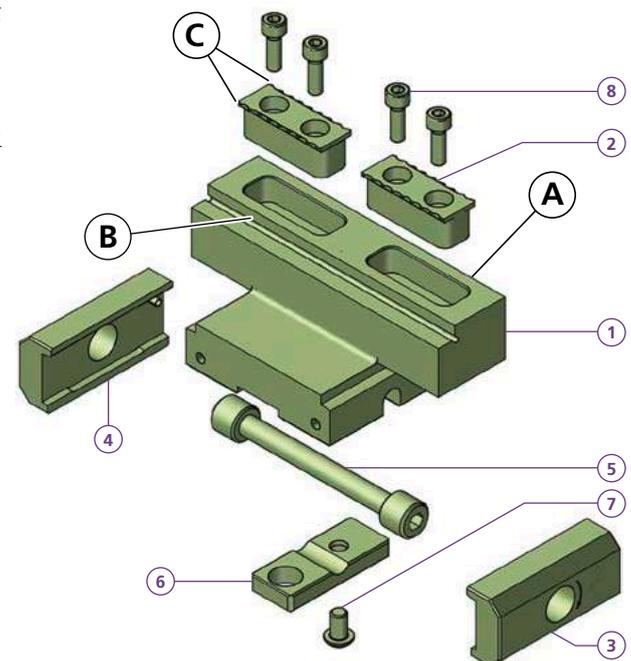


- |                       | A               | B | C |
|-----------------------|-----------------|---|---|
| <b>PAND120-49UPRG</b> |                 |   |   |
| 1                     | 1x TH160318     |   |   |
| 2                     | 2x MAND38-14PRG |   |   |
| 3                     | 1x PCSP60R      |   |   |
| 4                     | 1x PCSP60L      |   |   |
| 5                     | 1x PCS14        |   |   |
| 6                     | 1x PCGU2049     |   |   |
| 7                     | 1x M6X8ISO7380  |   |   |
| 8                     | 4x M5X16ISO4762 |   |   |
| kg                    | ~1,7            |   |   |



max. 8 Nm

25 Nm



Bestellbeispiel / Ordering example: PAND120-49UPRG

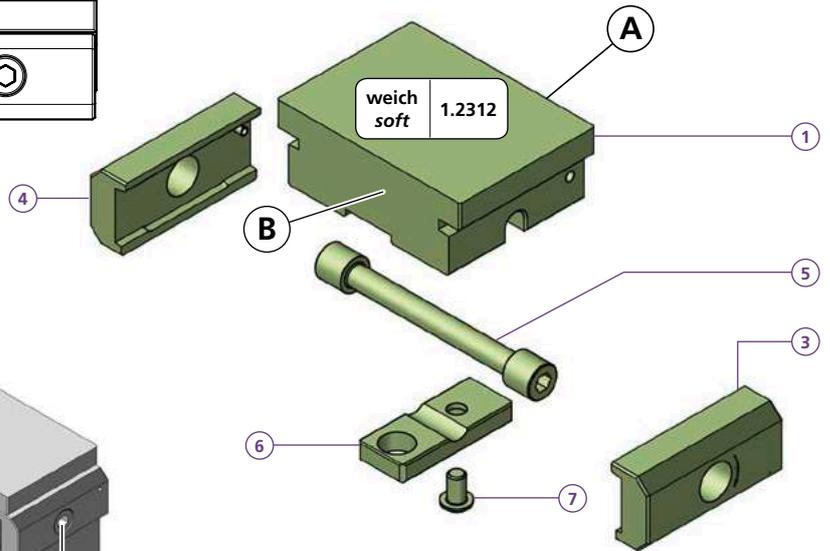
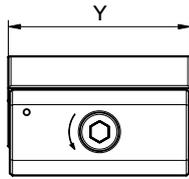
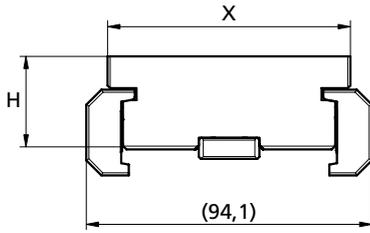
**Rohlingsmodule**  
**Blank module**

**PT-F80-30X60**  
**PT-F80-30X60NS**  
**PT-F80-30X30NS**

**PT-F61-25X60**  
**PT-F61-25X50**  
**PT-F61-25X30**



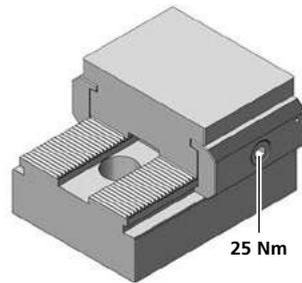
**powerCLAMP**



**PT-F80-30X60**

- 1 1x TF140637
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

X = 80  
H = 30  
Y = 60  
kg ~1,4

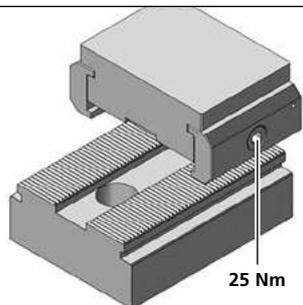


**PT-F80-30X60NS**

- 1 1x TF140635
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

X = 80  
H = 30  
Y = 60  
kg ~1,4

**NS = Rohlingsmodul freie Positionierung ohne Verzahnung**  
*Carrier module without positioning serration for free positioning*

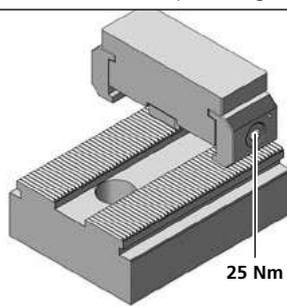


**PT-F80-30X30NS**

- 1 1x TF140749
- 3 1x PCSP30R
- 4 1x PCSP30L
- 5 1x PCS14
- 6 1x PCGU2030
- 7 1x M6X8ISO7380

X = 80  
H = 30  
Y = 30  
kg ~0,7

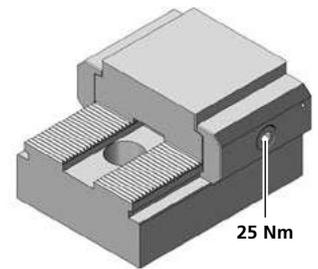
**NS = Rohlingsmodul freie Positionierung ohne Verzahnung**  
*Carrier module without positioning serration for free positioning*



**PT-F61-25X60**

- 1 1x TF140638
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

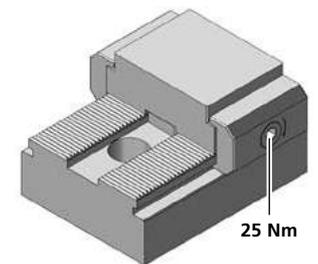
X = 61  
H = 25  
Y = 60  
kg ~1,1



**PT-F61-25X50**

- 1 1x TF140750
- 3 1x PCSP50R
- 4 1x PCSP50L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

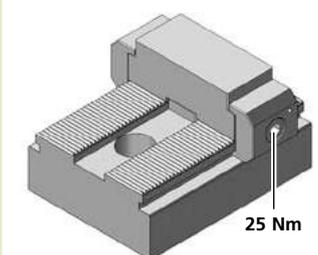
X = 61  
H = 25  
Y = 50  
kg ~1,0



**PT-F61-25X30**

- 1 1x TF140636
- 3 1x PCSP30R
- 4 1x PCSP30L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

X = 61  
H = 25  
Y = 30  
kg ~0,6



Rohlingsmodule  
Blank module

PR94-49SET

PR125-49SETALU

PT-F132-34RDSET

PR94-39-50SET

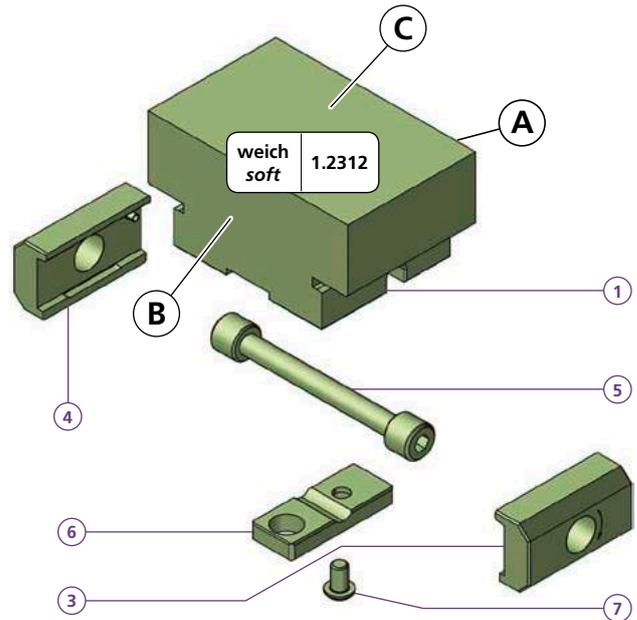
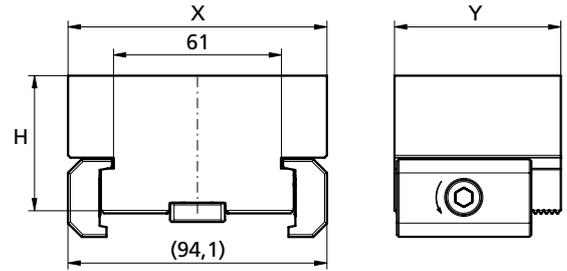
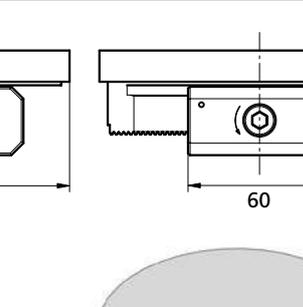
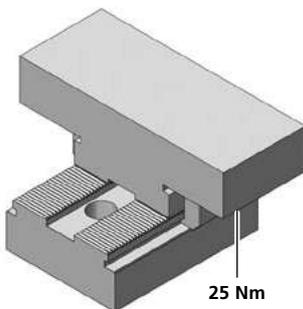
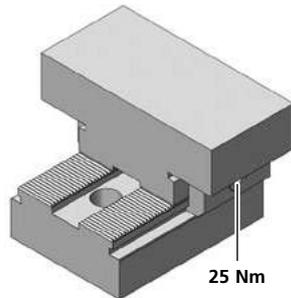
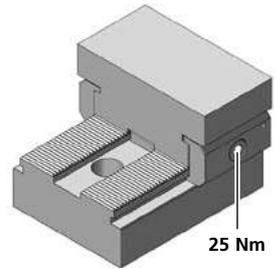
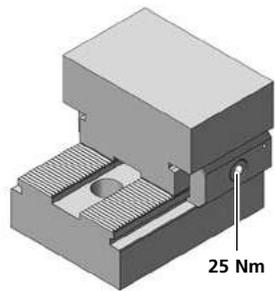
PR150-49SET

PR125-49SET

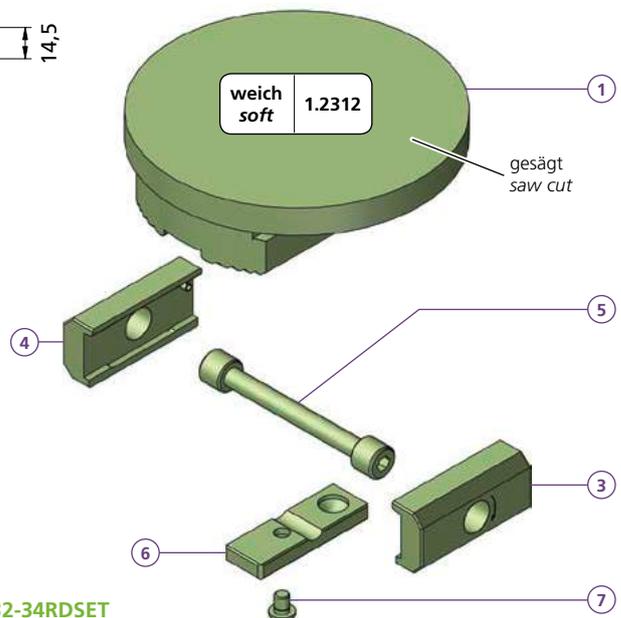
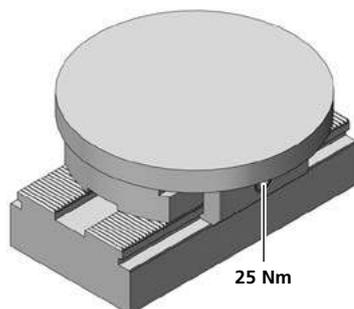
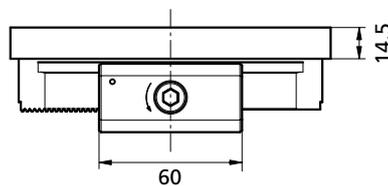
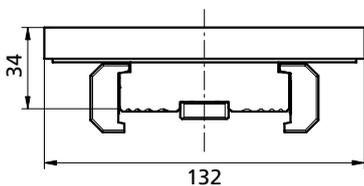


powerCLAMP

- PR94-49SET**
- 1 1x PR94-49
  - 3 1x PCSP50R
  - 4 1x PCSP50L
  - 5 1x PCS14
  - 6 1x PCGU2049
  - 7 1x M6X8ISO7380
- X = 94  
H = 49  
Y = 60,4  
kg ~2,3
- 
- PR94-39-50SET**
- 1 1x PR94-39-50
- X = 94  
H = 39  
Y = 50,4  
kg ~1,6
- 
- PR125-49SET**
- 1 1x PR125-49
- X = 125  
H = 49  
Y = 60,4  
kg ~2,7
- 
- PR125-49SETALU**
- 1 1x \*PR125-49ALU
- X = 125  
H = 49  
Y = 60,4  
kg ~0,83
- 
- PR150-49SET**
- 1 1x PR150-49
- X = 150  
H = 49  
Y = 60,4  
kg ~3,1



\* ALU = ENAW-7022 Bestellbeispiel / Ordering example: PR94-49SET



- PT-F132-34RDSET**
- 1 1x PT-F132-34RD
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2059
  - 7 1x M6X8ISO7380
- kg ~3,1

