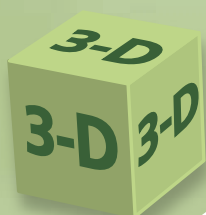
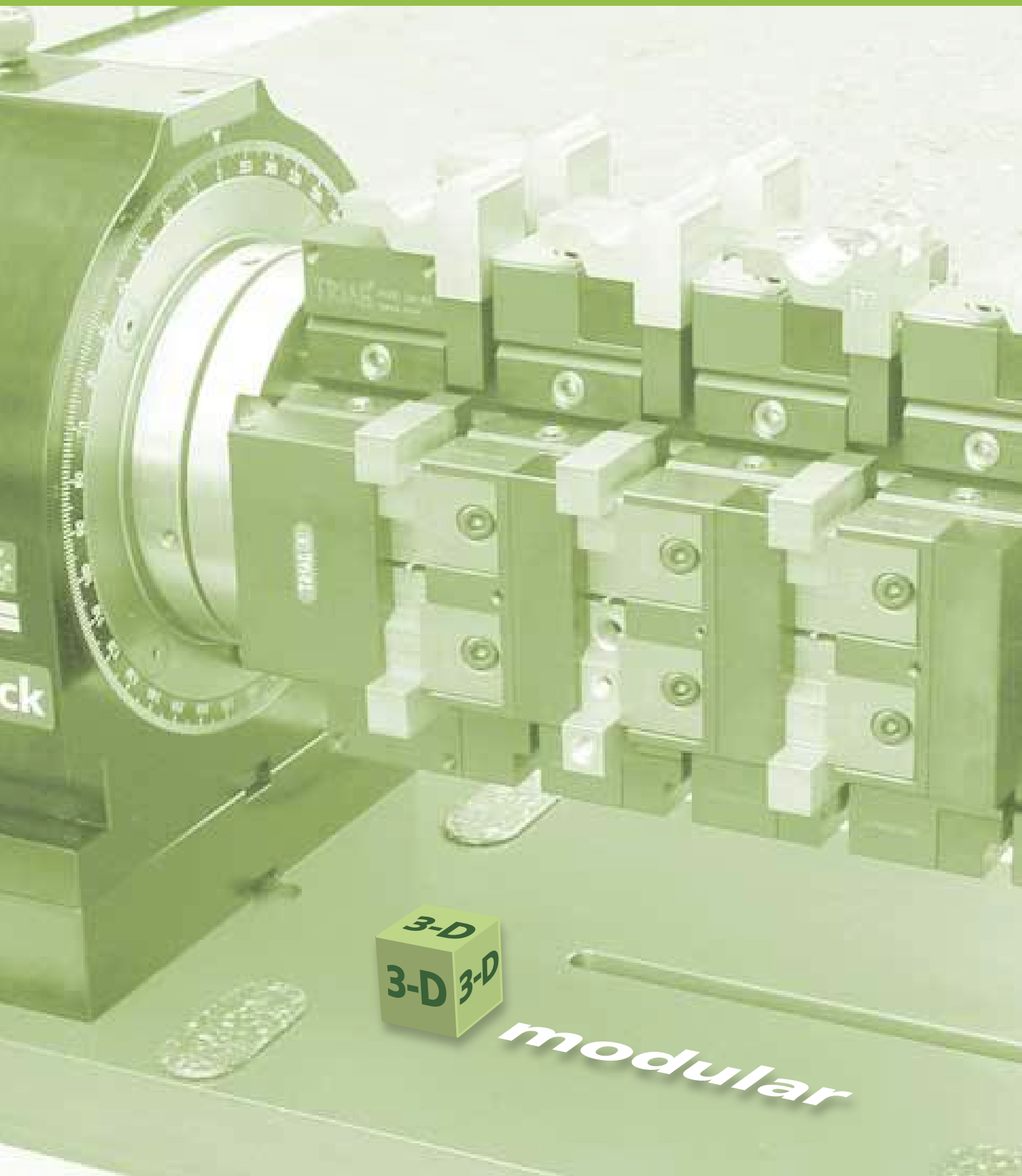





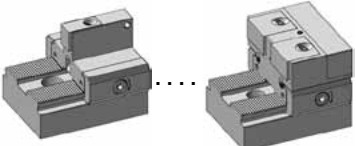
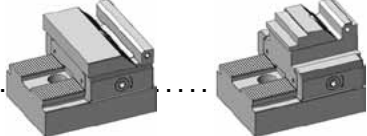

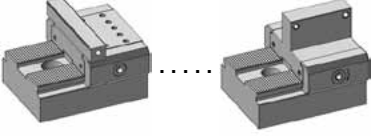

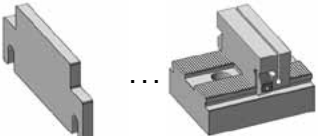


*power*CLAMP & 5axes



modular



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	Anschlagmodule <i>End module</i>	 85 - 92
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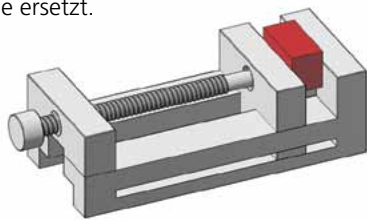


Der klassische Maschinenschraubstock ist für gewisse Zerspanungsarbeiten vielfach die richtige Wahl, obwohl man einen Spannstock ohne Mehrkosten auch mit einem Modularsystem aufbauen kann. Er wird durch die ständig erhöhten Anforderungen an die Prozessoptimierung immer mehr durch modulare Spannsysteme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

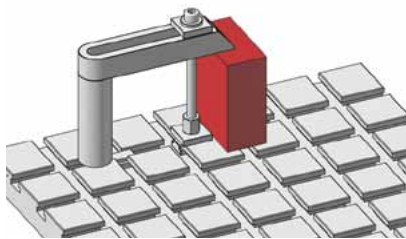
The classic machine vise is for some application still a good option, on the other hand can you set up the same with a modular clamp system at not higher costs! Because of always increasing demand and high competition you see more modular systems at endusers places, to keep up with productivity.

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.

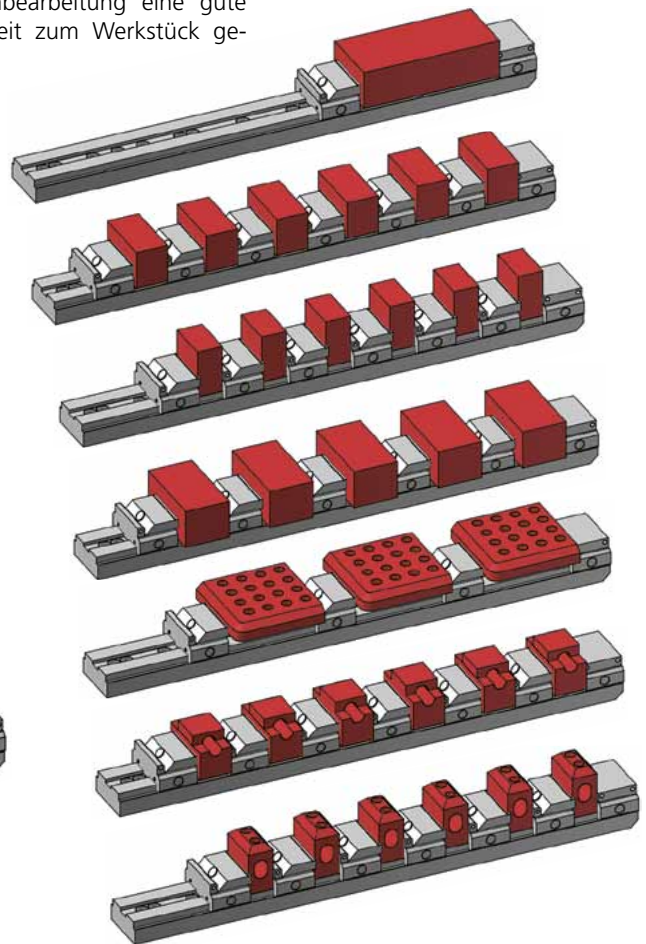
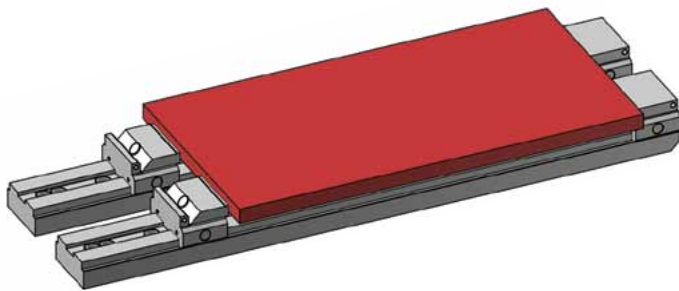
With modular clamp system you achieve a high flexibility and also high density of holding workpieces. This brings you big advantages also by producing single parts or small quantities! Compared to dedicated fixtures you can use this vises for many different applications.



Spannen mit dem Spannstock
Clamping with the machine vise



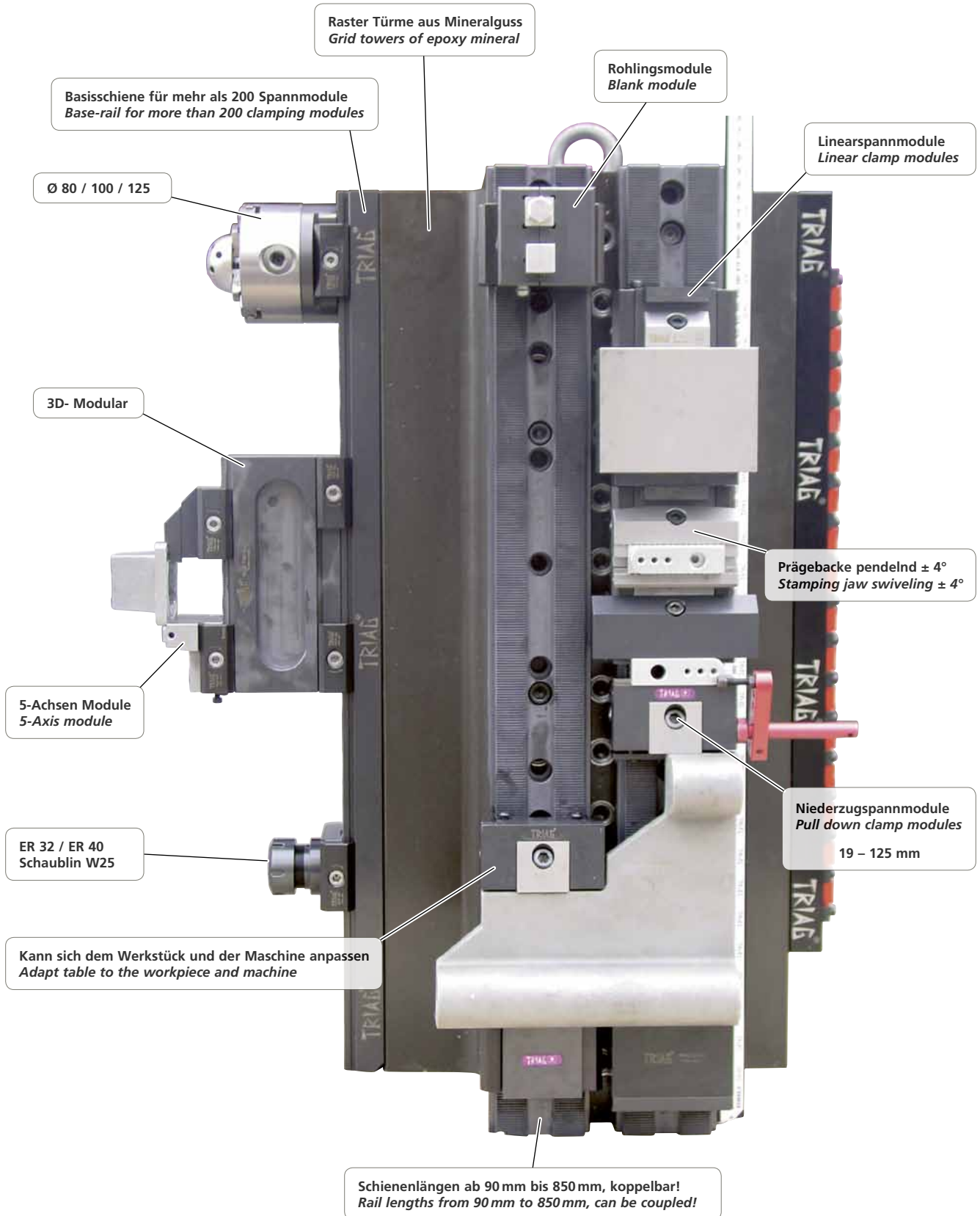
Spannen mit Spannpratzen
Clamps in operation