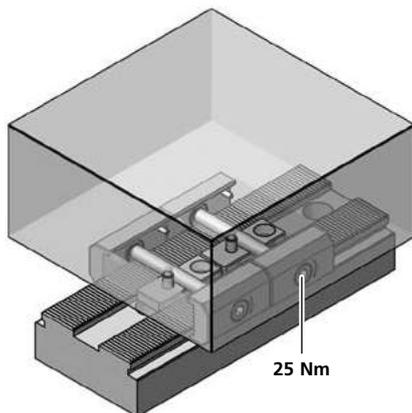
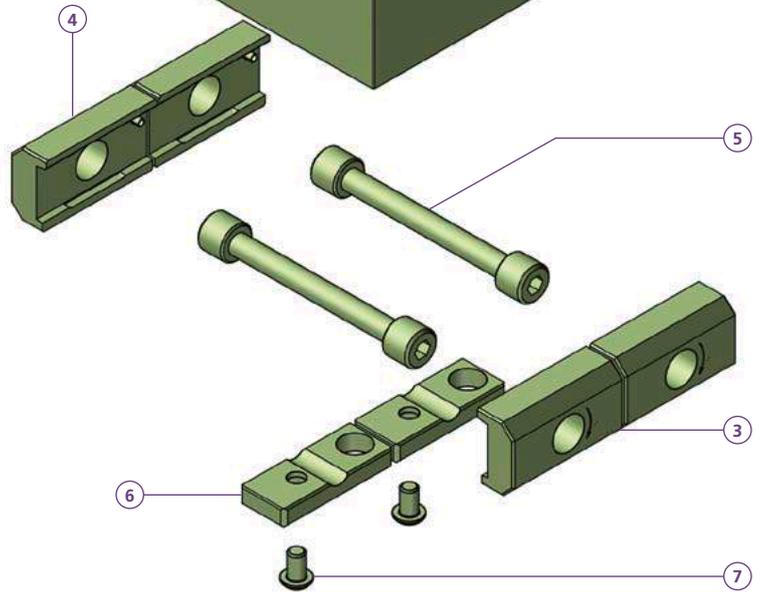
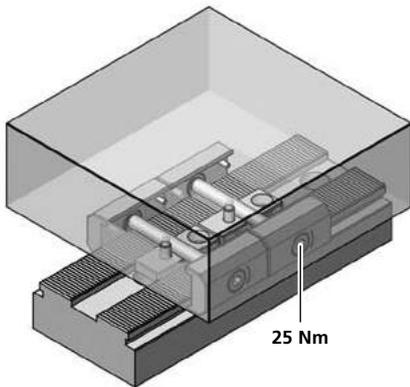
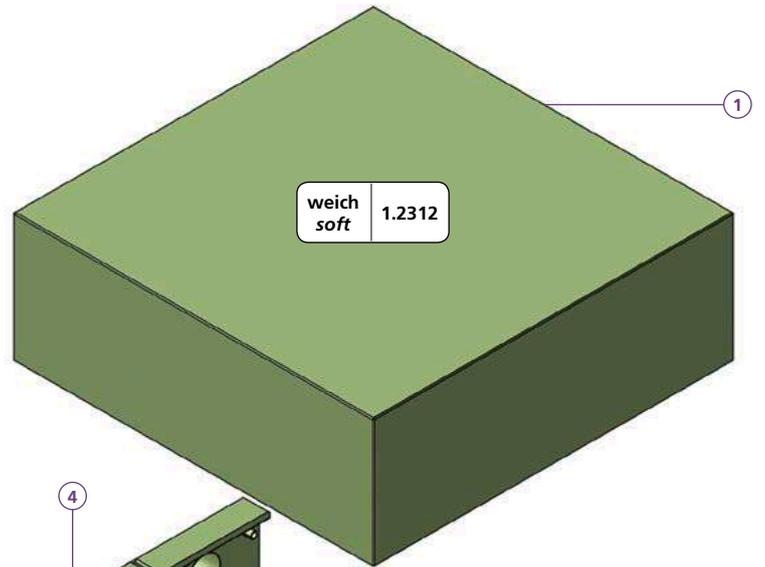
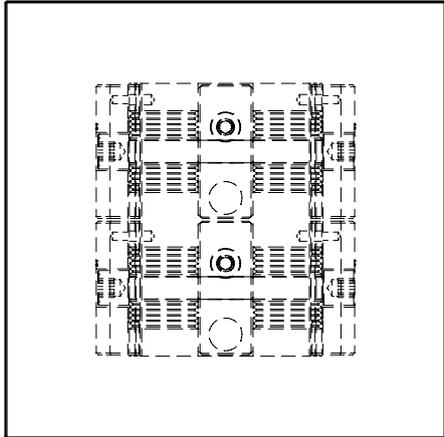
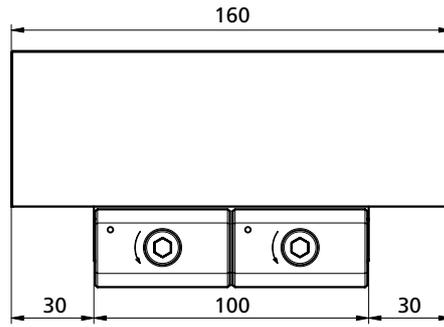
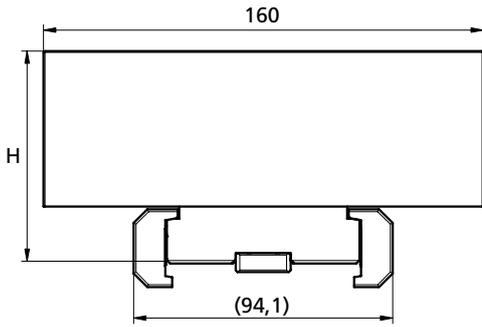
Bestellbeispiel / Ordering example: PT-F132-34RDSET



PTX160-77S

PTX160-57S

powerCLAMP



PTX160-57S	
1	1x TH130539
3	2x PCSP50R
4	2x PCSP50L
5	2x PCS14
6	2x PCGU2049
7	2x M6X8ISO7380
H	= 57
kg	~9

PTX160-77S	
1	1x TH130723
H	= 77
kg	~13

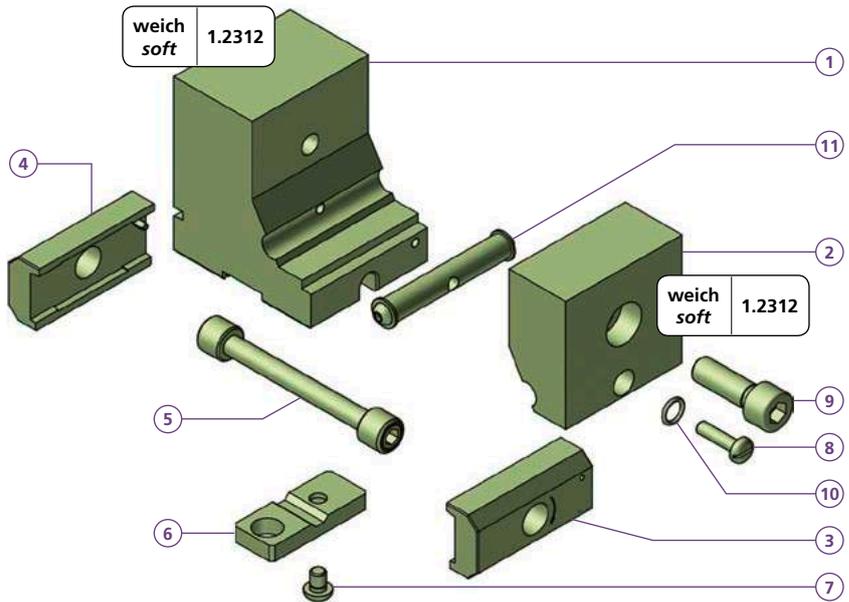
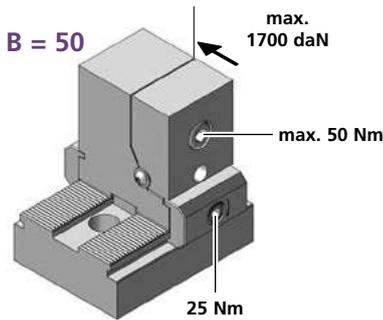
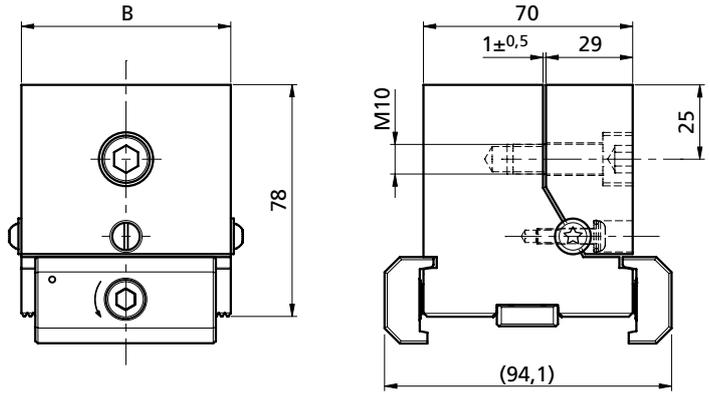
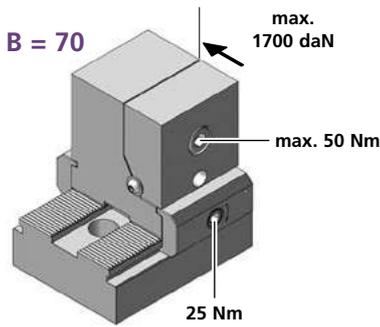
Bestellbeispiel / Ordering example: PTX160-57S



# Schnellwechsel - Spannbacken - Rohling

## Quick change - jaw blank

powerCLAMP

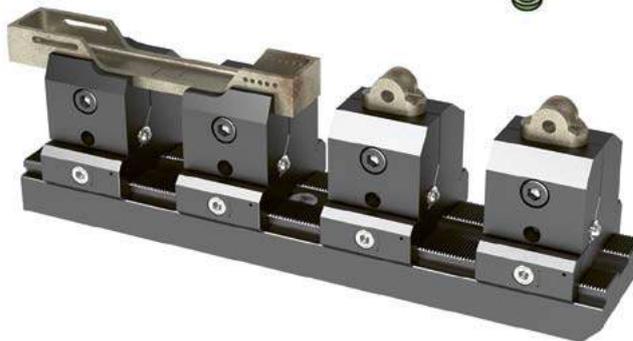


- PS1X70L78ST**
- ① 1x PRS7078AST
  - ② 1x PRS7078SST
  - ③ 1x PCSP60R
  - ④ 1x PCSP60L
  - ⑤ 1x PCS14
  - ⑥ 1x PCGU2049
  - ⑦ 1x M6X8ISO7380
  - ⑧ 1x M5X20BN1362
  - ⑨ 1x M10X30ISO4762
  - ⑩ 1x OR Ø 8x1,5
  - ⑪ 1x PRS7078G
- B** = 70  
**kg** ~3,2

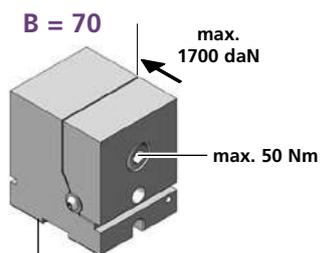
- PS1X50L78ST**
- ① 1x PRS5078AST
  - ② 1x PRS5078SST
  - ③ 1x PCSP50R
  - ④ 1x PCSP50L
  - ⑪ 1x PRS5078G
- B** = 50  
**kg** ~2,3

- PRS70L78ST**
- ① 1x PRS7078AST
  - ② 1x PRS7078SST
  - ⑪ 1x PRS7078G
- B** = 70  
**kg** ~2,8

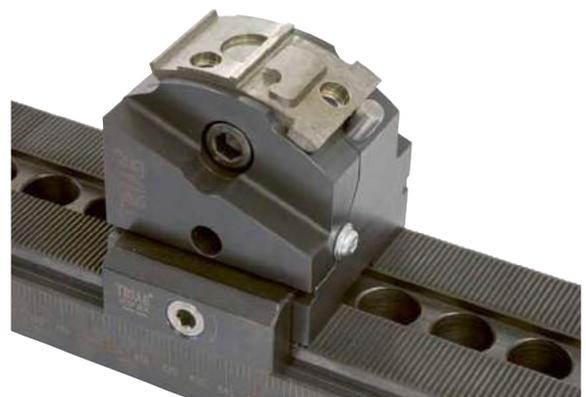
- PRS50L78ST**
- ① 1x PRS5078AST
  - ② 1x PRS5078SST
  - ⑪ 1x PRS5078G
- B** = 50  
**kg** ~2,0



Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6



PRS = Rohlingsmodul ohne Spannpratzen  
Blank module side clamp



Spannbacken Rohling auf Kundenwunsch angepasst  
Jaw blank machined to customer specification

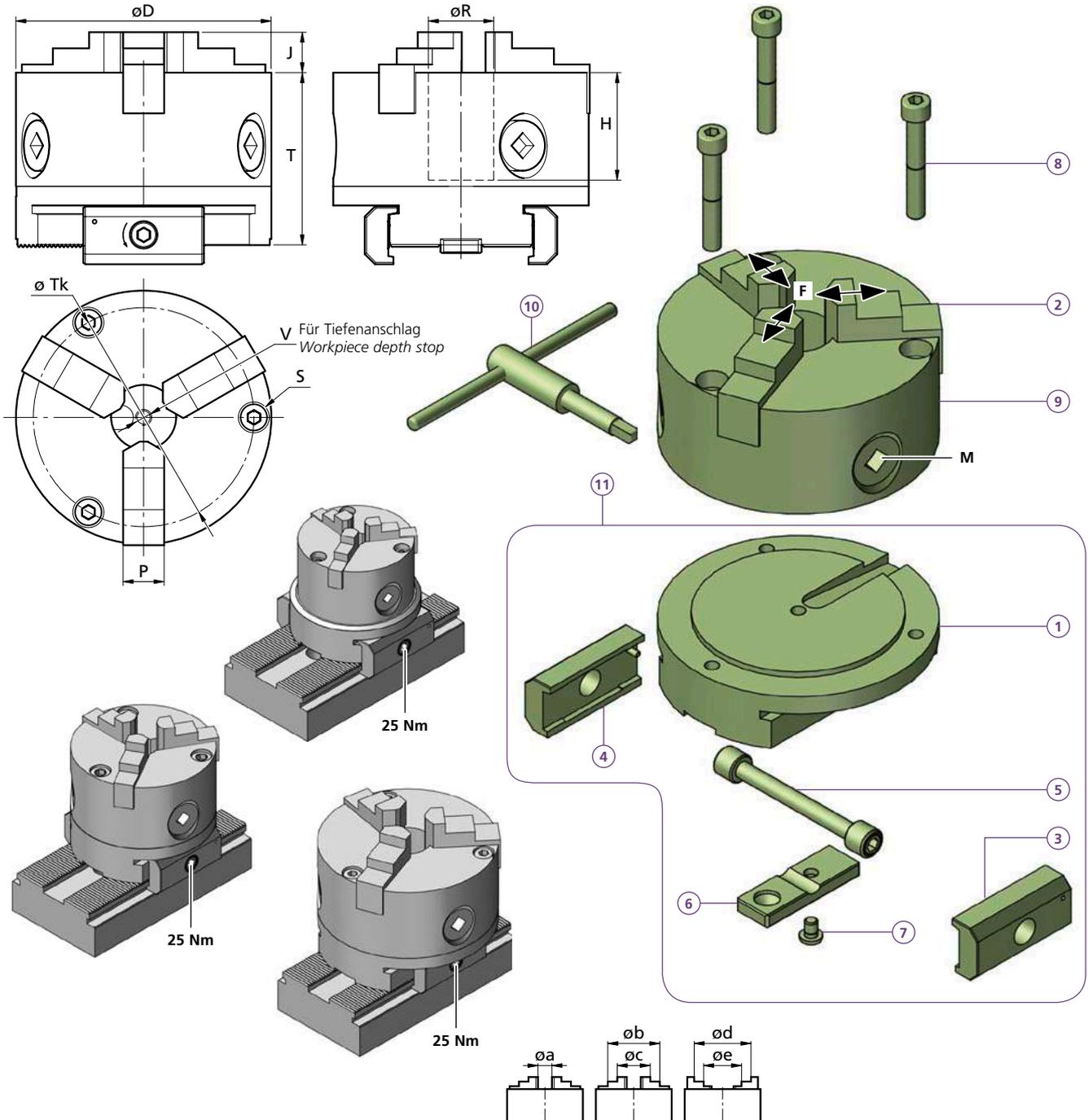
Bestellbeispiel / Ordering example: **PS1X70L78ST**

# Dreibackenfutter Three jaw chuck

**PS3X80L75BSET**  
**PS3X100L82BSET**  
**PS3X125L87BSET**



**powerCLAMP**



	D	J	T	R	H	P	V	a mm	b mm	c mm	d mm	e mm	M (max.)	F (max.)	$\varnothing T_k$	S
<b>PS3X80L75BSET</b>	80	13	75	15	42,5	10	M6	3...27	48...73	23...48	52...76	27...51	28 Nm	1300 daN	67	M6
<b>PS3X100L82BSET</b>	100	17	82	20	49,5	14	M8	3...39	58...94	24...60	64...100	30...66	38 Nm	1600 daN	83	M8
<b>PS3X125L87BSET</b>	125	19	87	32	55	16	M8	3...49	70...116	30...75	83...125	38...84	55 Nm	2600 daN	108	M8

- PS3X80L75BSET**
- 1 1x TW090013\_01
  - 2 2x 3 Stk. / pcs
  - 3 1x PCSP60R
  - 4 1x PCSP60L
  - 5 1x PCS14
  - 6 1x PCGU2059
  - 7 1x M6X8ISO7380
  - 8 3x M6X45ISO4762
  - 9 1x 243809.0083220
  - 10 1x 243864.0080000
  - 11 PTX80-30
- kg ~2,8

- PS3X100L82BSET**
- 1 1x TW090012\_01
  - 2 2x 3 Stk. / pcs
  - 8 3x M8X50ISO4762
  - 9 1x 243809.0103220
  - 10 1x 243864.0100000
  - 11 PTX100-30
- kg ~4,3

- PS3X125L87BSET**
- 1 1x TW080027\_01
  - 2 2x 3 Stk. / pcs
  - 8 3x M8X55ISO4762
  - 9 1x 243809.0123220
  - 10 1x 243864.0120000
  - 11 PTX125-29
- kg ~6,3

80 243849.0083200 243850.0083200 \*243834.0083300  
 100 243849.0103200 243850.0103200 \*243834.0103300  
 125 243849.0123200 243850.0123200 \*243834.0123300

3x Weich Soft 16MnCr5

Bestellbeispiel / Ordering example: **PS3X125L87BSET**

Separat bestellen / Separate order

PS1X50N62-ER32

Ø 1 - 22 mm

PS1X50N100-ER32

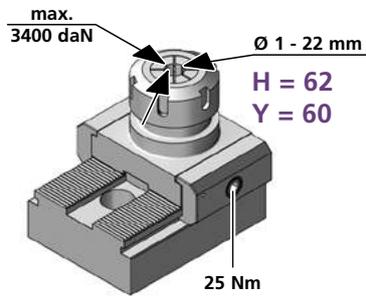
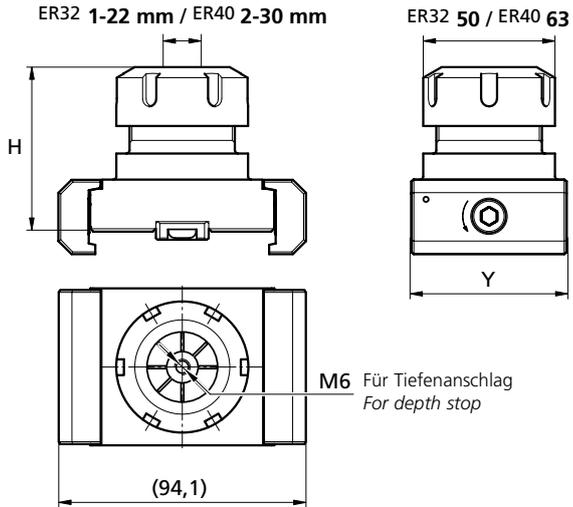
Ø 1 - 22 mm

PS1X63N100-ER40

Ø 2 - 30 mm



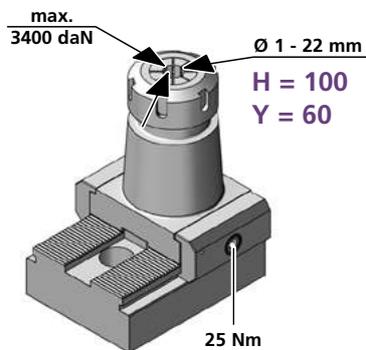
powerCLAMP



**PS1X50N62-ER32**

- 1 1x TW090089-01
- 2 1x ER32
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2059
- 7 1x M6X8ISO7380
- 8 1x ER/ESX32

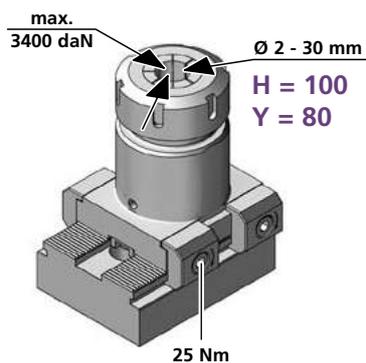
H = 62  
 Y = 60  
 kg ~1,3



**PS1X50N100-ER32**

- 1 1x TW090047-01

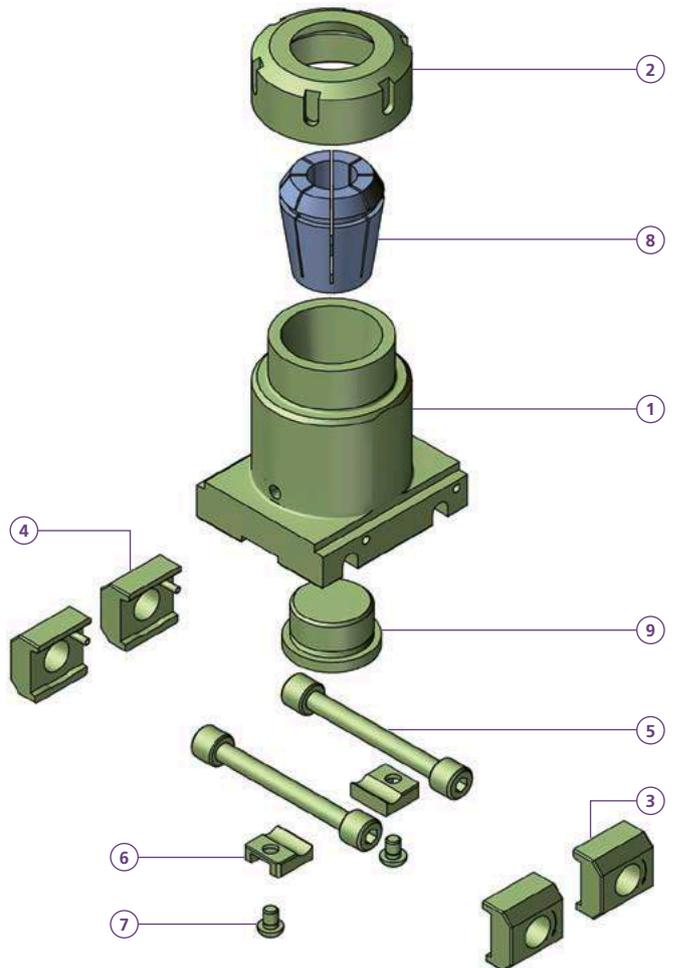
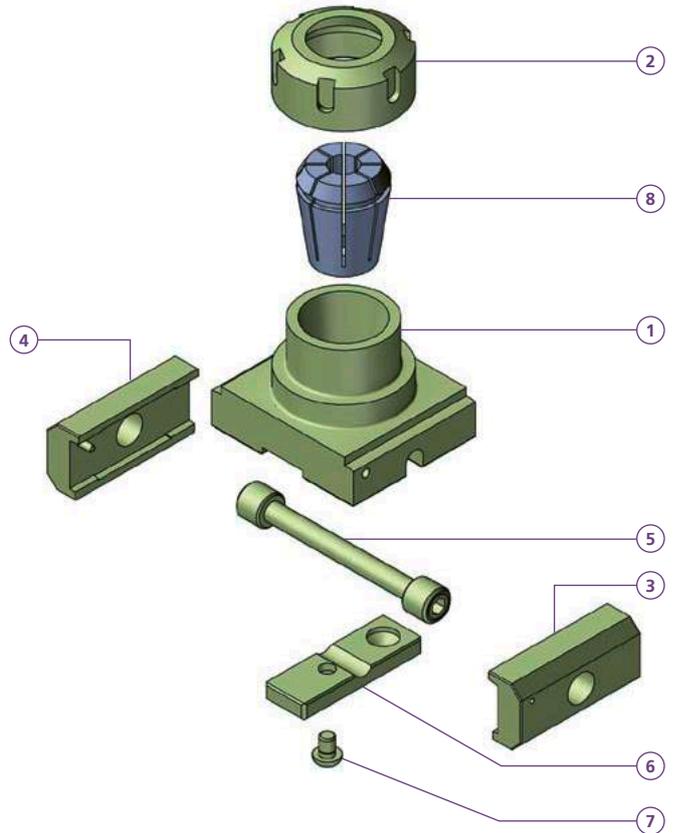
H = 100  
 Y = 60  
 kg ~2,2



**PS1X63N100-ER40**

- 1 1x TW110026-01
- 2 1x ER40
- 3 2x PCSP30R
- 4 2x PCSP30L
- 5 2x PCS14
- 6 2x PCGU2020
- 7 2x M6X8ISO7380
- 8 1x ER/ESX40
- 9 1x M33x2 DIN908

H = 100  
 Y = 80  
 kg ~2,3



Separat bestellen / Separate order

Bestellbeispiel / Ordering example: 1x PS1X 50N62 -ER32 & 1x ER32

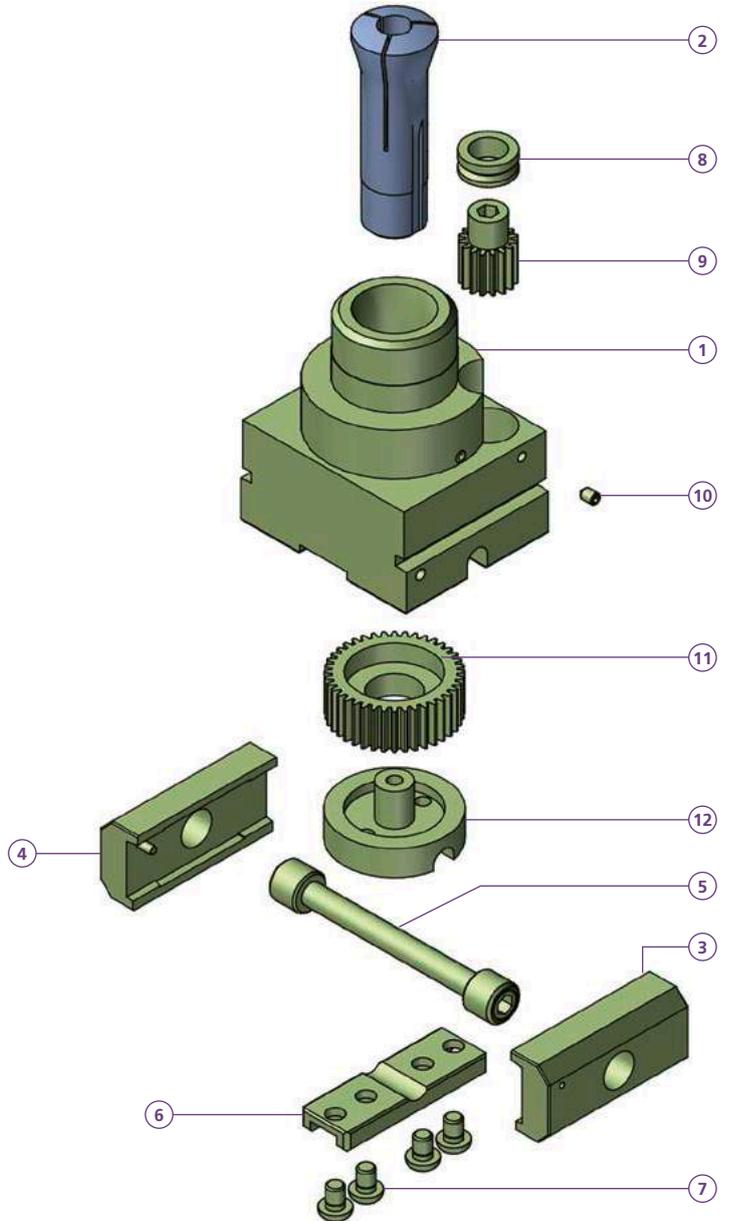
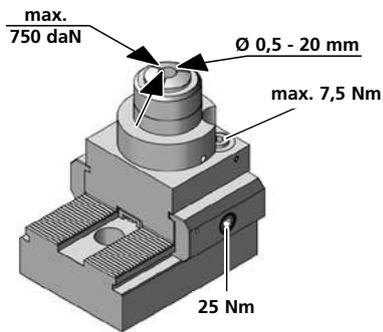
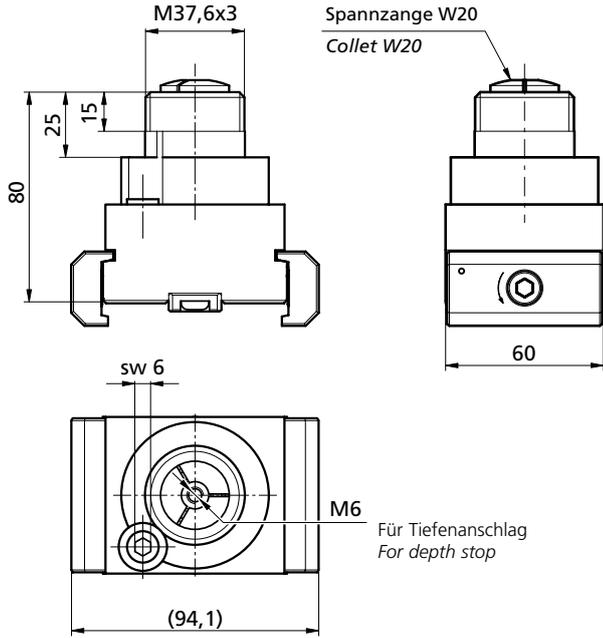


# Spannzangenaufnahme

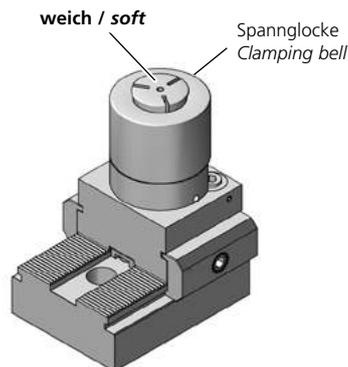
## Collet receiver

PS1X68N80-W20

powerCLAMP



PS1X68N80-W20	
1	1x TW080018-01
2	1x W20
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGUW20
7	4x M6X8ISO7380
8	1x PCD1808
9	1x PCRZ1825
10	1x M4X6ISO4027
11	1x PCZM4215
12	1x PCABD4221
kg	~1,8