Ausserdem / And:

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





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

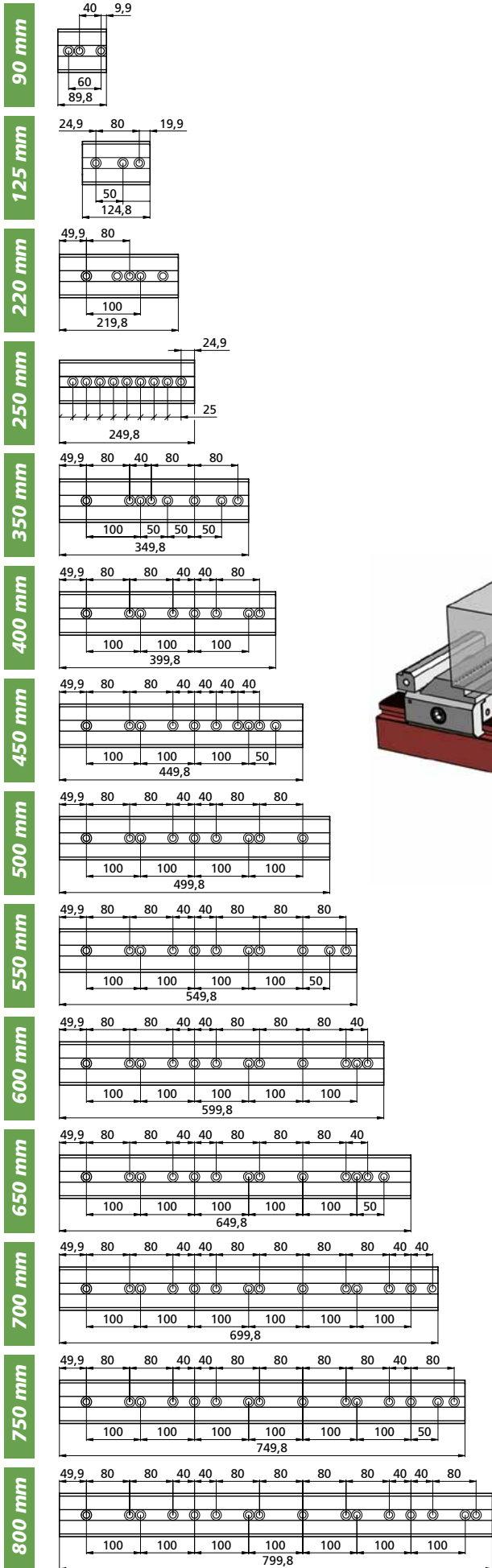


Keine spänefüllenden T-Nuten (im Gegensatz zu vielen Wettbewerbsprodukten) - Basis bilden stabile, mit Teilstücken verlängerbare Trägerschienen. Sie verfügen über eine hochgenau gefräste Verzahnung.

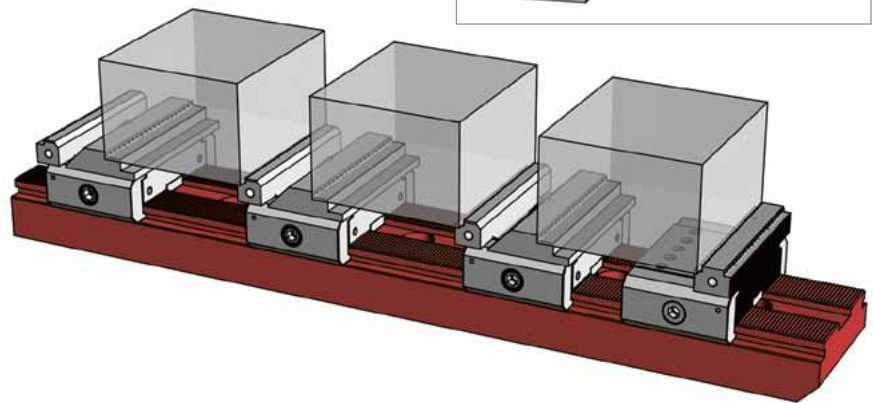
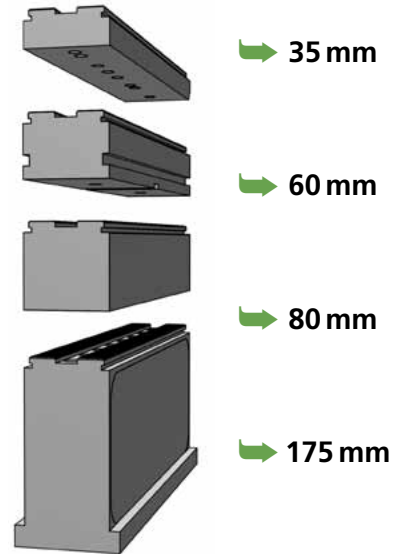
Eine Vielzahl an Spannmodulen mit unterschiedlichen Spannelementen lassen sich auf den Trägerschienen in einem Raster von 2 mm positionieren.

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:

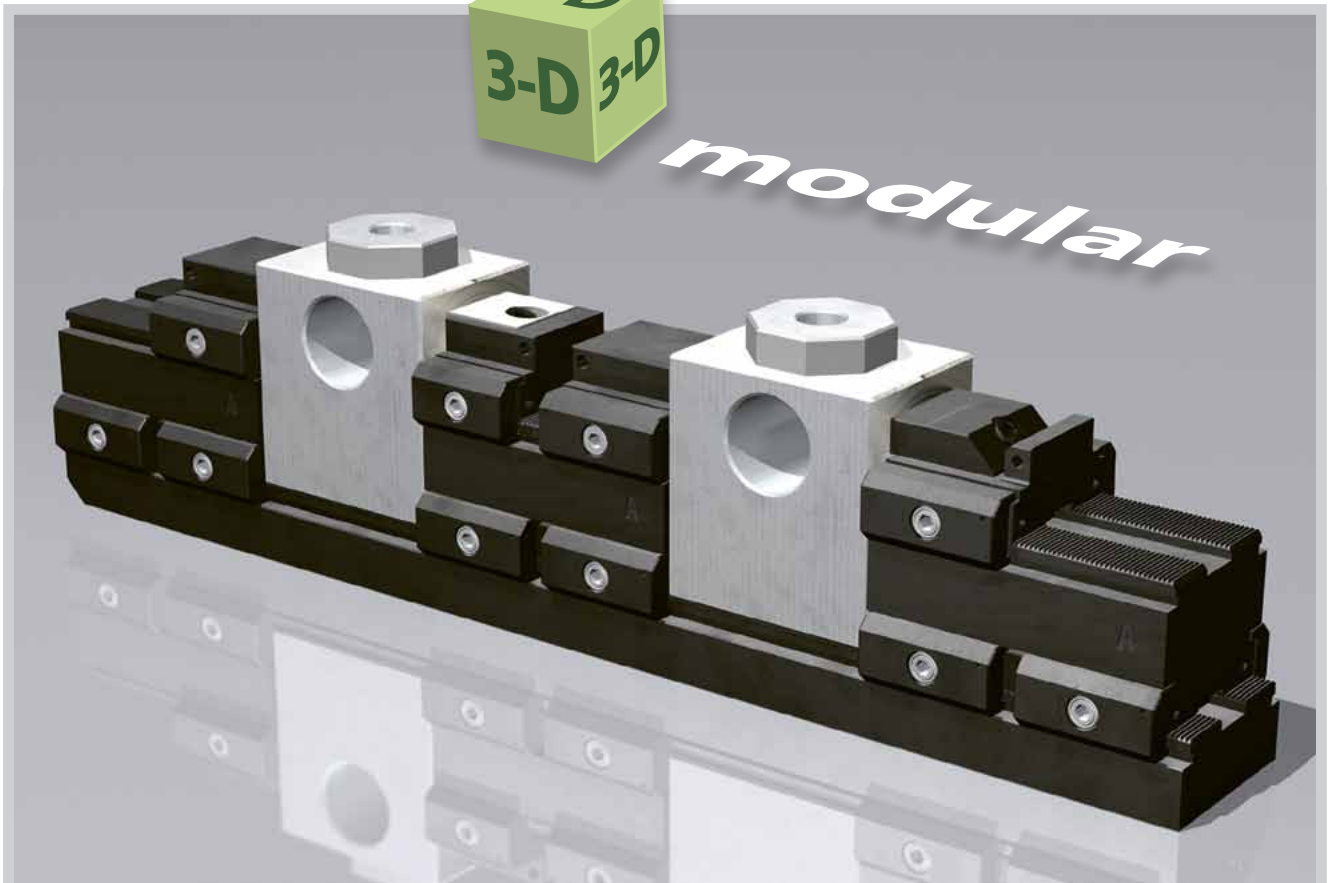


Basisschiene

Die Basisschiene ist das Grundelement des modularen Spannsystems von Triag International und ist in den Höhen von 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 Palettensystemen 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!

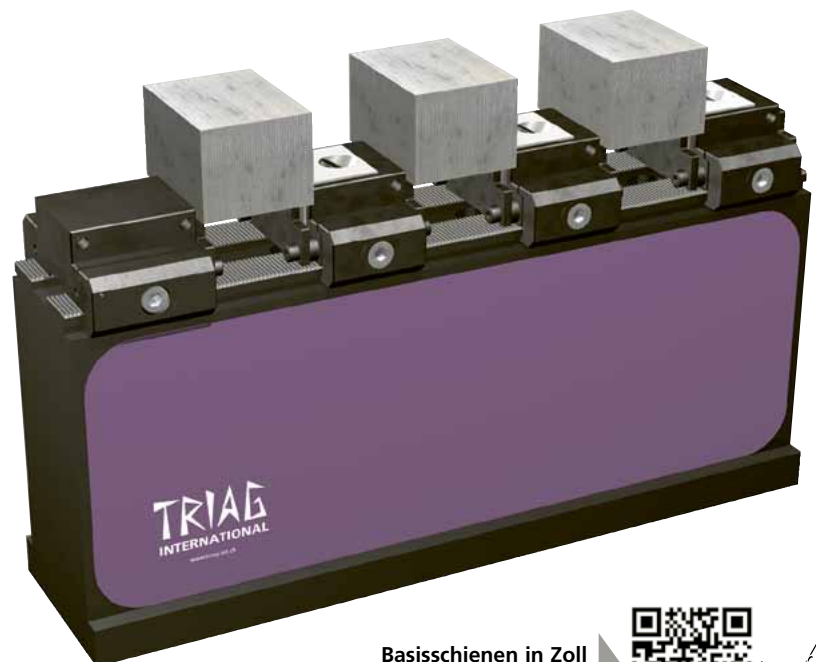
Mehr auf Seite | More on Page 48

Base rail

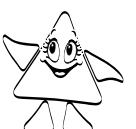
The base rail is the basic element of the Triag modular clamp system. We offer them in different lengths and heights and more than a hundred different standard clamp modules will fit onto the base rails.

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





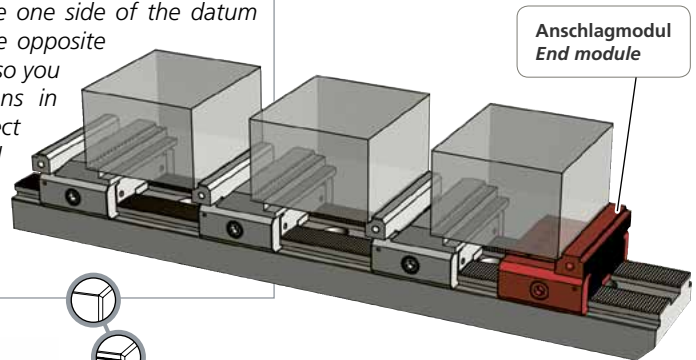
Das Anschlagmodul / End modules

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.

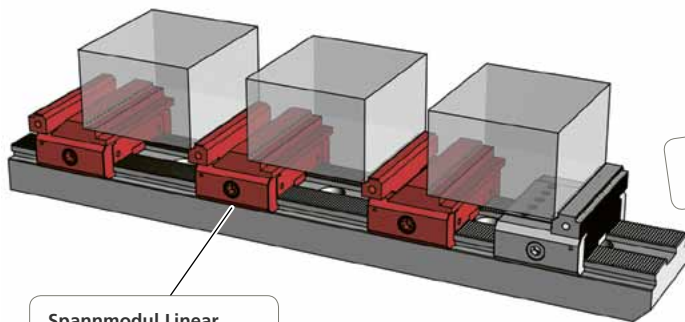
Für die unterschiedlichen Bearbeitungssituationen steht eine Vielzahl von Ausführungen zur Verfügung. Diese unterscheiden sich in der Breite der Backen (ab 19 mm bis max. 150 mm) als auch in der Beschaffenheit der Spannflächen (glatt, geriffelt, gerillt, hartmetallbeschichtet oder mit Prägeverzahnung,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

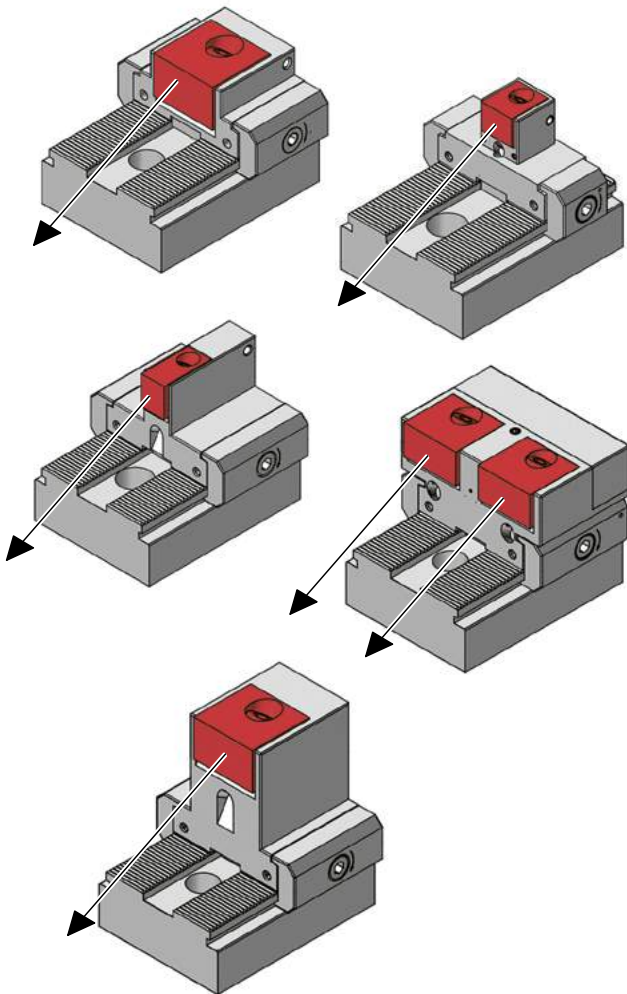
The movable jaws you can get in various versions such as hardened flat, carbide coated soft jaws double serrated, linear pull down, direct stamping dovating and more. The width of the clamps modules starts from 19 mm up to 125 mm.

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.



Niederzugspanmodule
Pull down 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

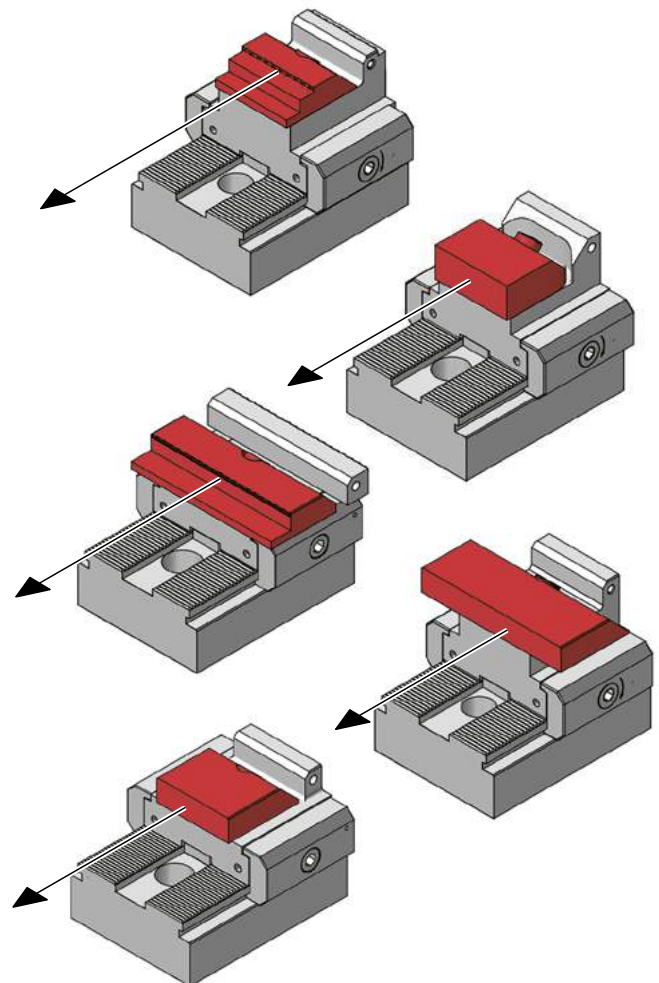
Facts for pull down clamp modules

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

Linearspanmodule
Linear clamp modules



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 linear clamp modules

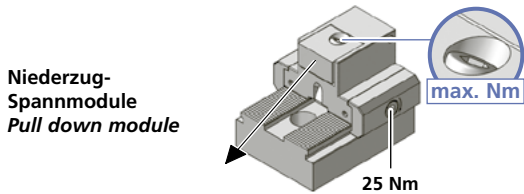
Jaw range: 0- 5,0 mm
 Clamping force: up to 1'600 daN

Advantages linear jaws:

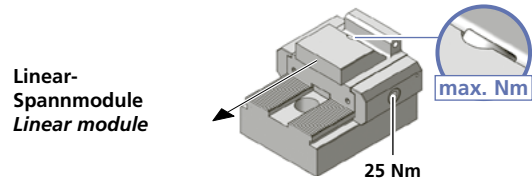
- Similar clamp as conventional vise
- Good for shaped jaws
- Secure clamped with direct stamping jaws
- Higher accuracy



ACHTUNG / CAUTION



Niederzug-Spannmodule
Pull down module



Linear-Spannmodule
Linear module

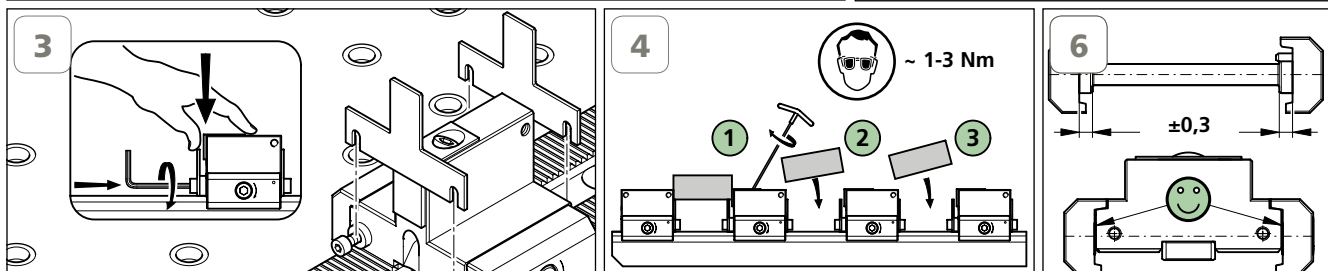
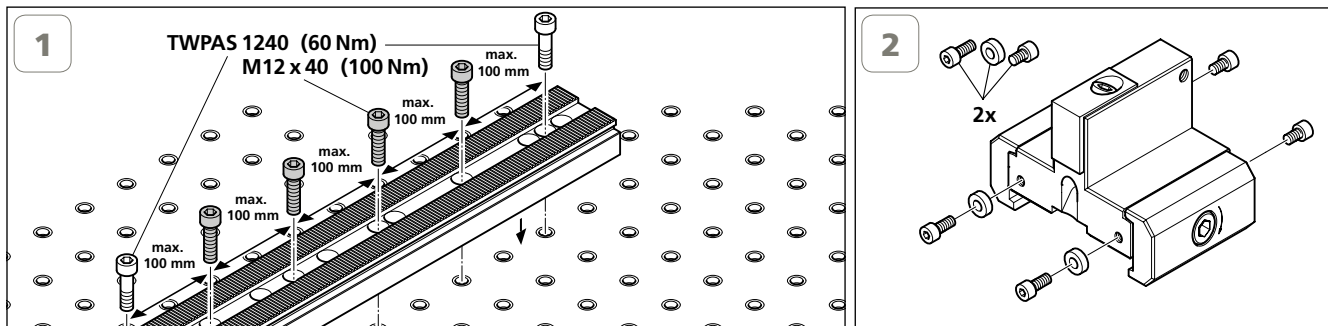
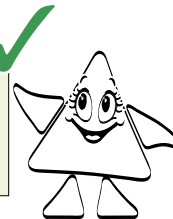
Schraube Screw	Drehmoment Torque		Spannkraft Workholding force		
	Nm	(lb-ft)	~daN	~(lb)	~t
M5 + M6	4	3	= 500	1100	0,50
	5	3,7	= 580	1280	0,58
	6	4,4	= 690	1520	0,69
	7	5,2	= 780	1720	0,78
	8	5,9	= 880	1940	0,88
	9	6,6	= 980	2160	0,98
M6	10	7,4	= 1020	2250	1,02
	12	8,9	= 1220	2690	1,22
	14	10,4	= 1450	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.

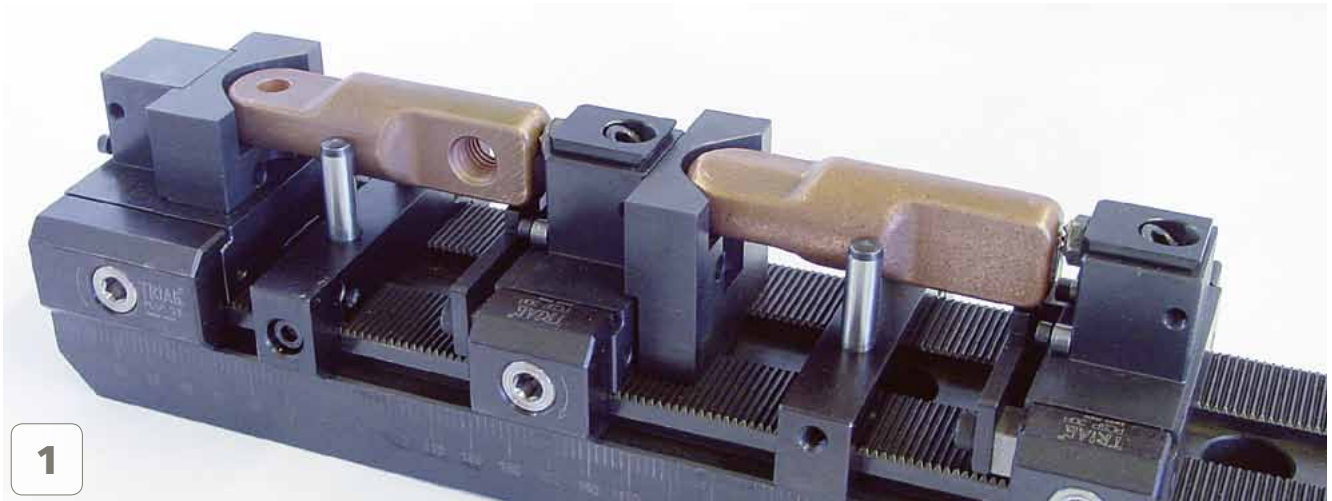
IMPORTANT: The torque numbers specified represent the absolute maximum. The table at the bottom of this page provides further information on the workholding forces.