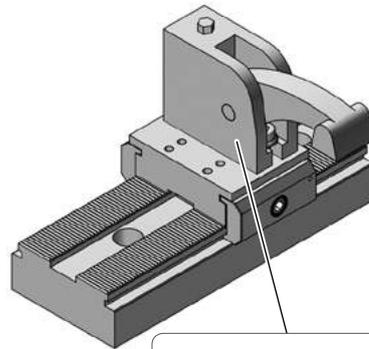
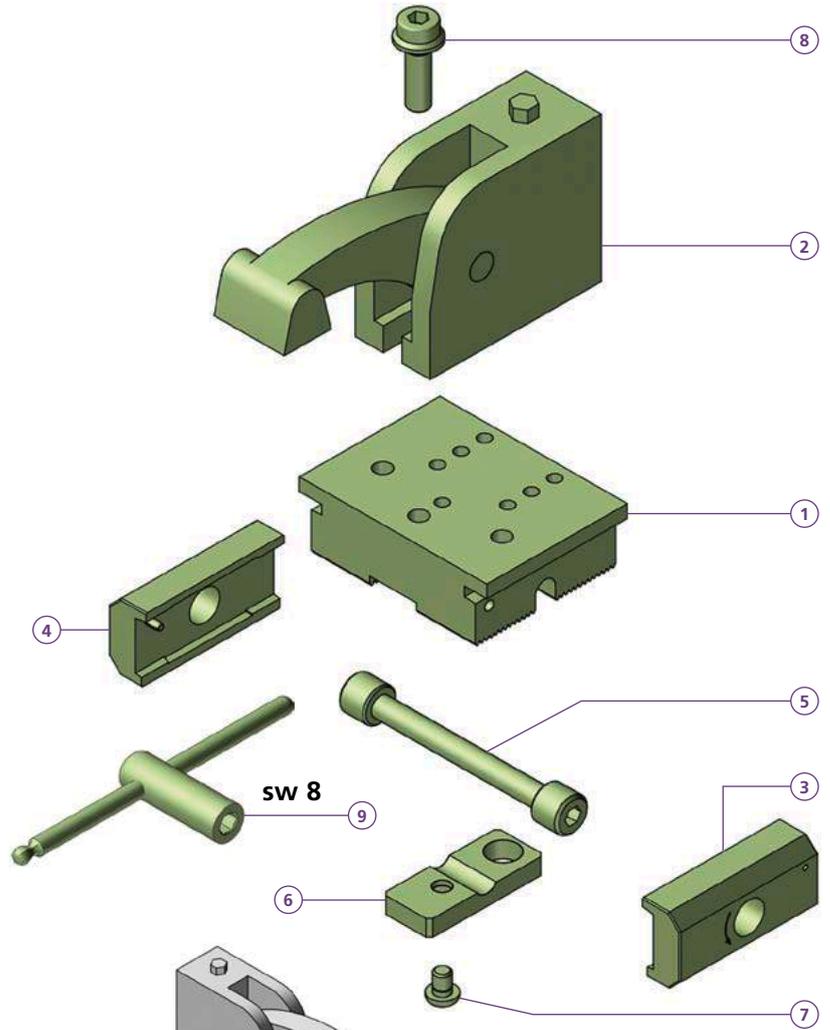
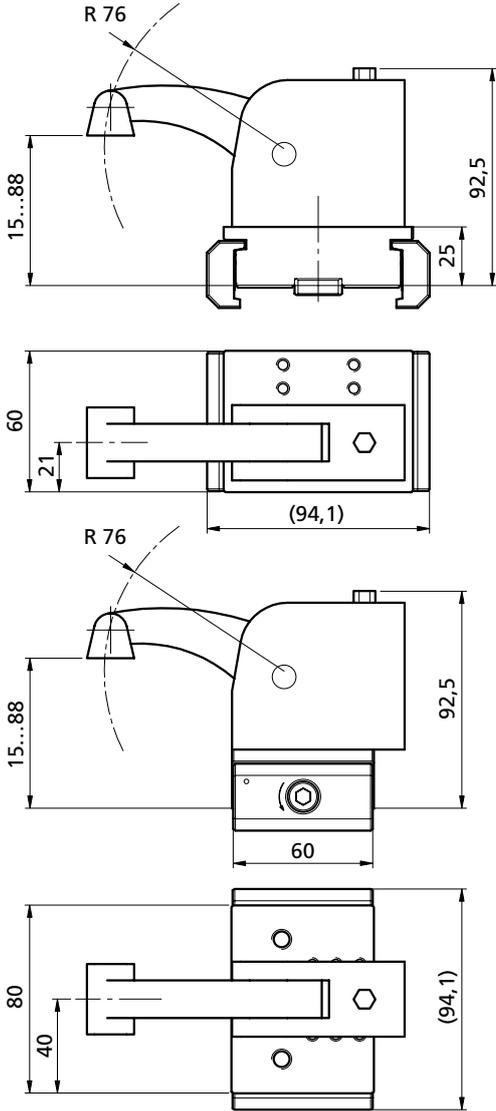
Bestellbeispiel / Ordering example: 1x PS1X68N80-W20 & 1x W20

Separat bestellen / Separate order

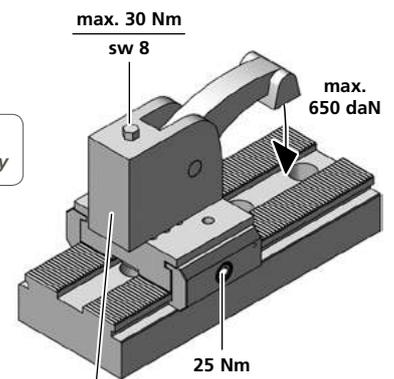


**PS1F-KLD1**  
**PS1F-KLD1NS**

**powerCLAMP**



Spanner quer montiert  
Clamp mounted transversely



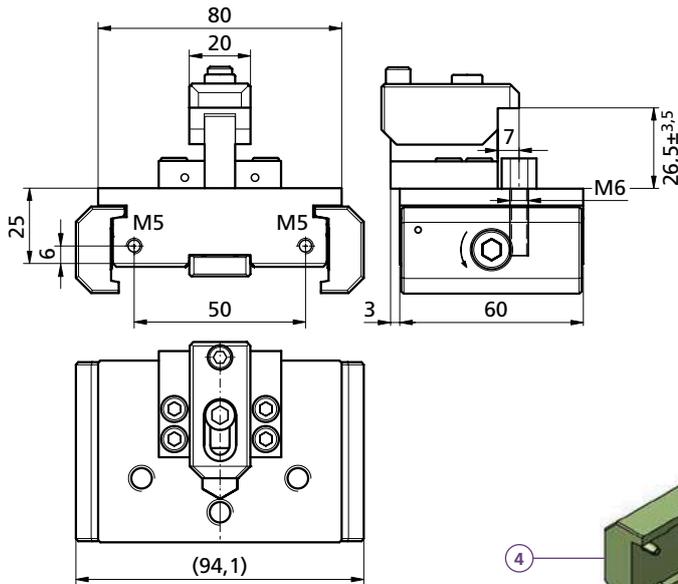
Spanner längs montiert  
Clamp mounted longitudinally



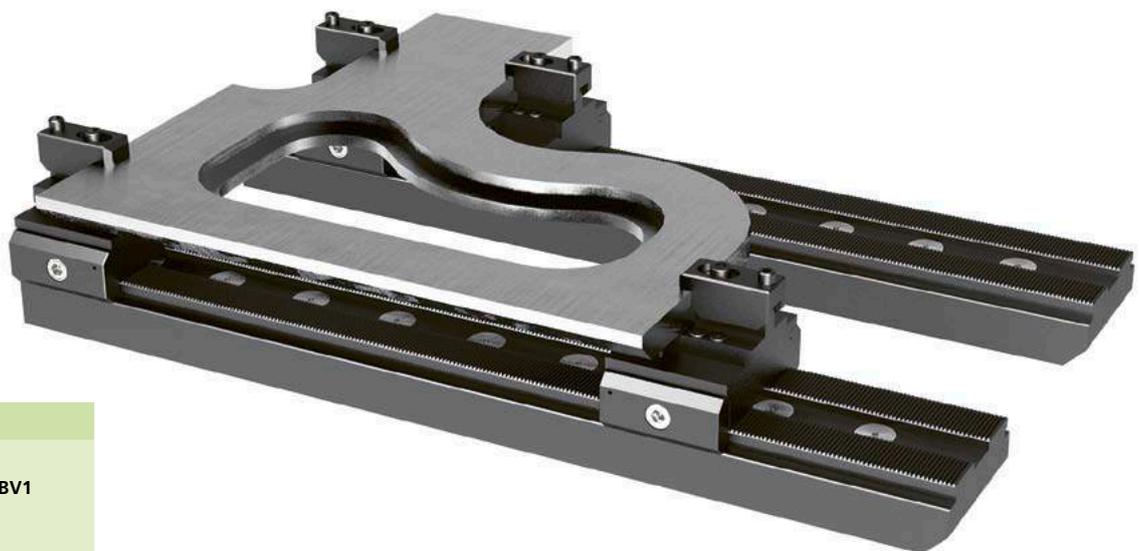
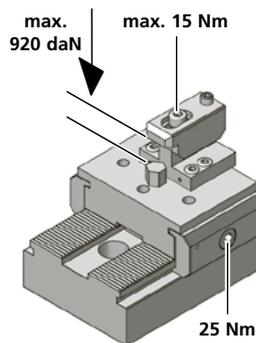
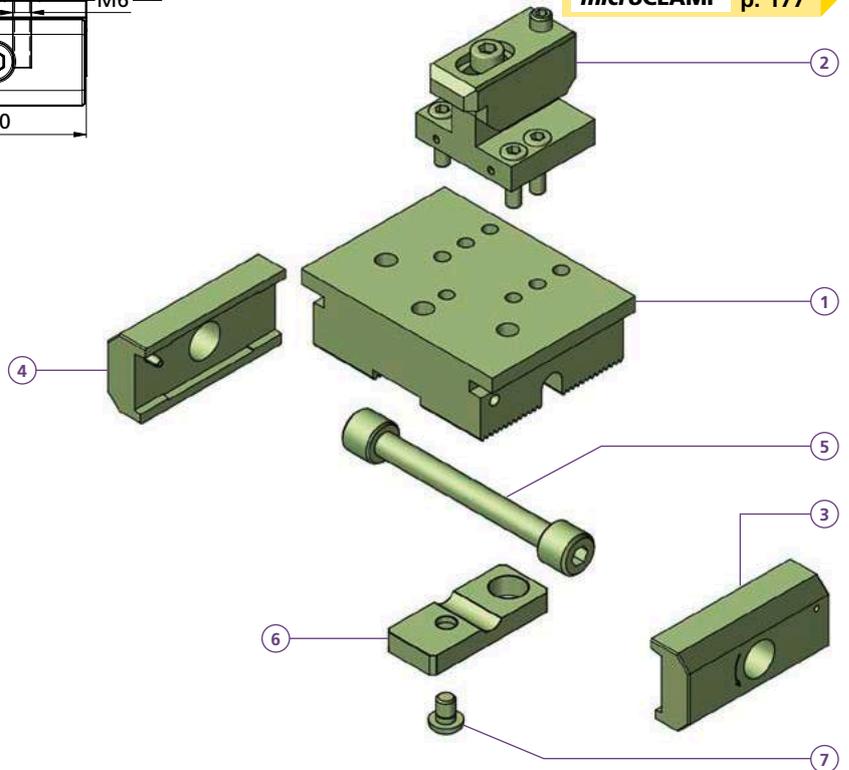
NS = Trägermodul freie Positionierung ohne Verzahnung  
Carrier module without positioning serration for free positioning

PS1F-KLD1	
1	1x PCTMV1F
2	1x 07-020
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	1x M8x25 TW080012-02
9	1x 07-180
kg	~2,1
PS1F-KLD1NS	
2	1x PCTMV1FNS
kg	~2,1

Bestellbeispiel / Ordering example: **PS1F-KLD1NS**



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**PS1F20L35BV1**

- ① 1x PCTMV1F
  - ② 1x MV1F20L35BV1
  - ③ 1x PCSP60R
  - ④ 1x PCSP60L
  - ⑤ 1x PCS14
  - ⑥ 1x PCGU2049
  - ⑦ 1x M6X8ISO7380
- kg ~1,4

**PS1F20L35BV1NS**

- ② 1x PCTMV1FNS
- kg ~1,4

NS = Trägermodul freie Positionierung ohne Verzahnung  
Carrier module without positioning serration for free positioning

Bestellbeispiel / Ordering example: PS1F20L35BV1

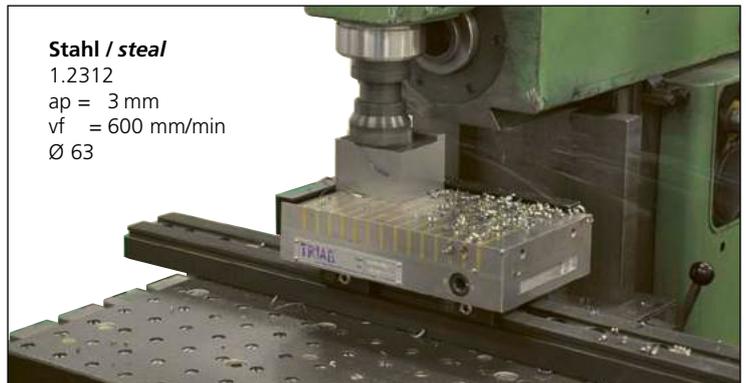
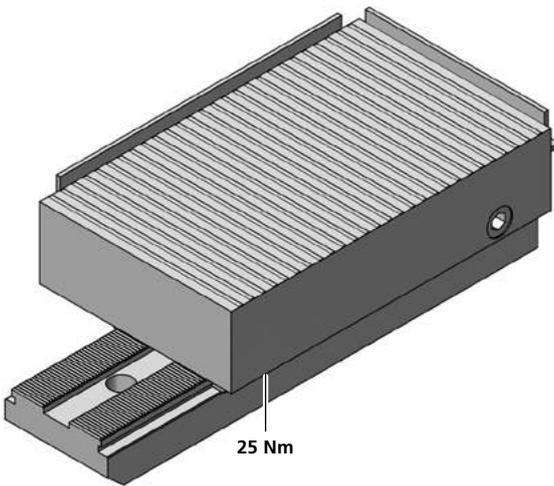
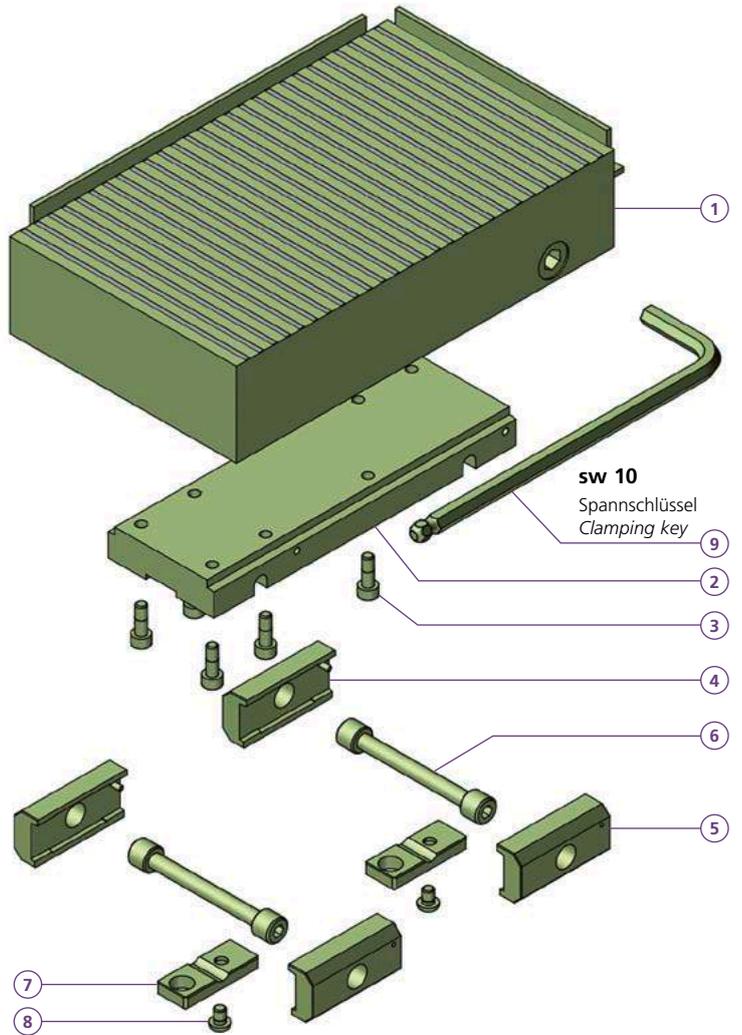
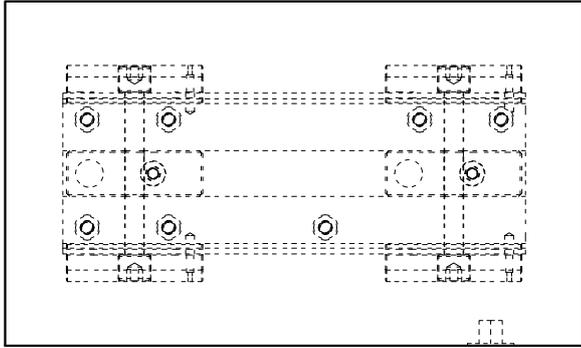
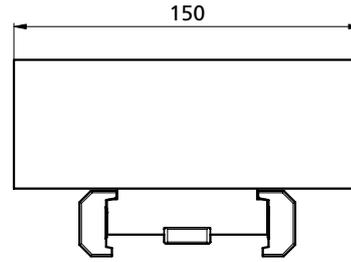
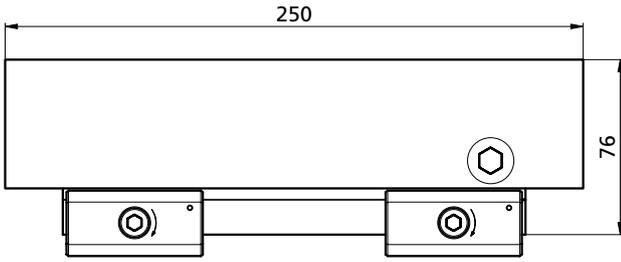


# Magnetspannplatte

## Magnetic chuck

PS1X150L60-250MAG11

powerCLAMP



**Stahl / steel**  
 1.2312  
 $a_p = 3 \text{ mm}$   
 $v_f = 600 \text{ mm/min}$   
 $\varnothing 63$

**max. Haltekraft / max. holding force = 120 N/cm<sup>2</sup>**

- Werkstücke ab 26 mm Länge und 6 mm Stärke werden optimal gespannt
- Workpieces from 26 mm length and 6mm thickness will be optimally hold

### PS1X150L60-250MAG11

- ① 1x XNeomill 250x150
- ② 1x TL110010-01
- ③ 7x MS60
- ④ 2x PCSP60L
- ⑤ 2x PCSP60R
- ⑥ 2x PCS14
- ⑦ 2x PCGU2049
- ⑧ 2x M6X8I5O7380
- ⑨ 1x ISL10 DIN 911L

kg ~19,5

Bestellbeispiel / Ordering example: PS1X150L60-250MAG11

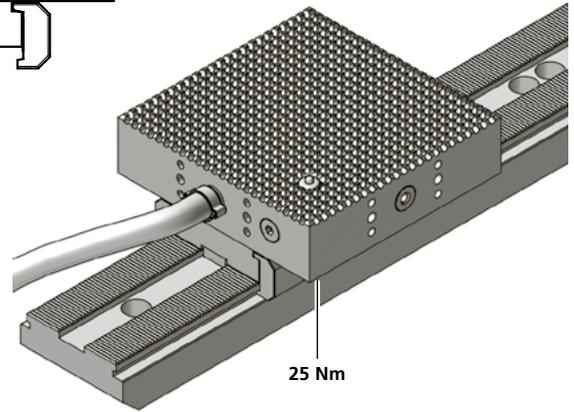
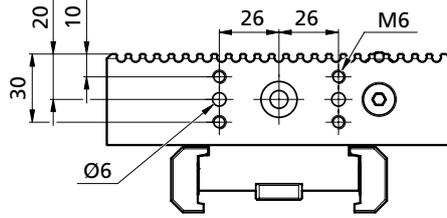
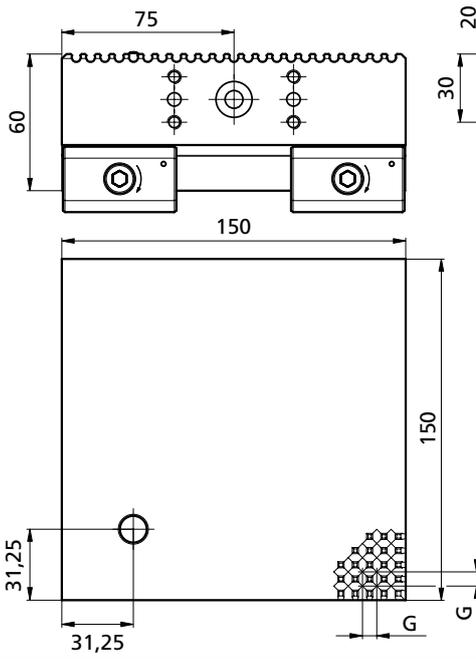


# Vakuum-Modul

## Vacuum module

## PS1X150L60-VAC

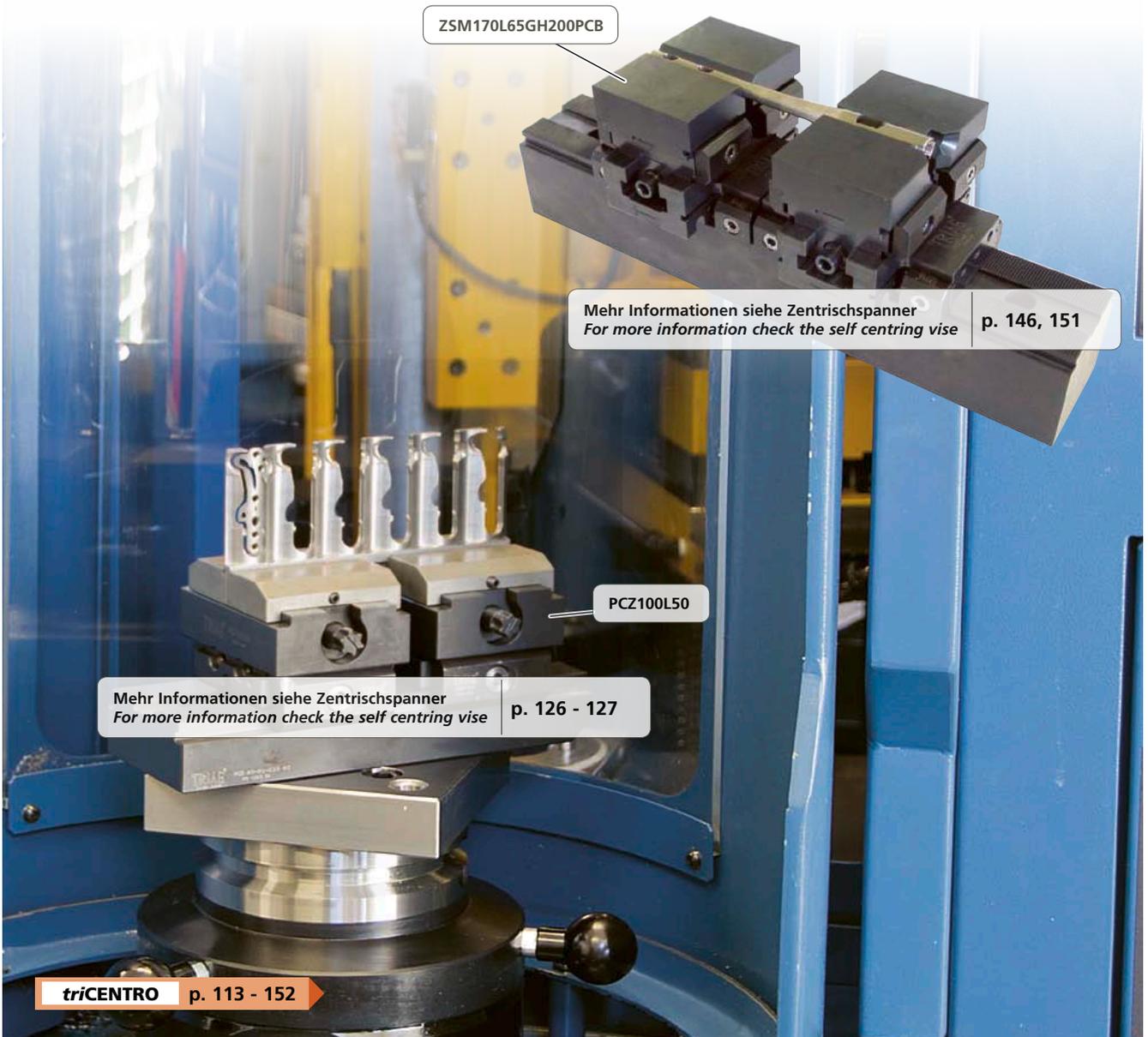
## powerCLAMP



**trivaCLAMP** p. 318

Mehr Informationen siehe Vacuum  
For more information check the vacuum workholding

Bestellbeispiel / Ordering example: **PS1X150L60-VAC**



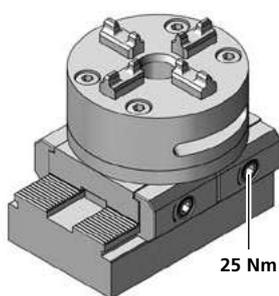
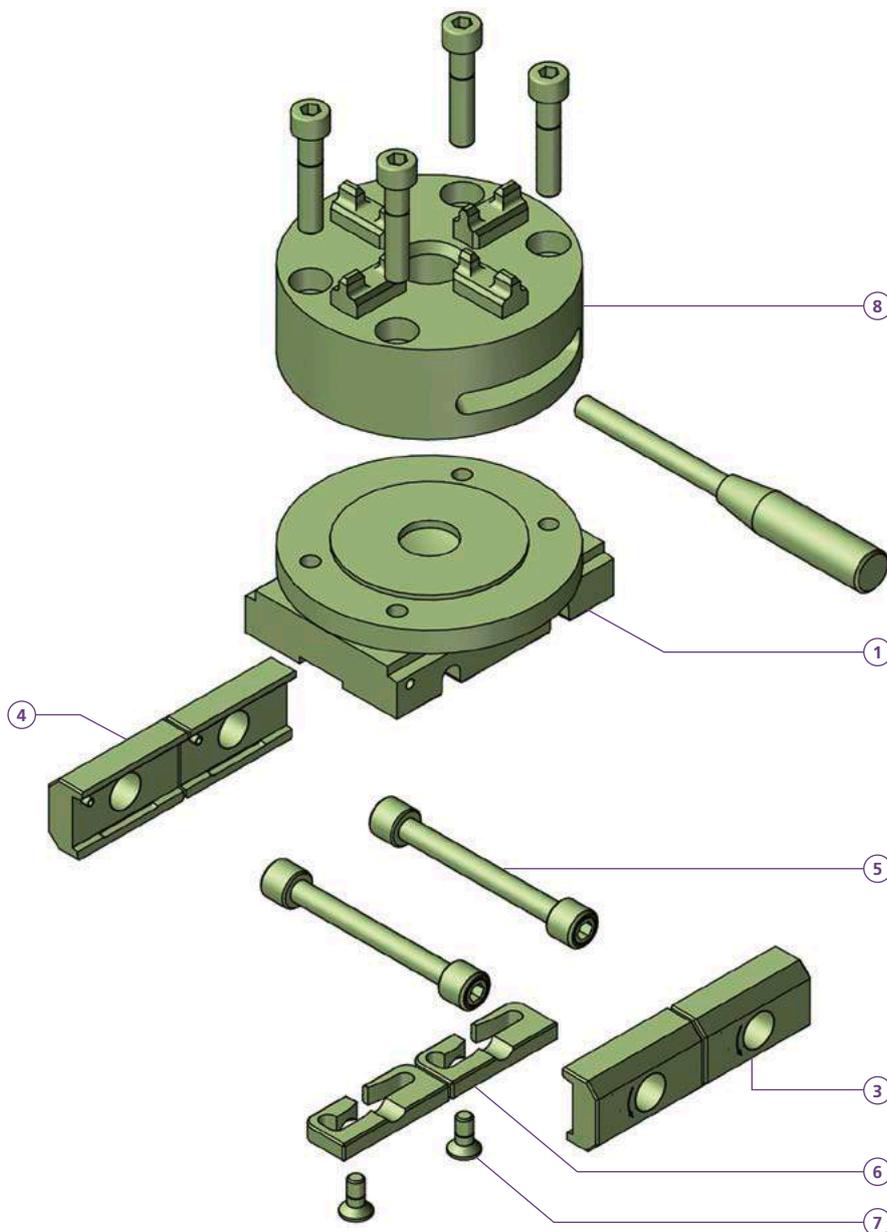
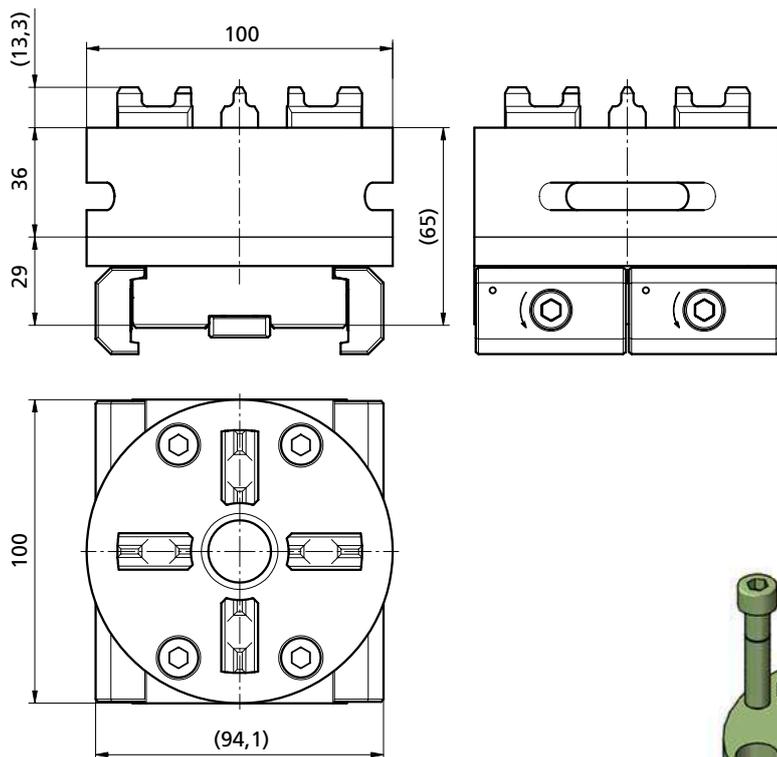
ZSM170L65GH200PCB

Mehr Informationen siehe Zentrischspanner  
For more information check the self centring vise p. 146, 151

PCZ100L50

Mehr Informationen siehe Zentrischspanner  
For more information check the self centring vise p. 126 - 127