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

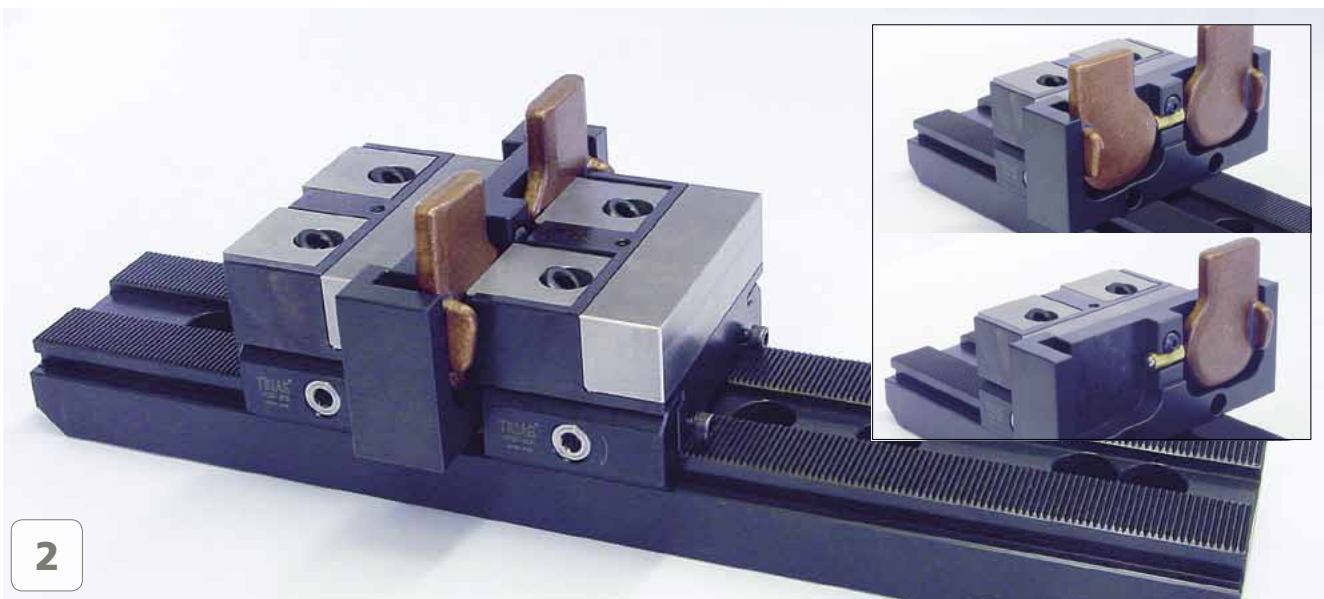


WICHTIG: Vor dem Positionieren der Spannmodule für ein neues Werkstück, ist die Spannbacke ganz zurück zu stellen, dies gewährleistet eine sichere Spannung (siehe Bild A)!

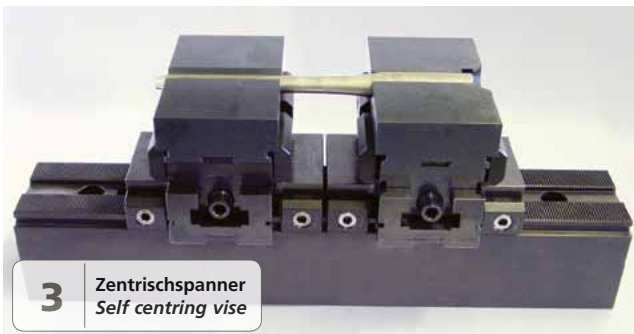
IMPORTANT: Prior to setting up a new clamping module the clamping jaw of the vice module must be retracted all the way (see picture A)! This guarantees proper clamping of the new workpiece.



1



2



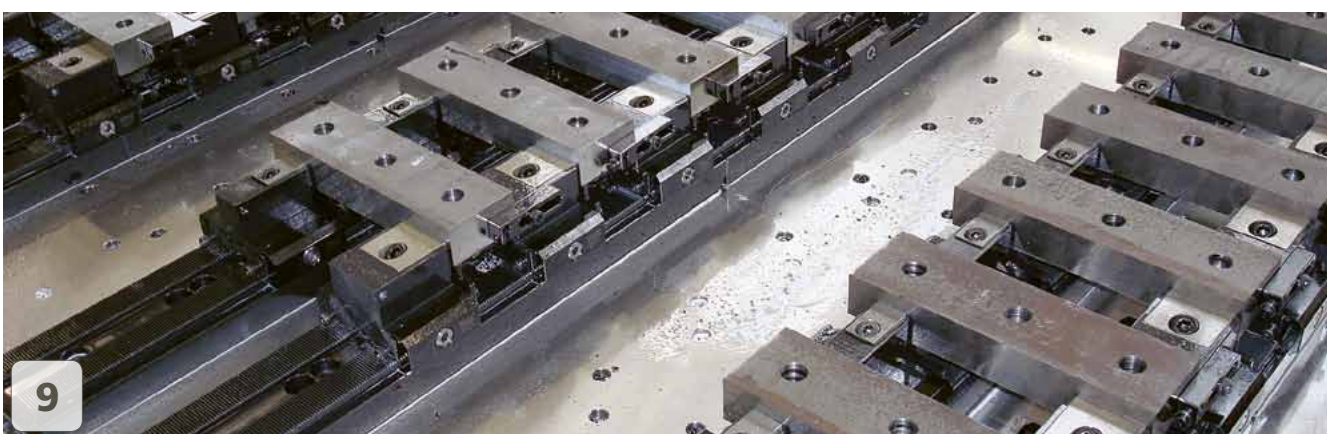
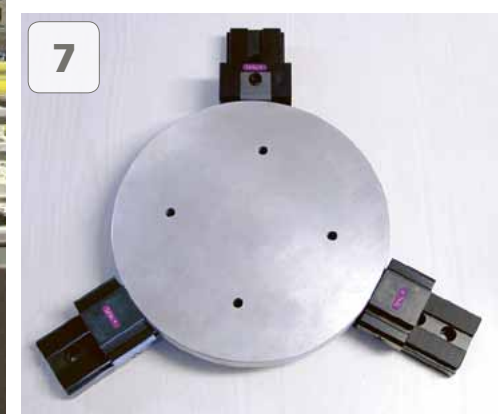
3 Zentrischspanner
Self centring vise

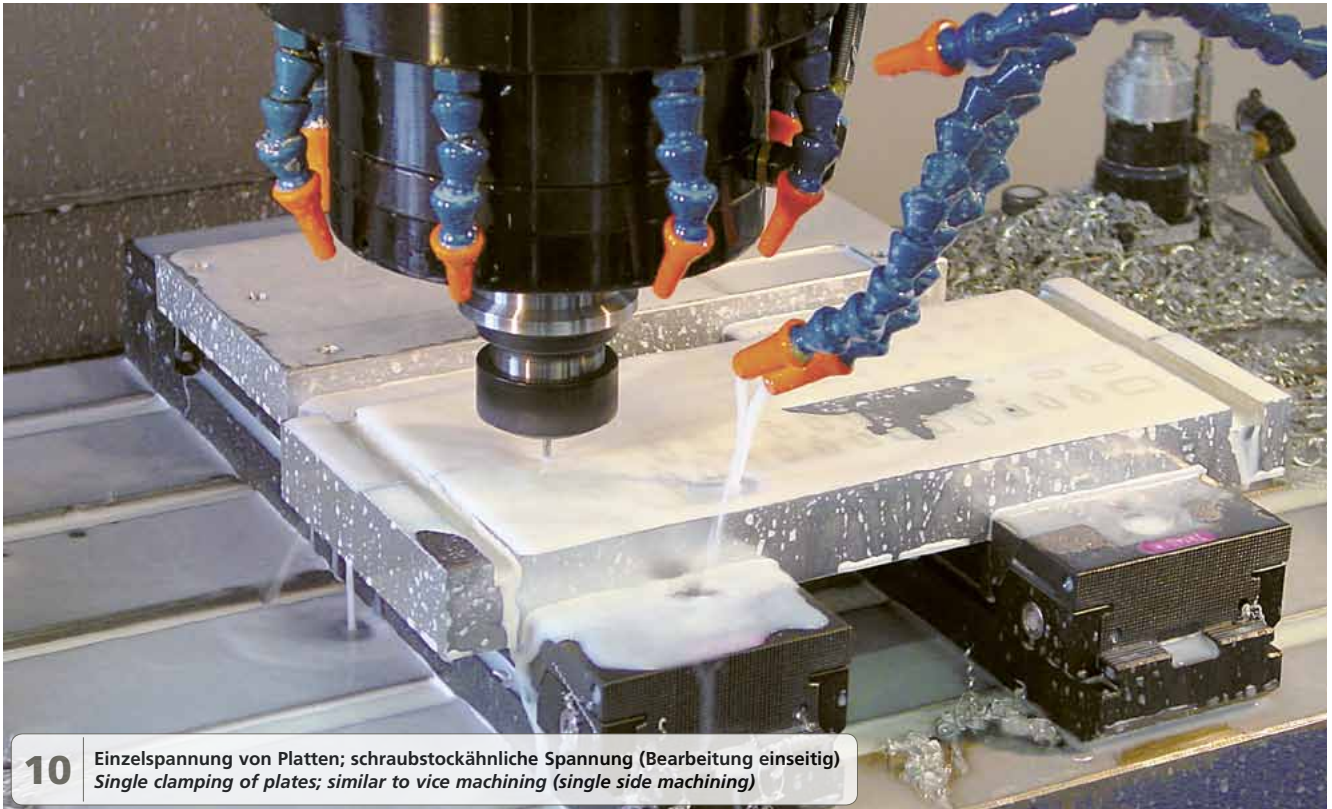


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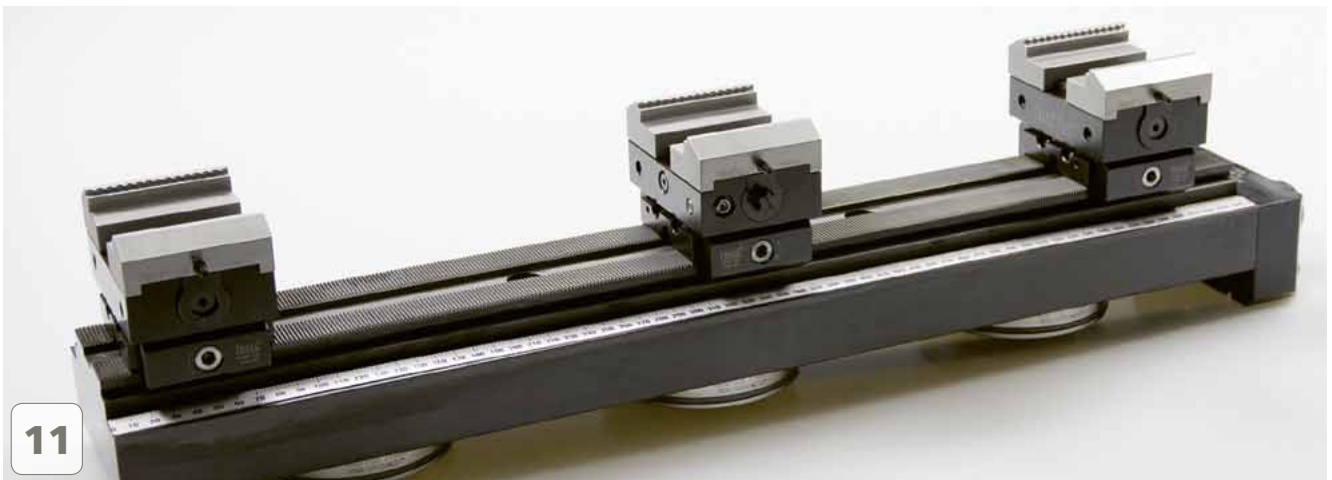