**triCENTRO** p. 113 - 152



**PS1X100-65ER-036345**

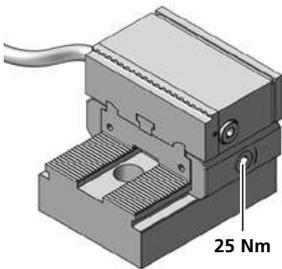
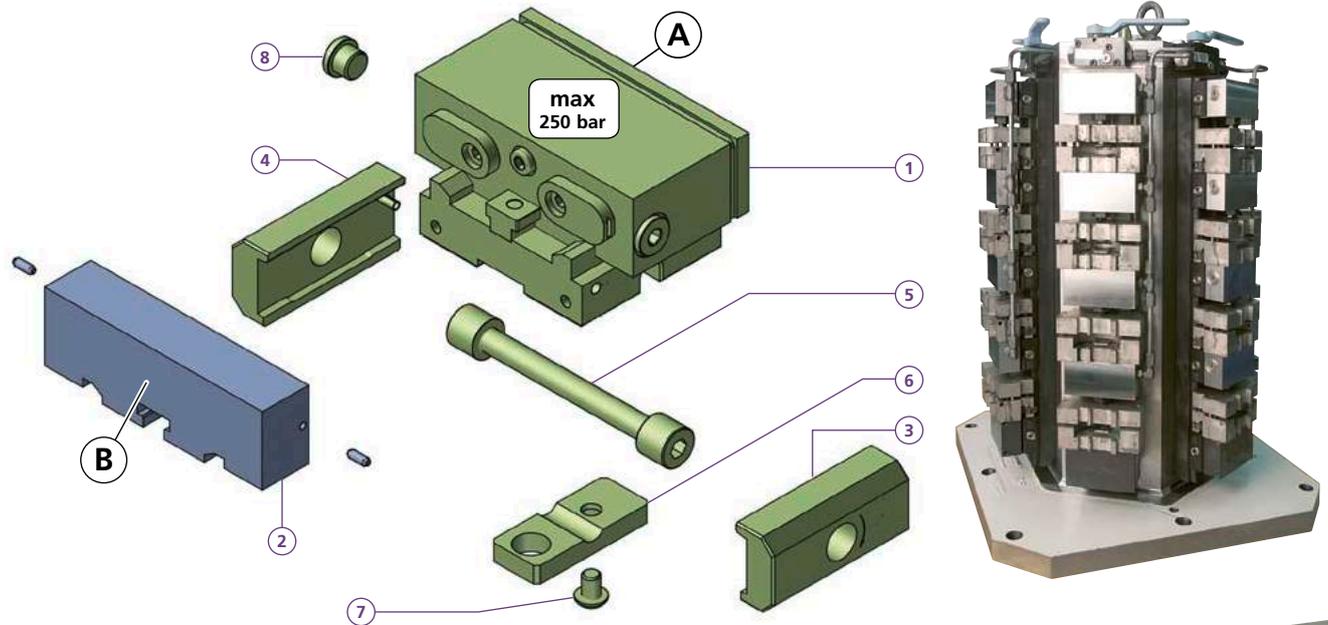
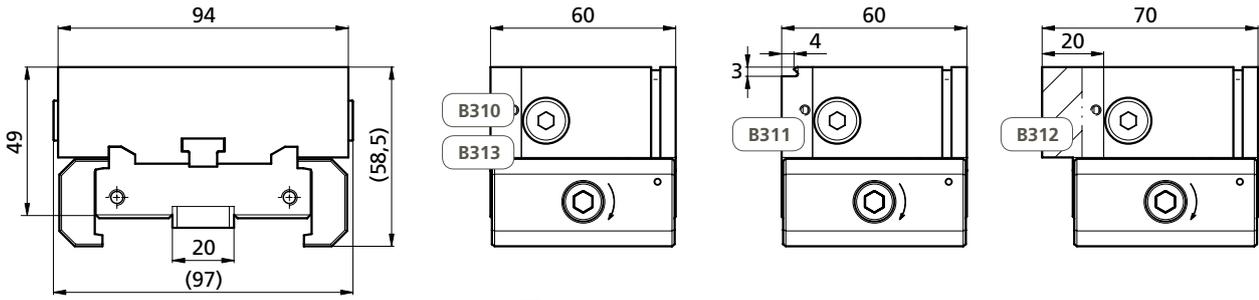
- 1 1x PTX100-29
  - 3 2x PCSP50L
  - 4 2x PCSP50R
  - 5 2x PCS14
  - 6 2x PCGU2049F
  - 7 2x M6X14ISO10642
  - 8 1x ER-036345
- kg ~4,0



# Hydraulisches Spannmodul Hydraulic clamping module

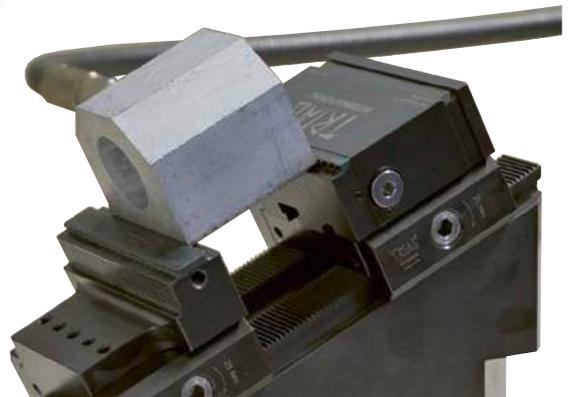
PSH1X94L49-310

powerCLAMP



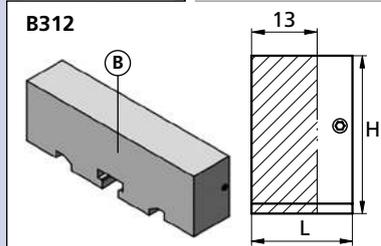
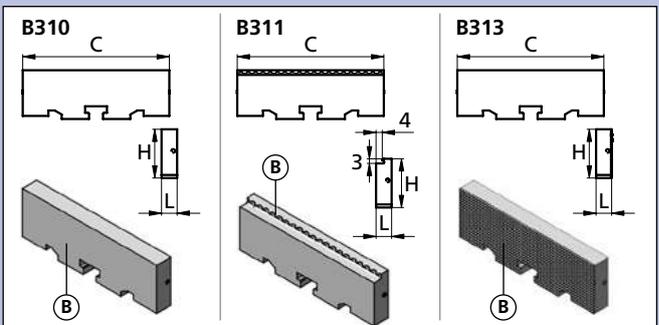
Ölvolumen / Oil volume	
Spannen / Clamping	
8 cm <sup>3</sup>	

5 mm Hub / Stroke			
bar	~daN	~(lb)	~t
100	= 960	2116	0,96
150	= 1'440	3175	1,44
200	= 1'920	4233	1,92
250	= 2'400	5291	2,4



Bestellbeispiel / Ordering example: PSH1X94L49-310 & 1 x B310

<b>B310</b>	<b>B311</b>	<b>B312</b>	<b>B313</b>	
<b>C</b> 94	94	94	94	
<b>H</b> 31,5	31,5	31,5	31,5	
<b>L</b> 10	10	20	10	
<b>i</b> HV700	57HRC	*	HV700	
	x0,2mm		x0,2mm	
<b>kg</b> ~0,18	~0,17	~0,39	~0,17	



### Zum Erstellen Ihrer individuellen Formbacke:

Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe

**If a dedicated jaw is being machined:**  
Sectional drawing to determine the maximum machining depth

PSH1X94L49-310

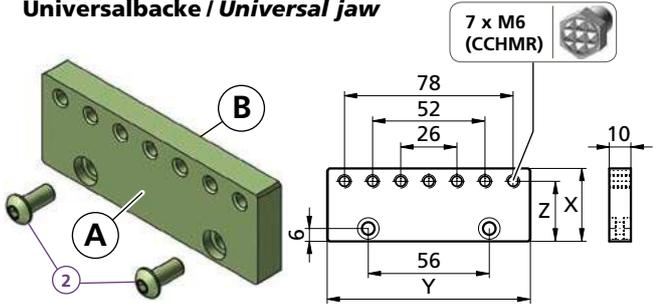
- 1 1x ZF191349
- 2 1x \_\_\_\_\_
- 3 1x PCSP60R
- 4 1x PCSP60L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X81507380
- 8 2x TN100014
- kg ~1,94

\* = weich / soft (1.7225 Vergütungsstahl / Tempering steel)

Separat bestellen / Separate order

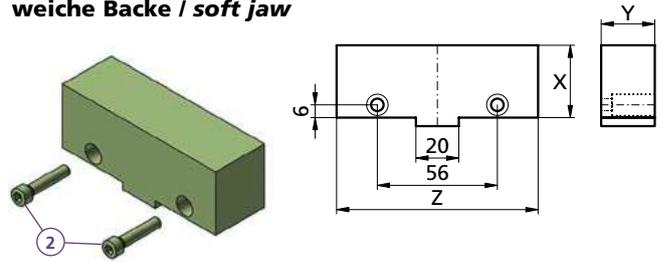


Universalbacke / Universal jaw



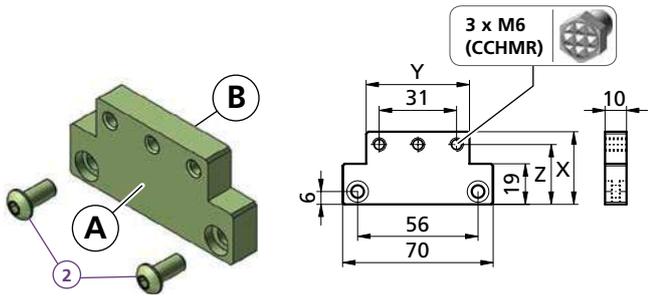
PC9434	2	A	B	X	Y	Z	i	kg
PC9434	2			34	94	28	56 HRC	~0,23
PC12549	M5X12ISO7380			49	125	43	HV700 x 0,2mm	~0,45

weiche Backe / soft jaw

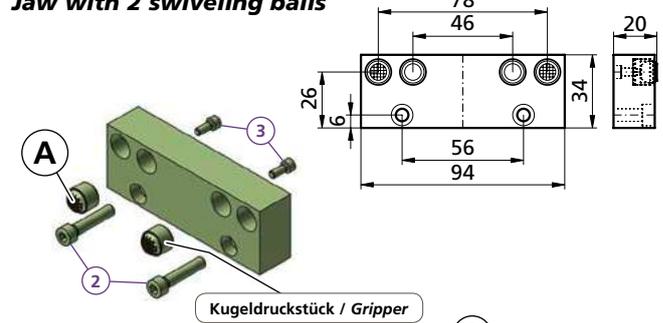


*PC943425W	2	X	Y	Z	i	kg
*PC943425W	2	34	25	94		~0,63
*PC943430W		34	30	94	1.0570	~0,76
*PC944930W	M5X30ISO4762	49	30	94		~1,09
*PC1254930W		49	30	125		~1,45

Backe mit 2 Pendeldruckstücken  
Jaw with 2 swiveling balls

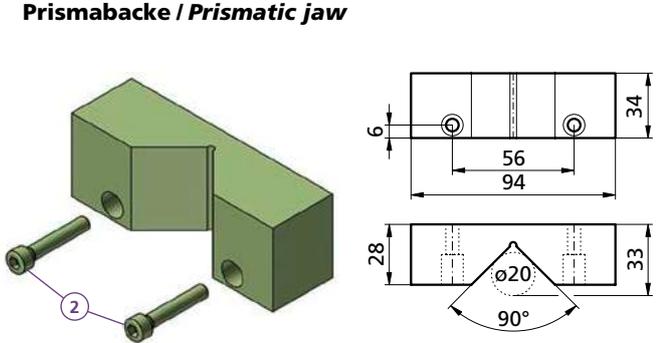


PC4849	2	A	B	X	Y	Z	i	kg
PC4849	2			49	43	43	56 HRC	~0,19
PC4834	M5X12ISO7380			34	48	28		~0,15



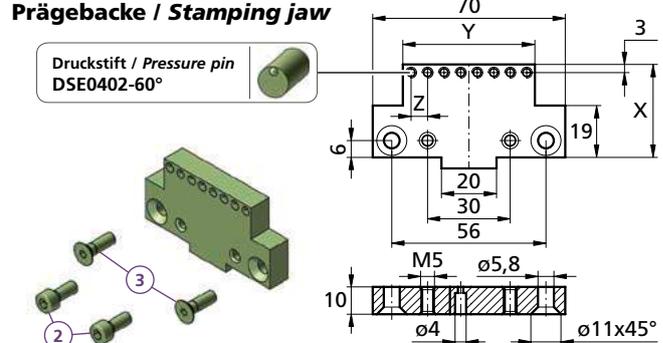
PC9460	2	3	A	kg
PC9460	2	3		~0,43
PC9460R	M5X20ISO4762	M3X8ISO4762		~0,45

Prismabacke / Prismatic jaw

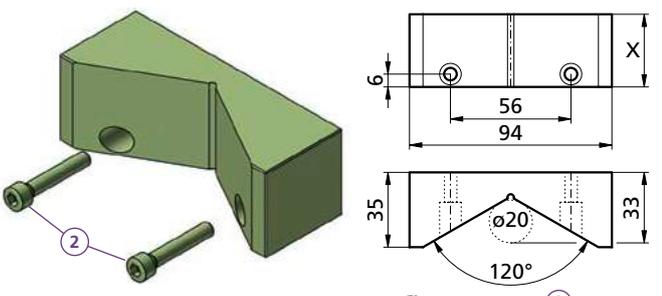


PC9434V90°	2	Ø	i	kg
PC9434V90°	2	min 6	56 HRC	~0,6
	M5X20ISO4762	max 52		

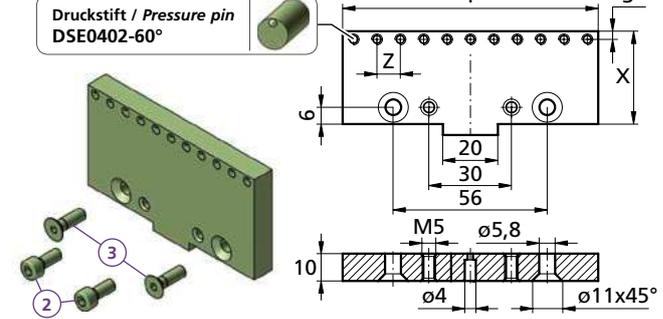
Prägebacke / Stamping jaw



PC4834DS	2	3	X	Y	Z	kg
PC4834DS	2	3	34	48	7 x 6 = 42	~0,17
PC4349DS	M5X10ISO4762	M5X16DIN7991	49	43	6 x 6 = 36	~0,21
PC4849DS			49	48	5 x 8 = 40	~0,21



PC9434V120°	2	X	Ø	i	kg
PC9434V120°	2	34	min 8	HV700	~0,59
	M5X20ISO4762		max 158	x0,2mm	
PC9449V120°		49	min 8	56 HRC	~0,88
			max 158		



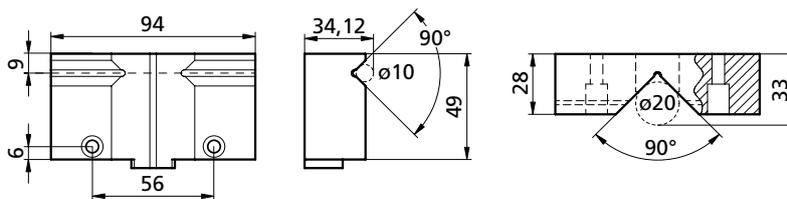
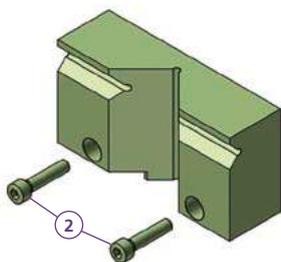
PC9434DS	2	3	X	Y	Z	kg
PC9434DS	2	3	34	94	10 x 8,5 = 85	~0,25
PC9449DS	M5X10ISO4762	M5X16DIN7991	49	94	10 x 8,5 = 85	~0,36
PC12549DS			49	125	13 x 8,5 = 110,5	~0,48