5





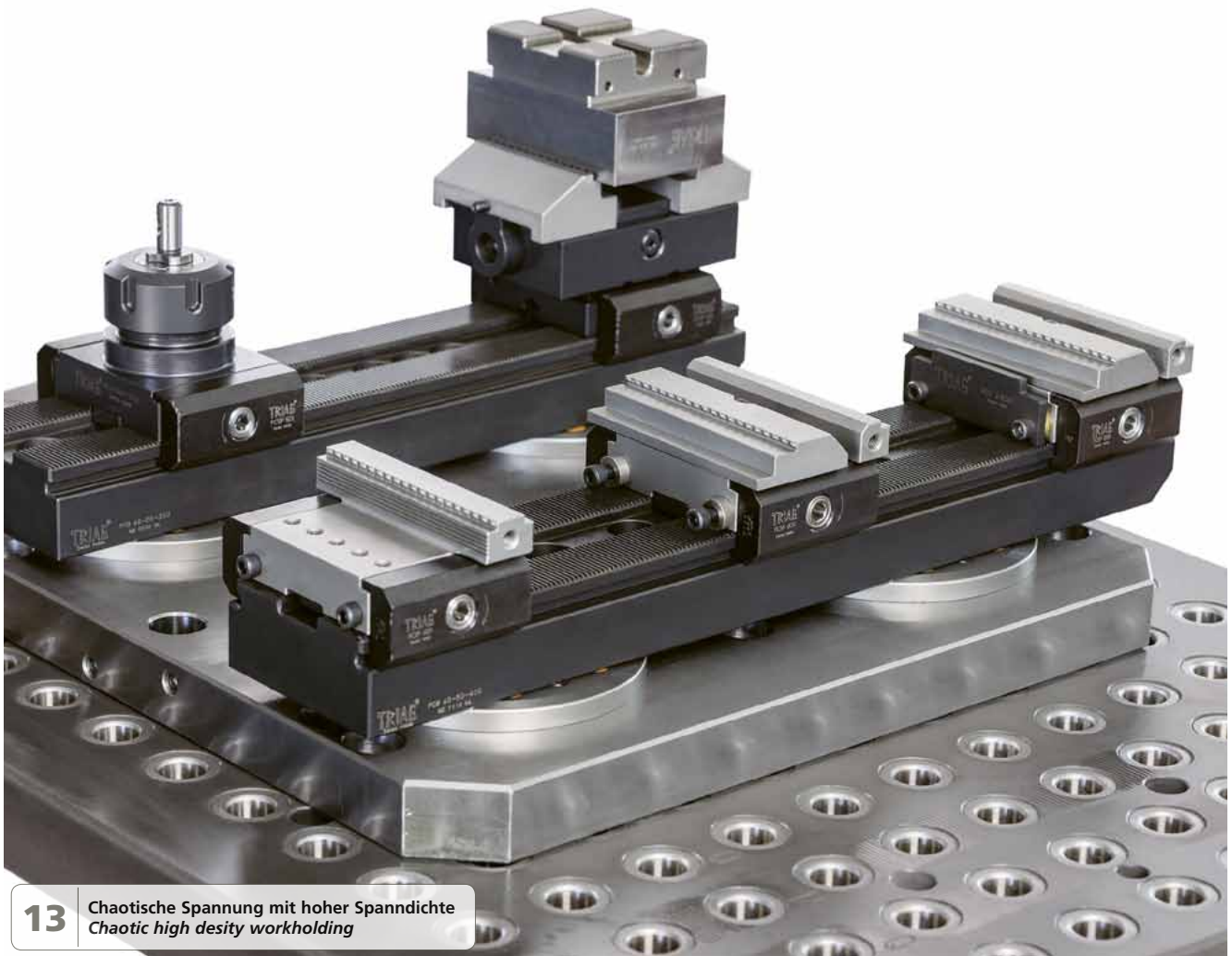
10 Einzelspannung von Platten; schraubstockähnliche Spannung (Bearbeitung einseitig)
Single clamping of plates; similar to vice machining (single side machining)



11



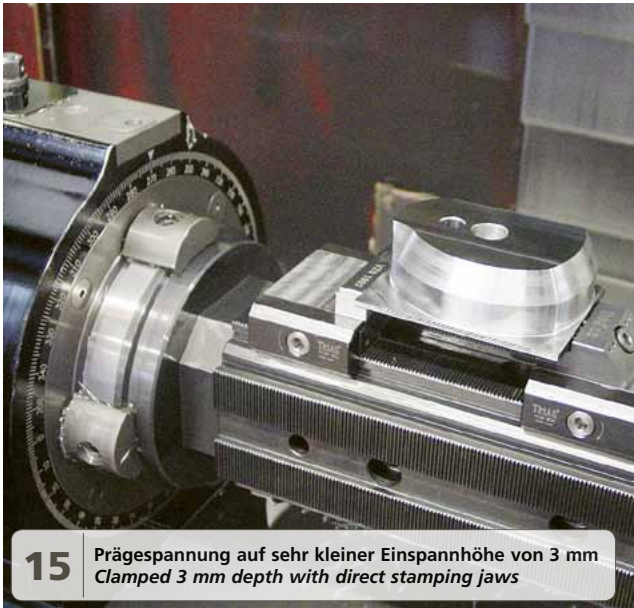
12 Verschiedene dringende Werkstücke in Bearbeitung, Grundplatte, Nutensteine und Keile (Total 9 Werkstücke)
Various urgent work pieces in progress, base plate, nuts and wedges (totally 9 pieces)



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



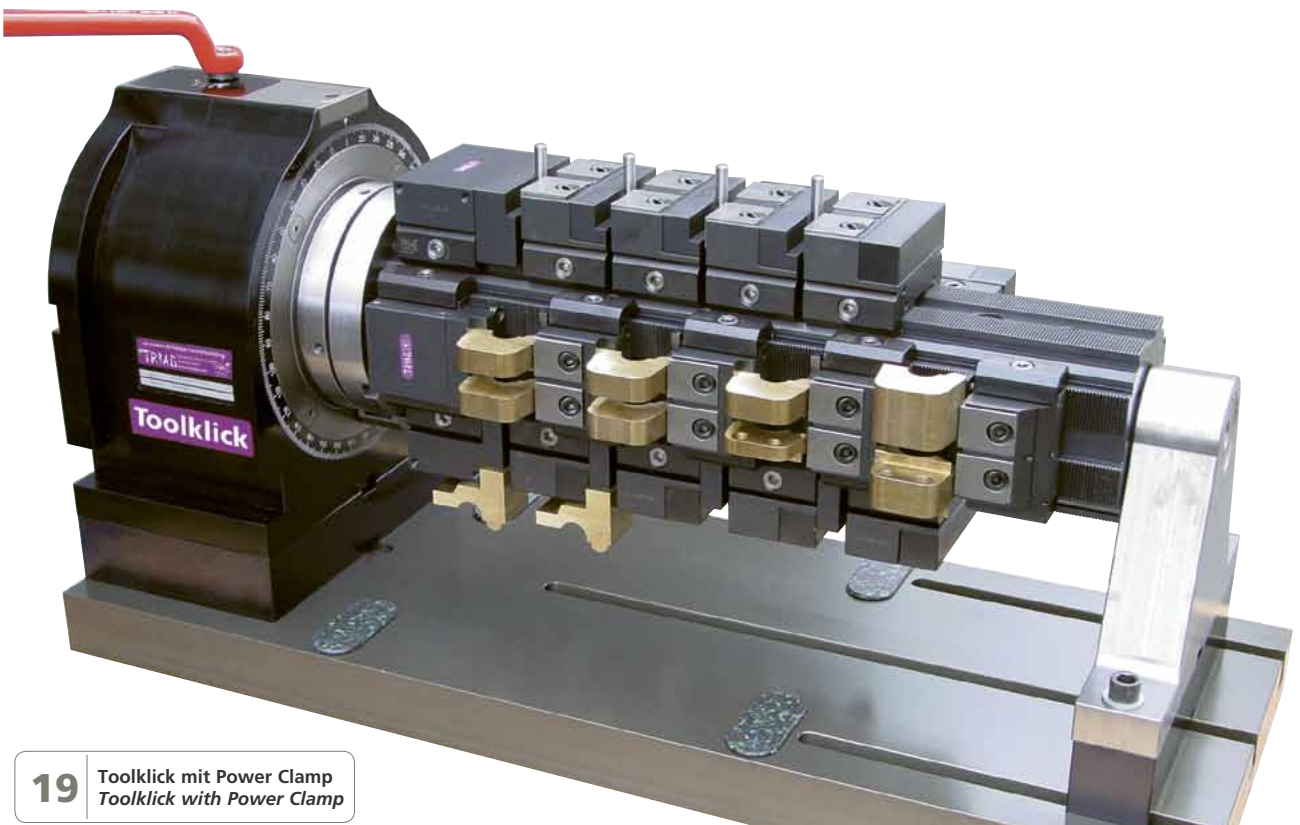
16 Dreiseitenbearbeitung ab 19 mm
Three-sided machining beginning at 19 mm



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)



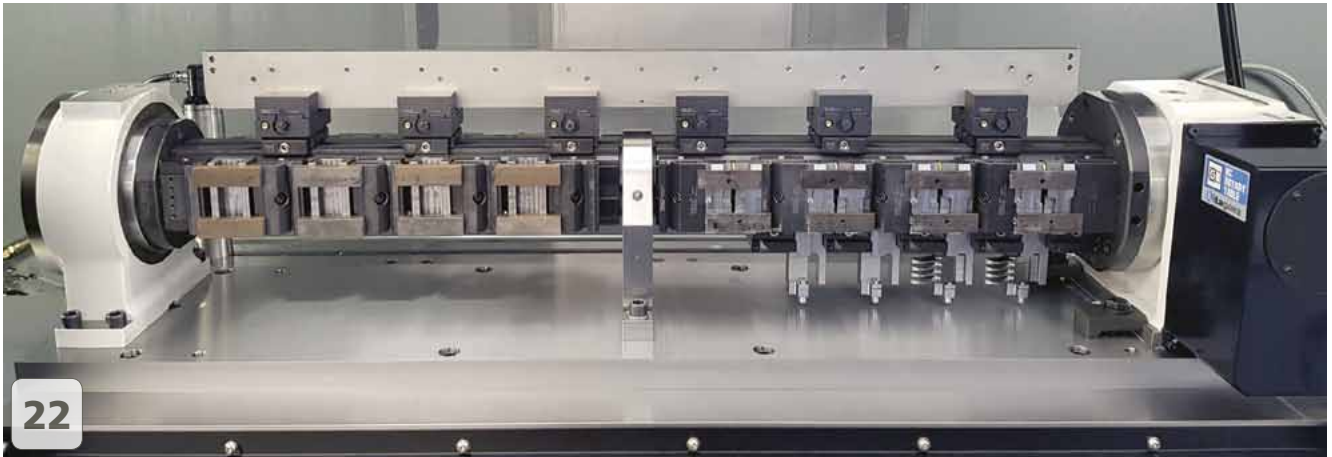
19 Toolclick mit Power Clamp
Toolclick with Power Clamp



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



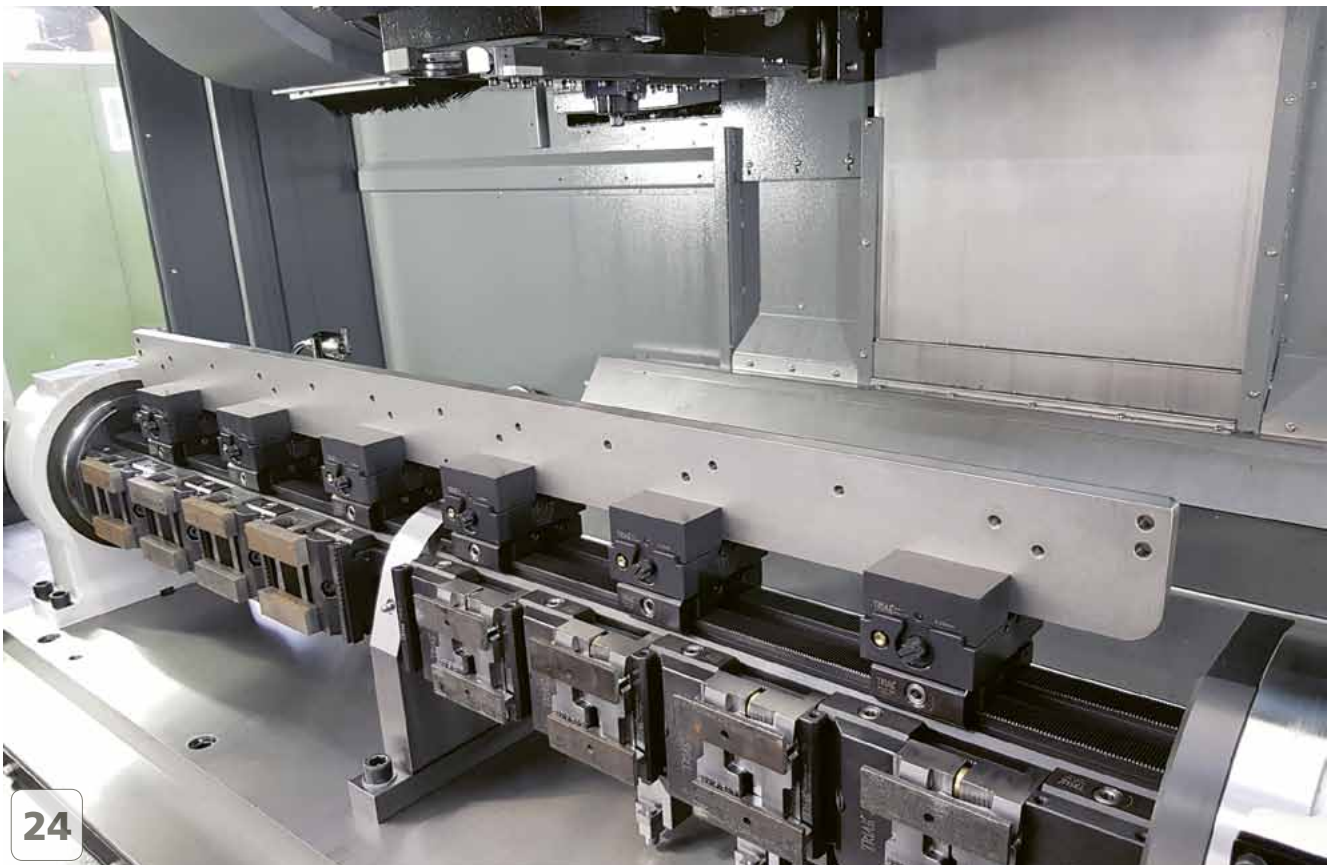
21



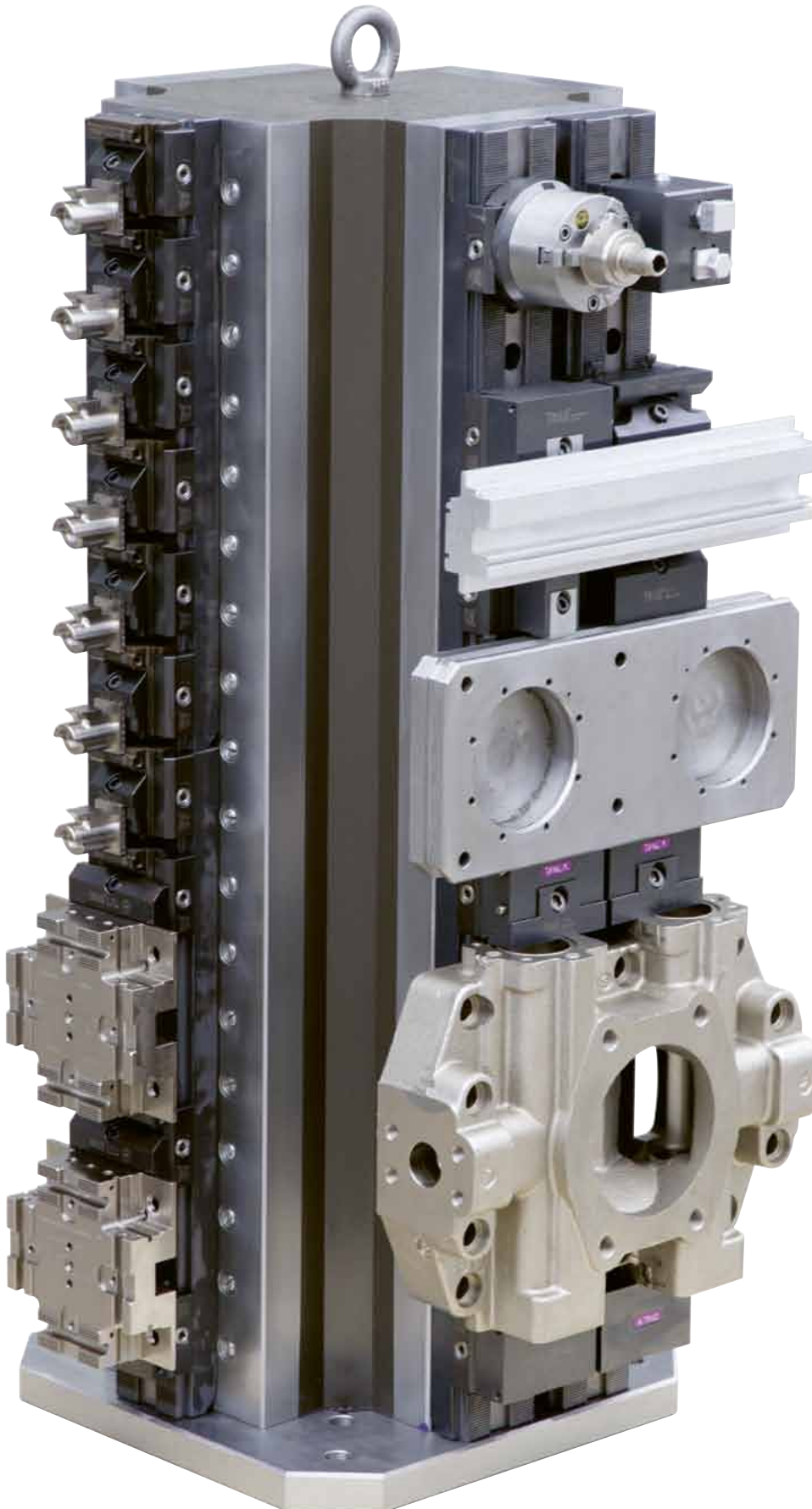
22



23



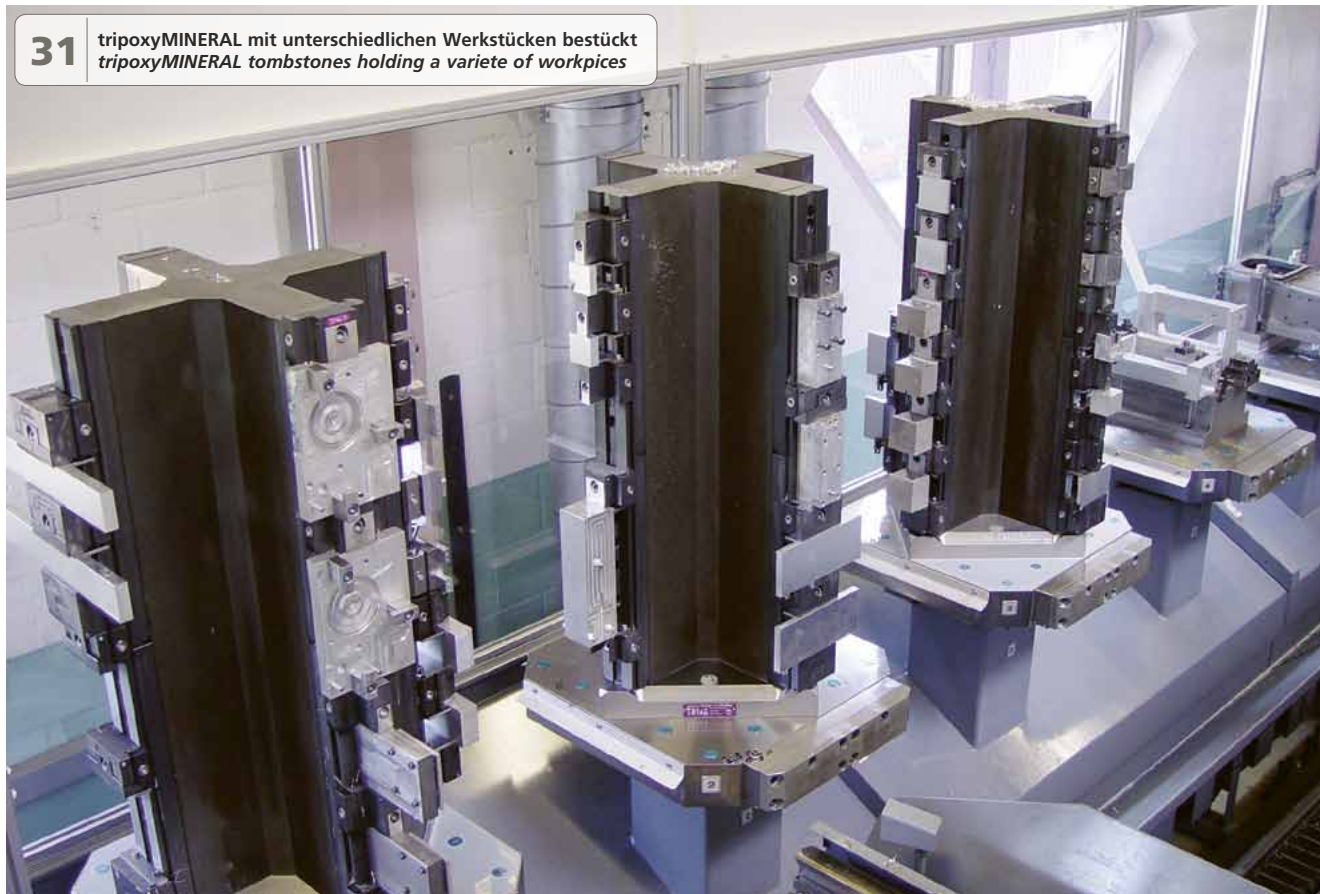
24



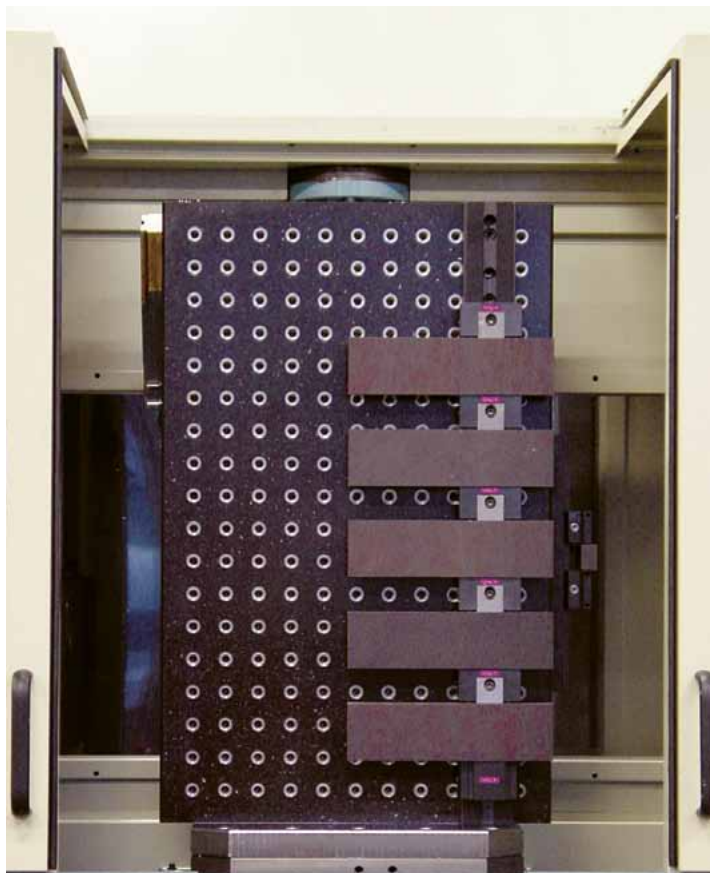
25 tripoxyMINERAL Kreuzturm mit PowerCLAMP Schienen für chaotische Spannung
tripoxyMINERAL Cross version with PowerCLAMP baserails for chaotic workholding