\* = weicher Stahl / soft steel

Bestellbeispiel / Ordering example: PC9434

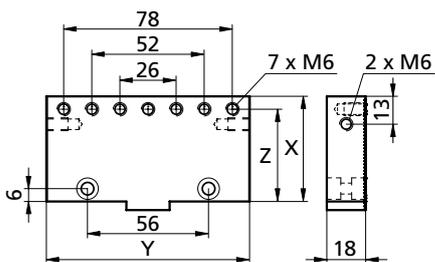
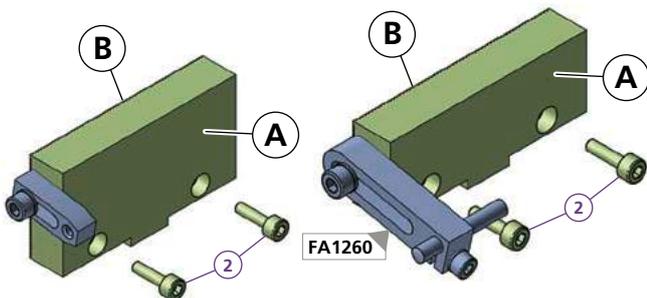


**Prismabacke / Prismatic jaw**

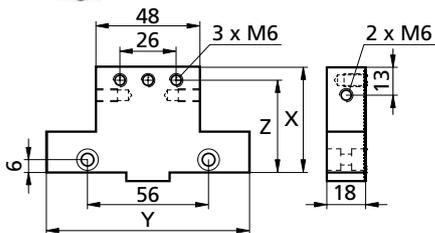
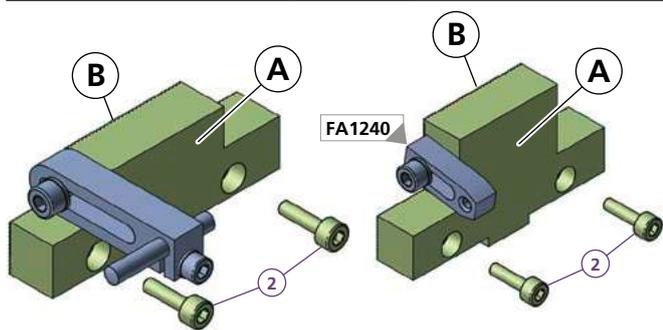


		Ø		kg
<b>PC9449V90°-2</b>	HV 700 x0,2mm	Spanndurchmesser horizontal Clamping diameter horizontal		<b>min</b> 5
		Spanndurchmesser vertical Clamping diameter vertical		<b>max</b> 16
		<b>M5X20ISO4762</b>	<b>min</b> 16	~ 0,84
			<b>max</b> 52	

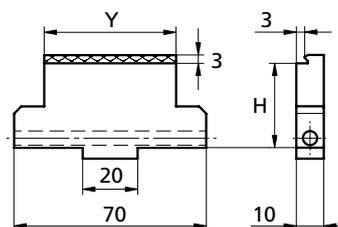
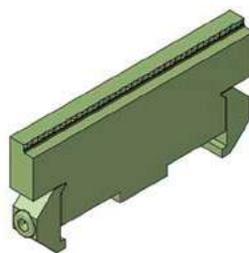
**Universalbacke / Universal jaw**



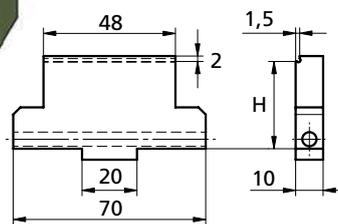
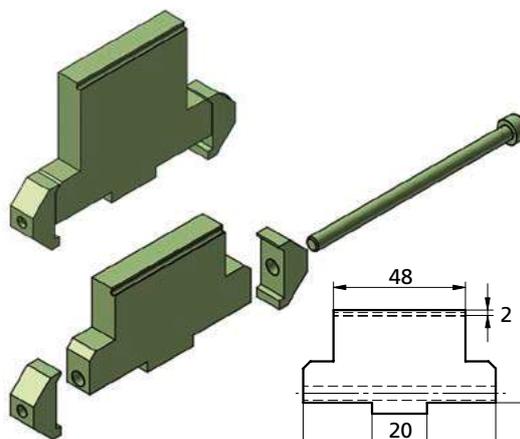
		A	B	X	Y	Z	i	kg
<b>PC9434RF</b>	<b>M5X18ISO4762</b>			34	94	28	HV 700 x 0,2mm	~0,24
<b>PC9449RF</b>				49	94	43	HV 700 x 0,2mm	~0,35



		A	B	X	Y	Z	i	kg
<b>PC4834RF</b>	<b>M5X18ISO4762</b>			34	94	28	HV 700 x 0,2mm	~0,33
<b>PC4849RF</b>				49	94	43	HV 700 x 0,2mm	~0,43

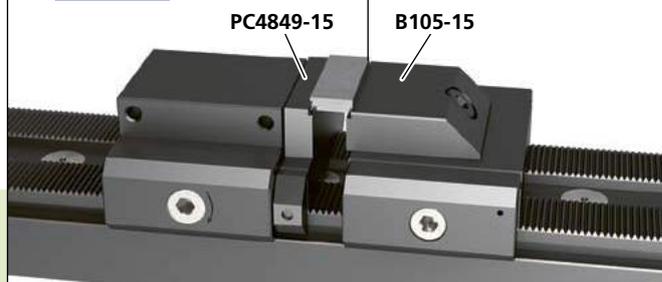


		Y	H	i	kg
<b>PC48-34PRG</b>		48	31	57HRC	~ 0,19
<b>PC48-49PRG</b>		48	46	57HRC	~ 0,25
<b>PC94-34PRG</b>		94	31	57HRC	~ 0,36
<b>PC94-49PRG</b>		94	46	57HRC	~ 0,48



		H	i	kg
<b>PC4834-15</b>		32	HV700 x 0,2mm	~ 0,19
<b>PC4849-15</b>		47	HV700 x 0,2mm	~ 0,25

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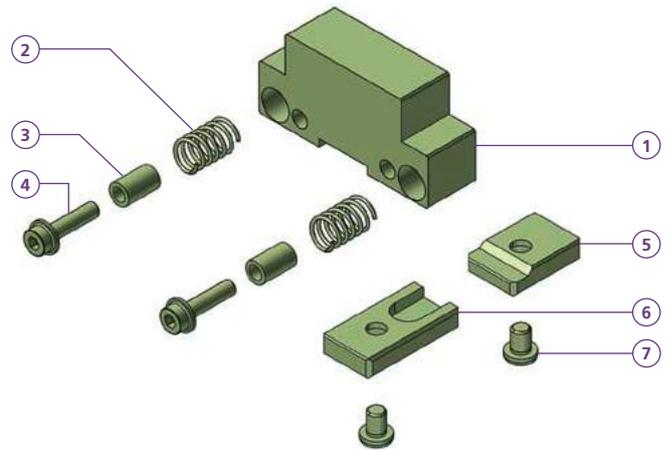
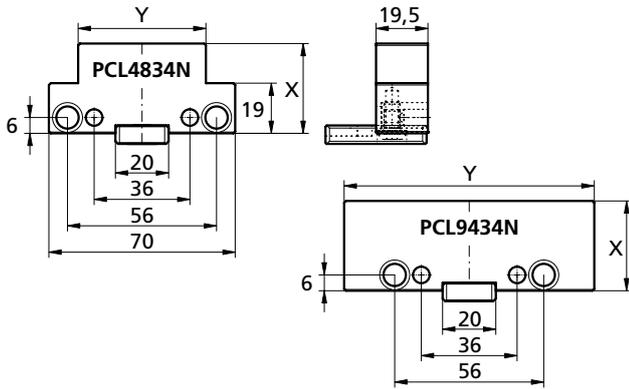


Bestellbeispiel / Ordering example: **PC 9434 RF** & 1 x **FA1240**

Separat bestellen / Separate order



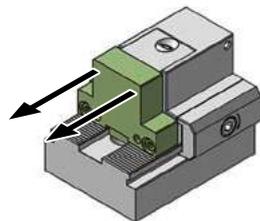
**Von Niederzug zu Linear!**  
**From pull down jaws to linear stroke!**



**PCL4349N**

- 1 1x TF140697
- 2 2x FED10175
- 3 2x PCD0813
- 4 2x M5X20BN1392
- 5 1x PCGU2028
- 6 1x PCGU2030LB
- 7 2x M6X8ISO7380

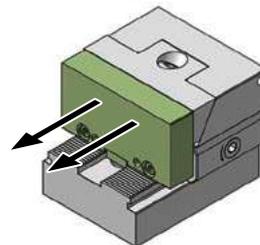
X = 49  
Y = 43  
kg ~0,43



**PCL4834N**

- 1 1x TF140698
- 2 2x FED10175
- 3 2x PCD0813
- 4 2x M5X20BN1392
- 5 1x PCGU2028
- 6 1x PCGU2030LB
- 7 2x M6X8ISO7380
- 8 1x M10X22ISO4762

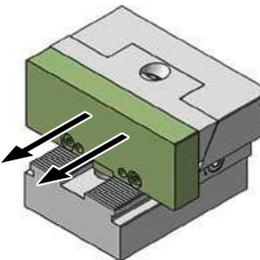
X = 48  
Y = 48  
kg ~0,35



**PCL9449N**

- 1 1x TF140700

X = 49  
Y = 94  
kg ~0,74



**PCL12549N**

- 1 1x T00317

X = 49  
Y = 125  
kg ~0,97

**PCL9434N**

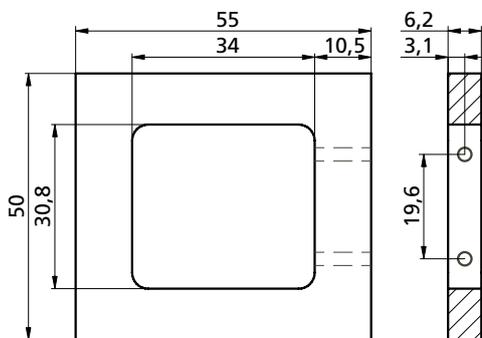
- 1 1x TF140699

X = 34  
Y = 94  
kg ~0,52

Die Spannschraube 8 der 34 mm hohen Spannmodule müssen durch eine kürzere Schraube ausgetauscht werden!  
The clamping screws 8 of the 34 mm high clamping modules must be replaced by a shorter screw!

Bestellbeispiel / Ordering example: **PCL4834N**

**Montagehilfe und Ersatzteile für Linearbacken**  
**Assembling tool for linear jaws and spare parts**



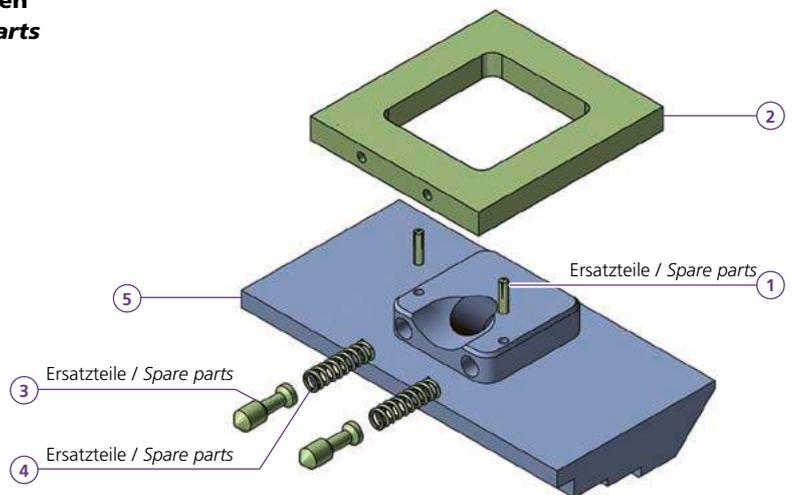
**BL-SET**

- 1 2x TN100823
- 2 1x TK160609
- 3 2x PCRB0516
- 4 2x TN100614
- 5 1x \_\_\_\_\_

kg ~0,08

p. 84

Alle Linearbacken  
All linear jaws



Montageanleitung siehe Video  
Assembly instructions see video



Separat bestellen / Separate order



Click-Flex

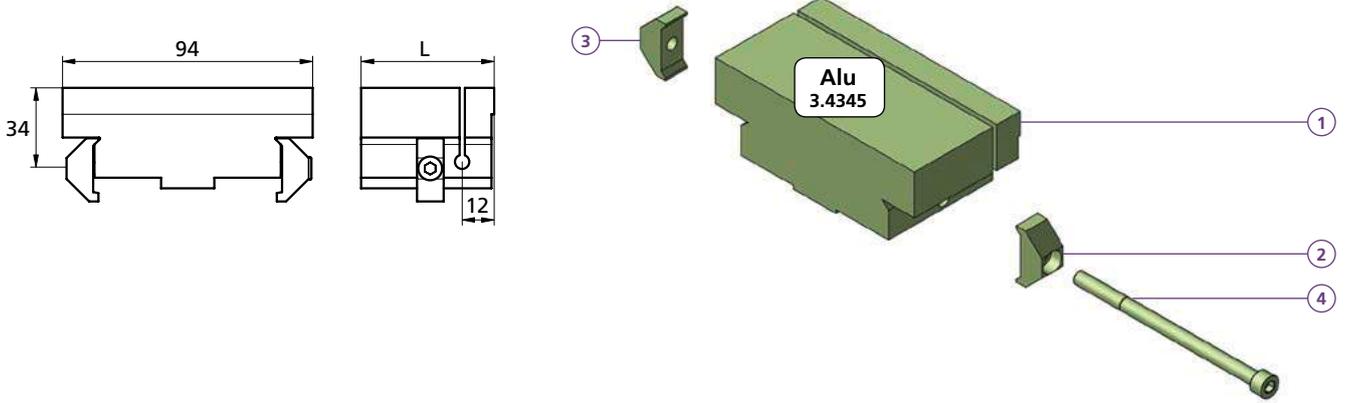
PCFX30

PCFX50

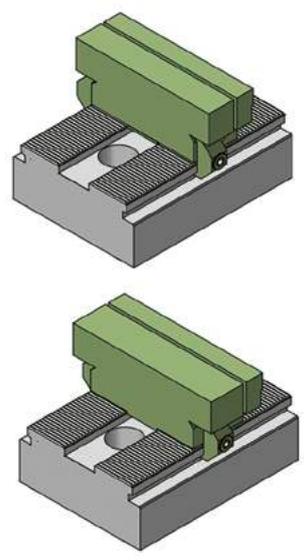
PCFX35

PCFX70

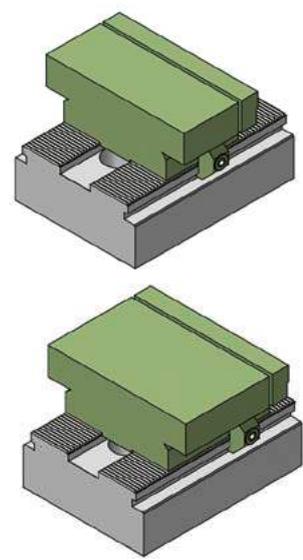
powerCLAMP



- PCFX30**
- ① 1x TF140702
  - ② 1x PCSP10B
  - ③ 1x PCSP10G
  - ④ 1x M5X85ISO4762
- L = 30  
kg ~0,27
- 
- PCFX35**
- ① 1x TF140703
- L = 35  
kg ~0,31