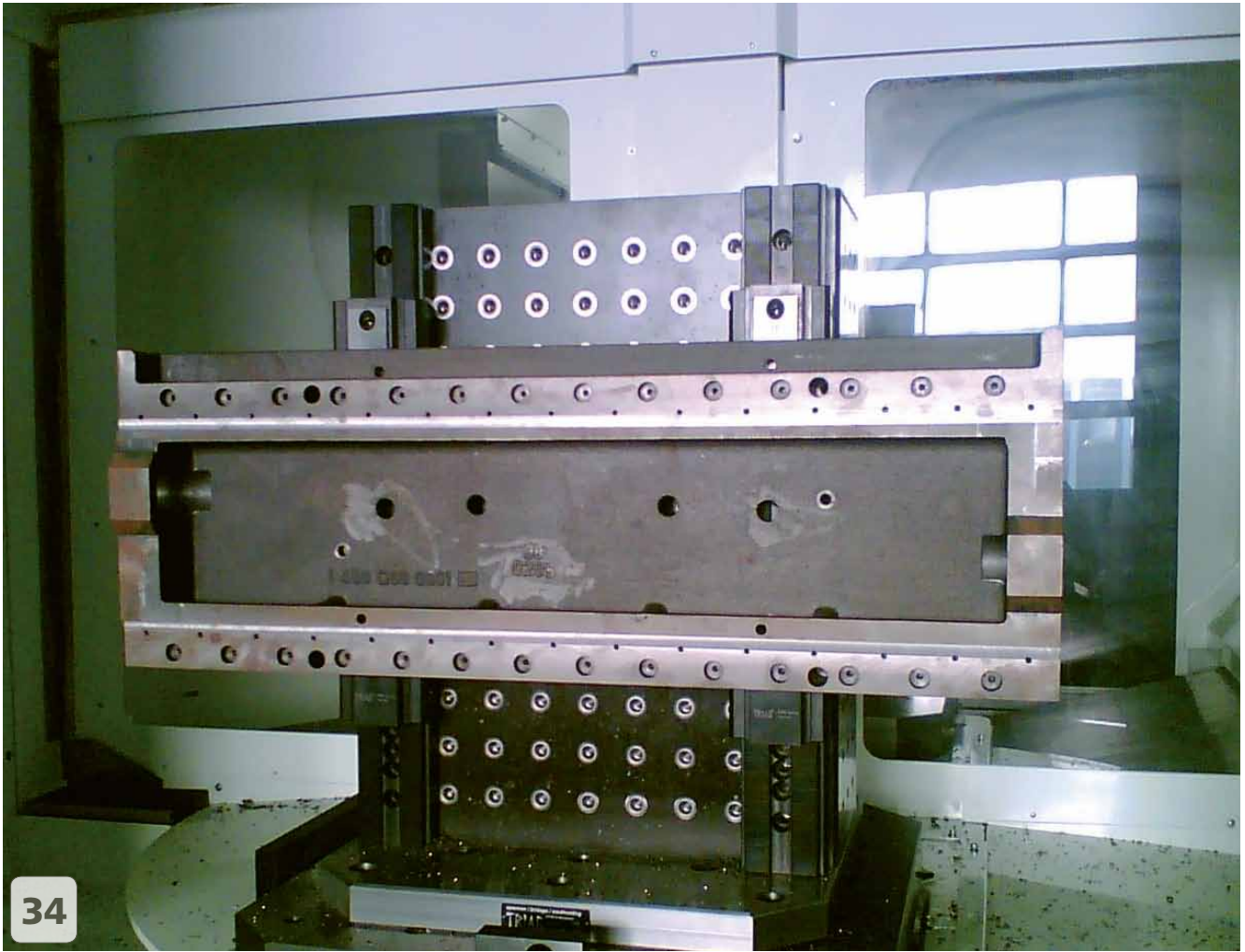
31 tripoxyMINERAL mit unterschiedlichen Werkstücken bestückt
tripoxyMINERAL tombstones holding a variety of workpieces



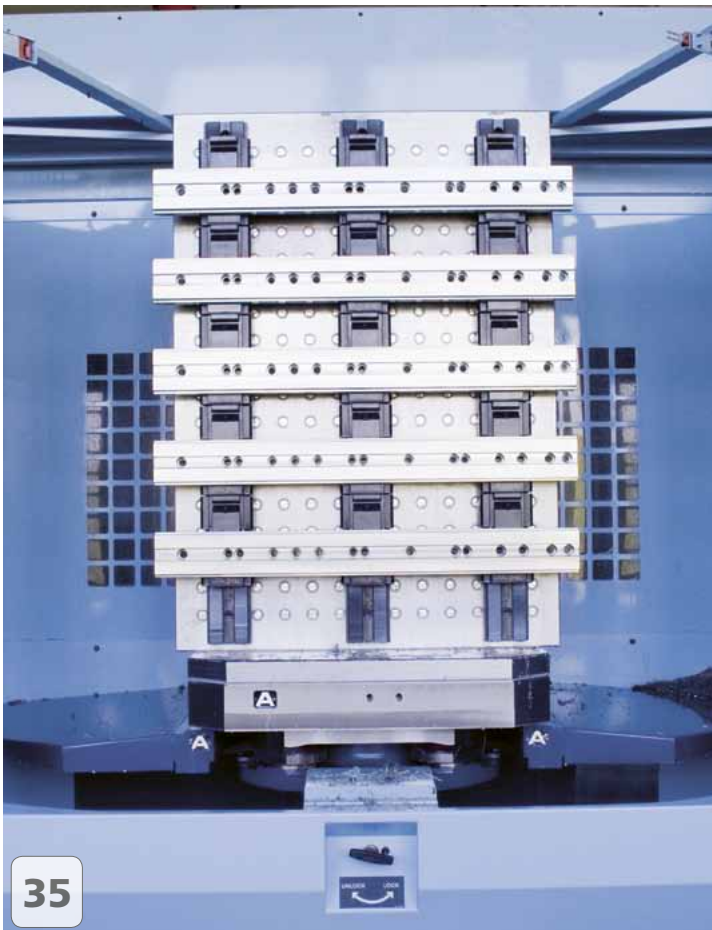
32 Zentrischspanner auf einem Spezialturm
Centric vices installed on a special tombstone



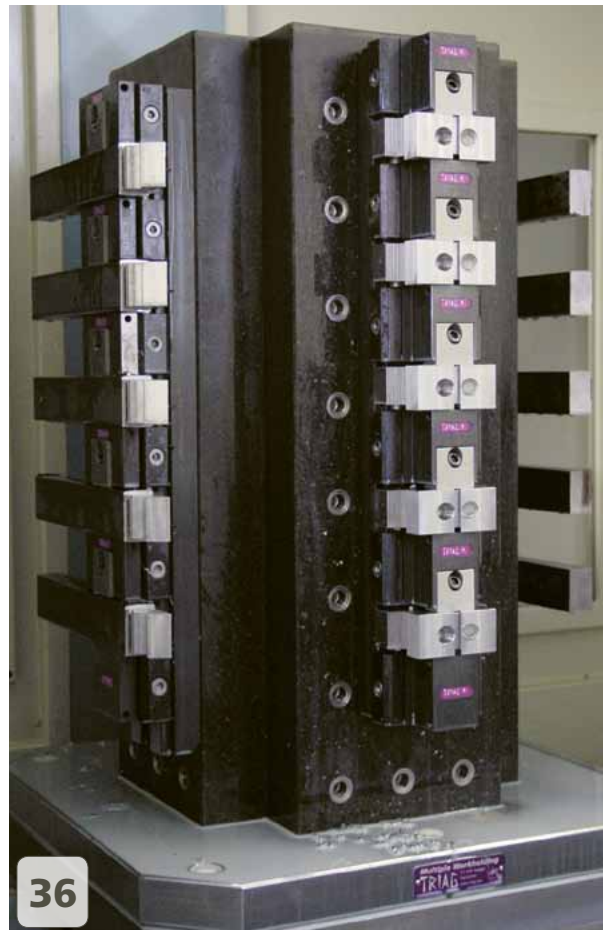
33 Aufspannung mit Power Clamp auf einem Mineralgussturm
Set up with Power Clamp on a tombstone made of composite concrete