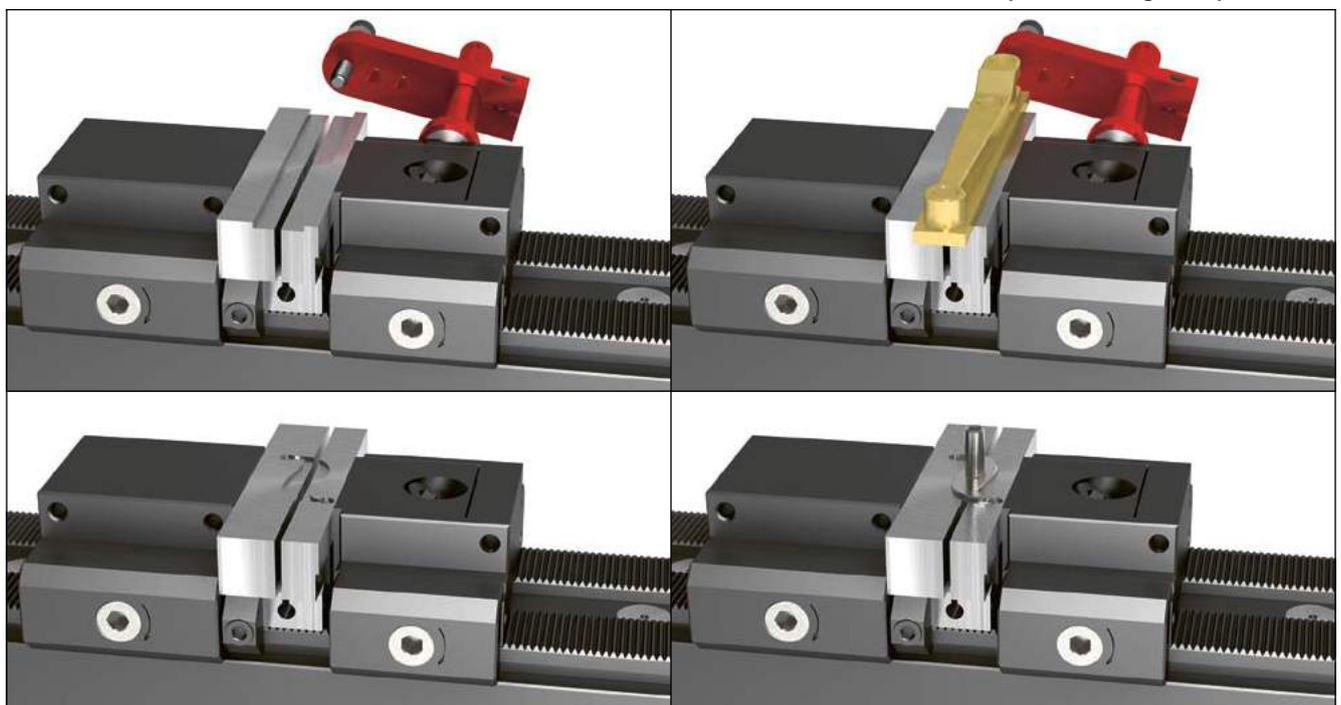


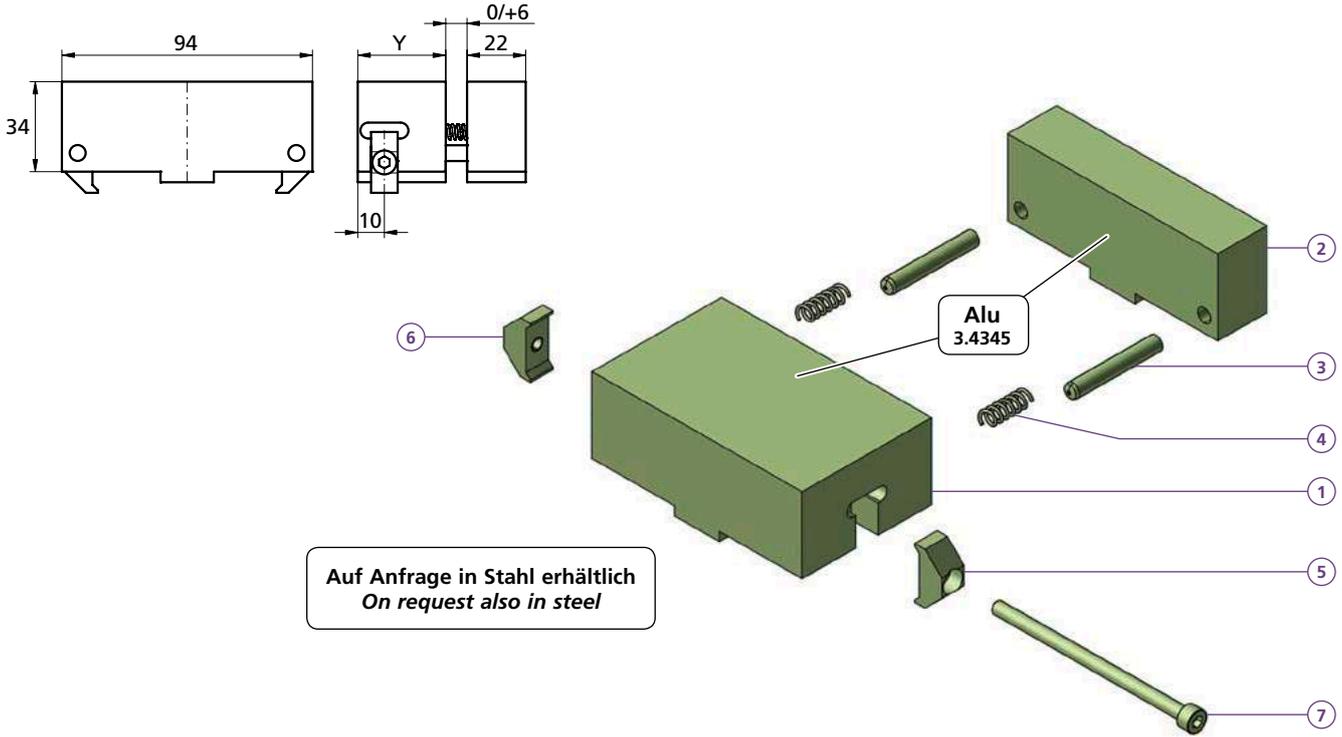
- PCFX50**
- ① 1x TF140704
  - ② 1x PCSP10B
  - ③ 1x PCSP10G
  - ④ 1x M5X85ISO4762
- L = 50  
kg ~0,45
- 
- PCFX70**
- ① 1x TF140705
- L = 70  
kg ~0,62



Auf Anfrage in Stahl erhältlich  
On request also in steel

Bestellbeispiel / Ordering example: PCFX30





Auf Anfrage in Stahl erhältlich  
On request also in steel

**PCFM3322**

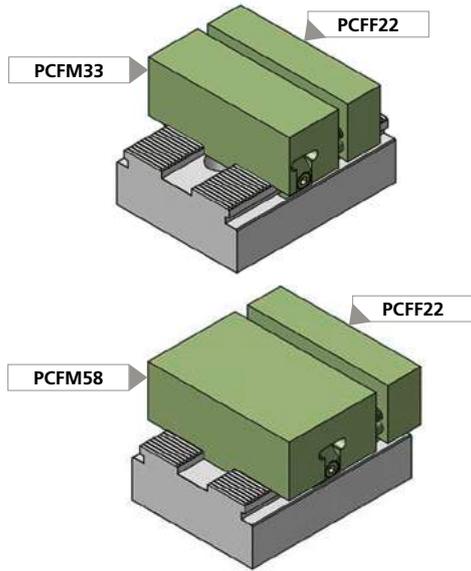
- ① 1x PCFM33
- ② 1x PCFF22
- ③ 2x CCBO0801
- ④ 2x FED0618
- ⑤ 1x PCSP10B
- ⑥ 1x PCSP10G
- ⑦ 1x M5X85ISO4762

Y = 33  
kg ~0,52

**PCFM5822**

- ① 1x PCFM58

Y = 58  
kg ~0,75



**PCSP10SET** kg ~0,04

- ① 1x PCSP10G
- ② 1x PCSP10B
- ③ 1x M5X85ISO4762

Bestellbeispiel / Ordering example: **PCFM3322**

**Anschlagbacke flach**  
*Jaw flat stop*

	B	H	kg
PCUD34093TG	93	34	~0,11
PCUD49093TG	93	49	~0,14

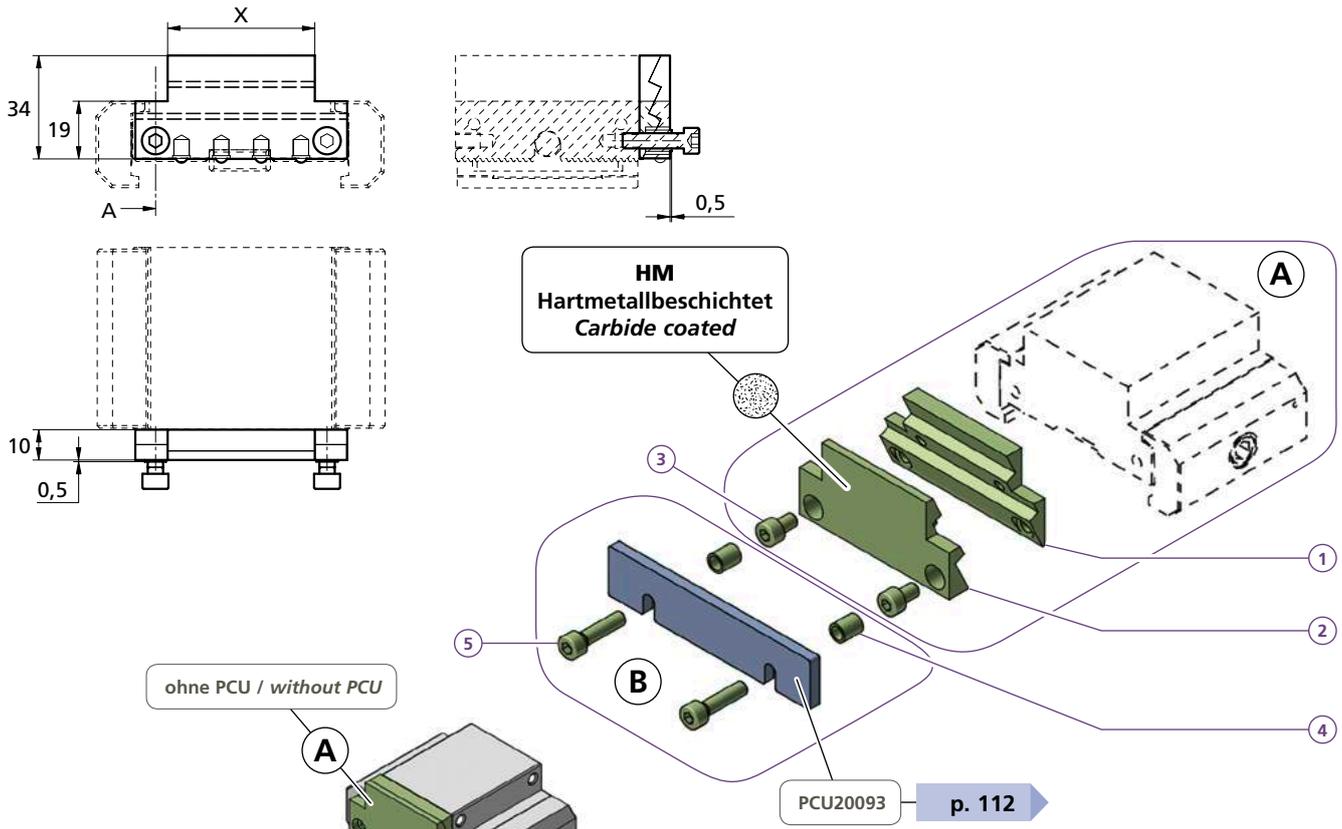
**Unterlagen gehärtet und geschliffen**  
*Parallels hardened and ground*

Type		B	H	kg
I	PCUD14093	93	14	~0,05
I	PCUD20093	93	20	~0,06
I	PCUD24093	93	24	~0,08
I	PCUD29093	93	29	~0,09
II	PCUD31093	93	31	~0,10
I	PCUD34093	93	34	~0,11
I	PCUD39093	93	39	~0,12
I	PCUD44093	93	44	~0,14
II	PCUD46093	93	46	~0,14
I	PCUD47093	93	37	~0,15



# Niederzugbacke für Anschlagseite Pull down jaws for solid reference face

powerCLAMP

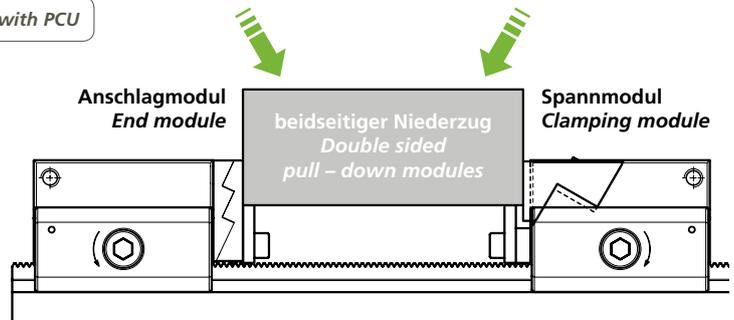
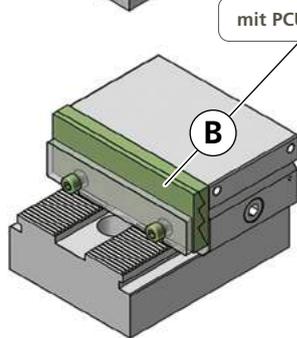
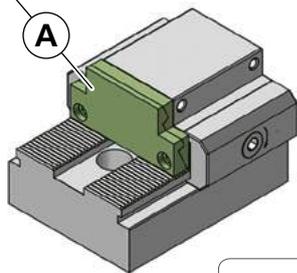


**PC4834N**

1	1x PC4834NSL
2	1x PC4834NB1
3	2x M5X8ISO4762
4	2x PCD008
5	2x M5X20ISO4762
X	= 48
kg	~0,17

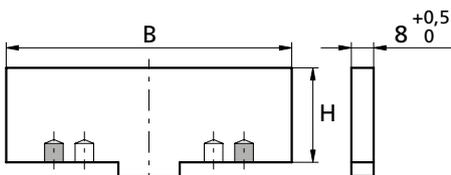
**PC9434N**

1	1x PC9434NSL
2	1x PC9434NB1
X	= 94
kg	~0,2

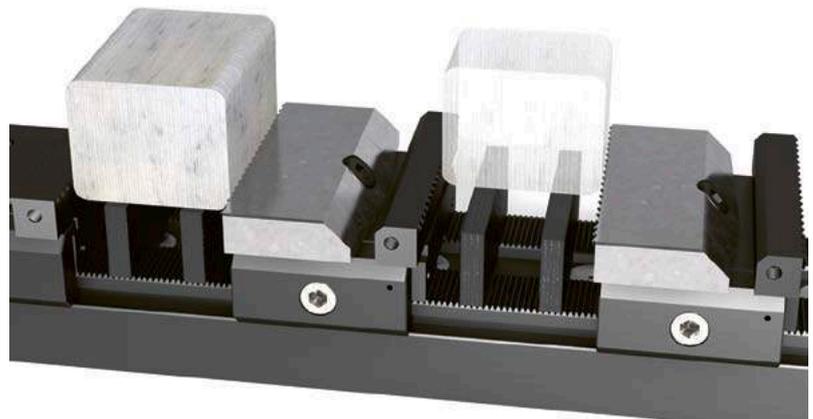


Bestellbeispiel / Ordering example: **PC4834N**

## Magnetunterlage Magnetic base



	B	H	kg
PCUM1409308	93	14	~0,09
PCUM2009308	93	20	~0,13
PCUM2409308	93	24	~0,15
PCUM2909308	93	29	~0,18
PCUM3109308	93	31	~0,20
PCUM3409308	93	34	~0,21
PCUM3909308	93	39	~0,24
PCUM4409308	93	44	~0,27
PCUM4609308	93	46	~0,28



Bestellbeispiel / Ordering example: **PCUM1409308**

Separat bestellen / Separate order