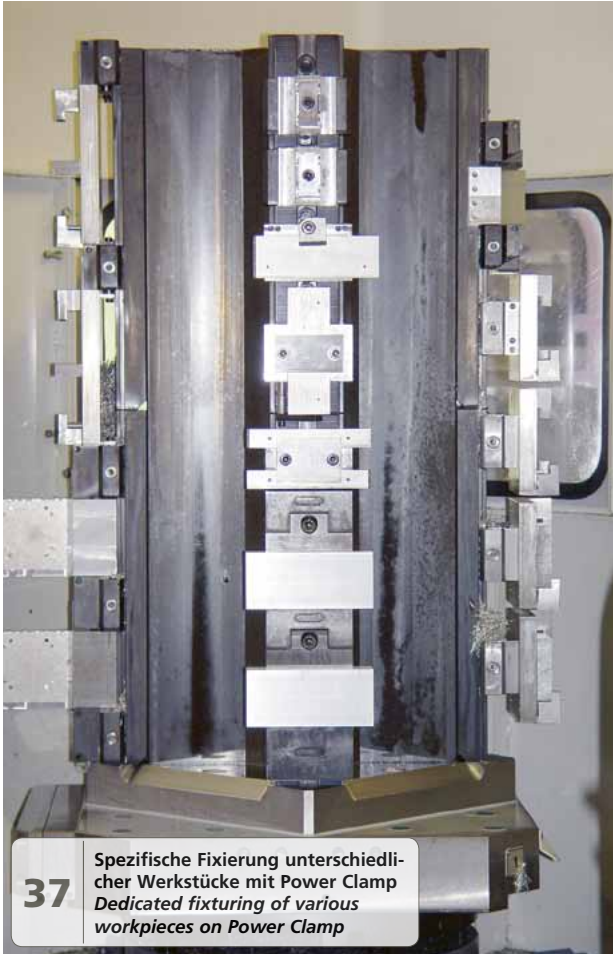
34



35



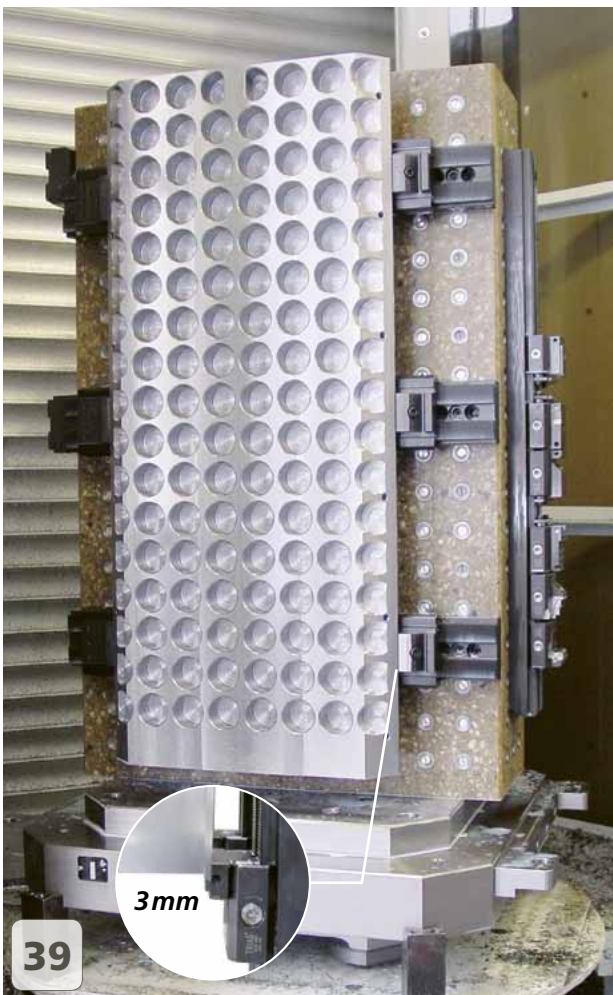
36



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



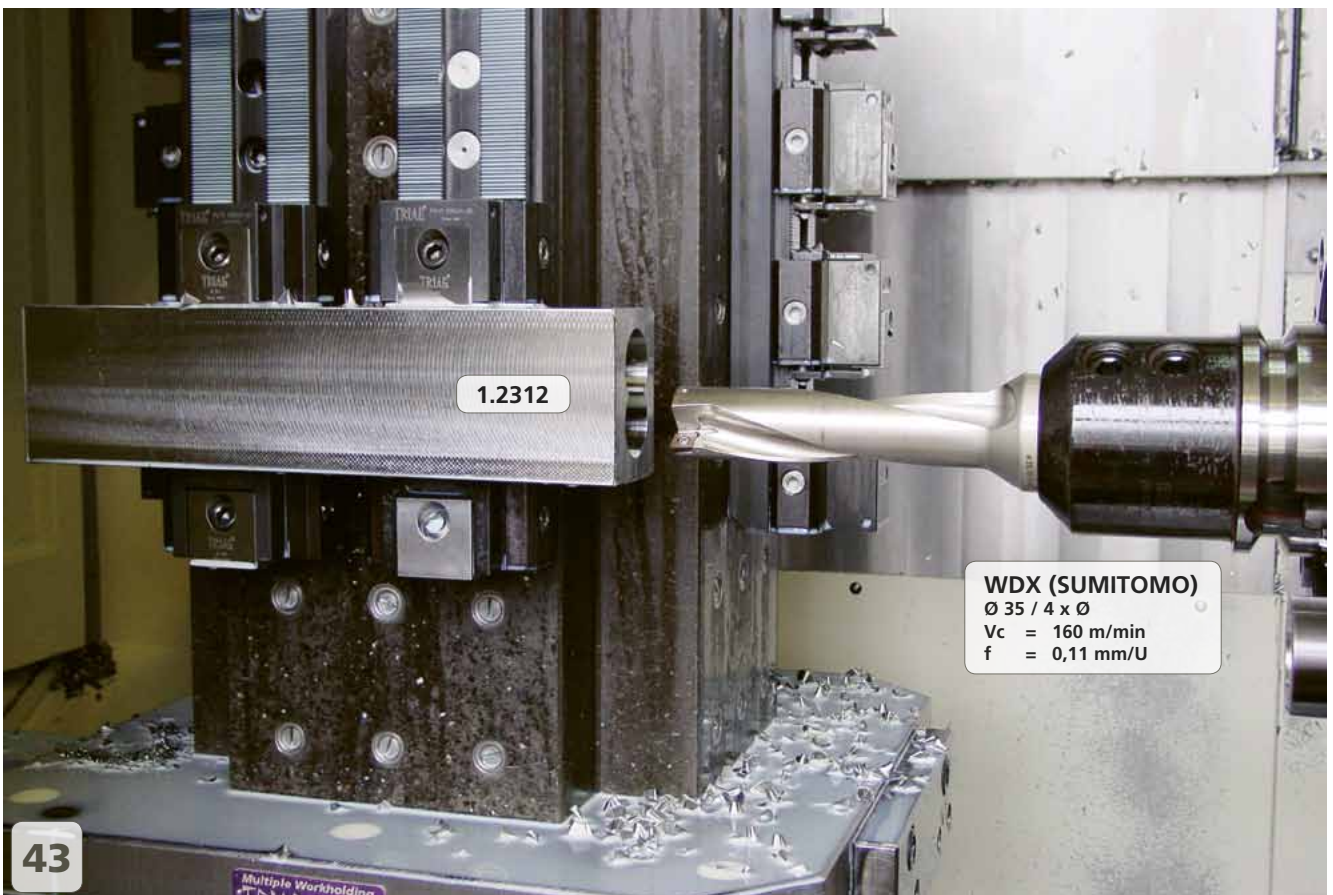
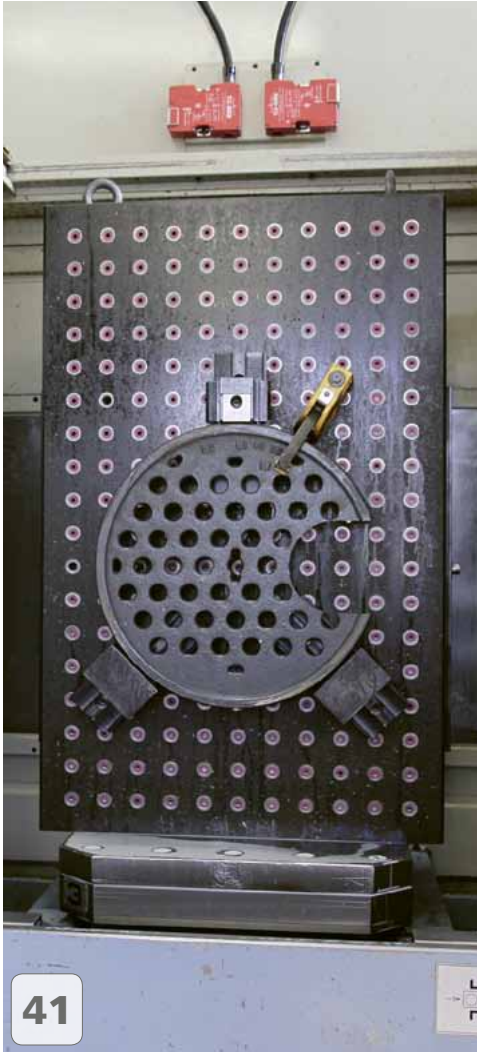
38 Prägespannung auf sehr kleiner Einspannhöhe von 3 mm
Clamped 3 mm depth with direct stamping jaws



39 3mm



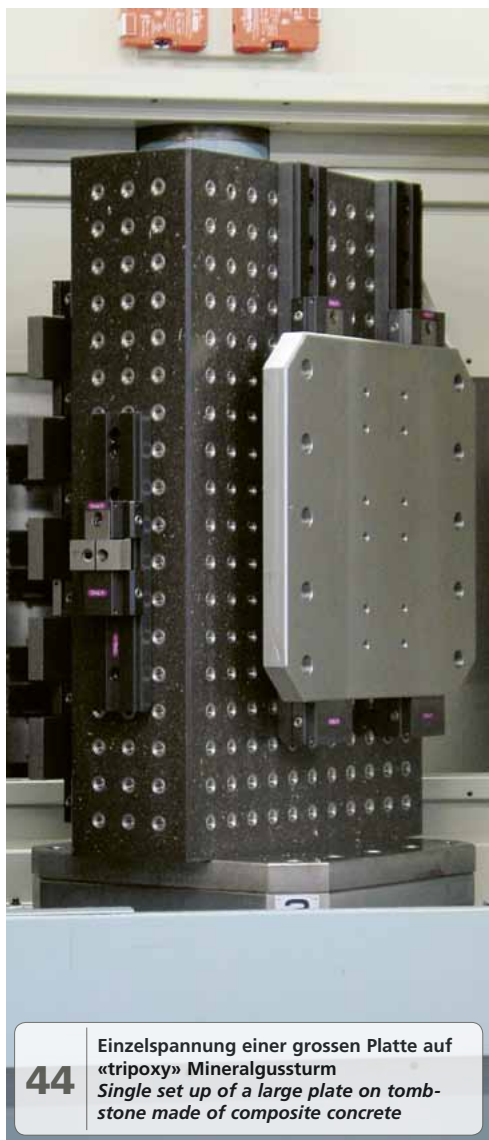
40 Aufspannung mit Power Clamp auf einem „Tripoxy“ Mineralgussturm
Set up with Power Clamp on a tombstone made of composite concrete





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

45 Stahlmineralguss-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



47



48 Im Einsatz auf der 5 Achsenmaschine
In action on a 5 axis machine



49 ... im Einsatz auf der 5 Achsenmaschine
... in action on a 5 axis machine



50



51 oppSystem in Anwendung mit Werkstückwechsler
oppSystem in application with workpiece changer



52



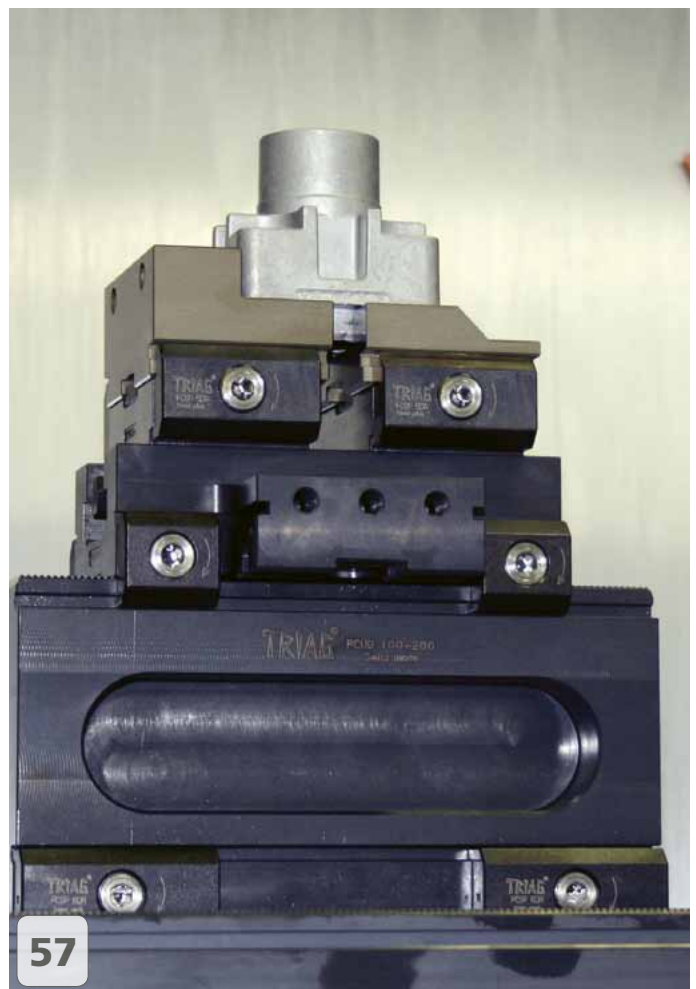
54



53



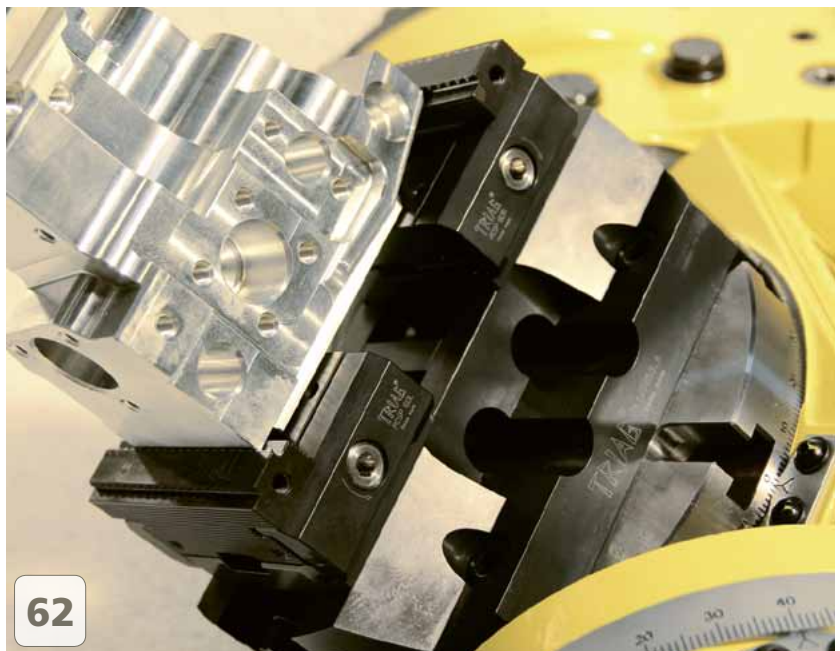
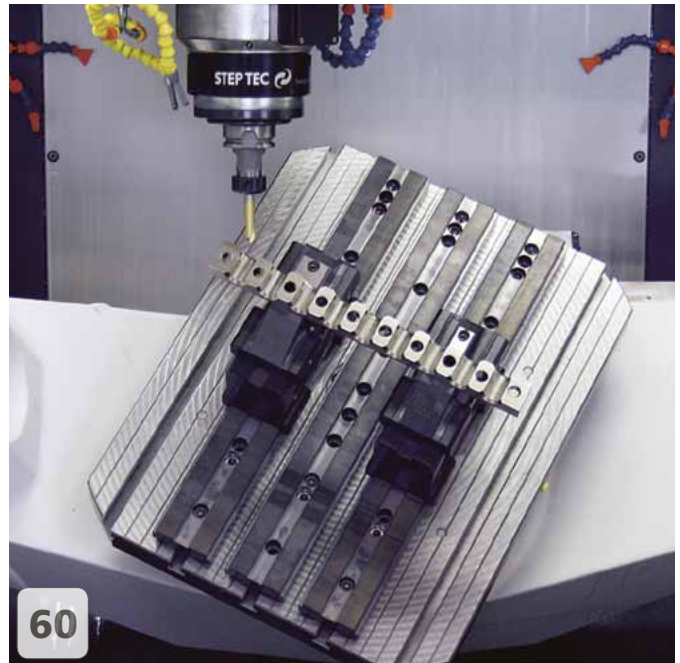
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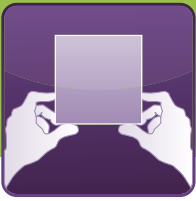


57



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:

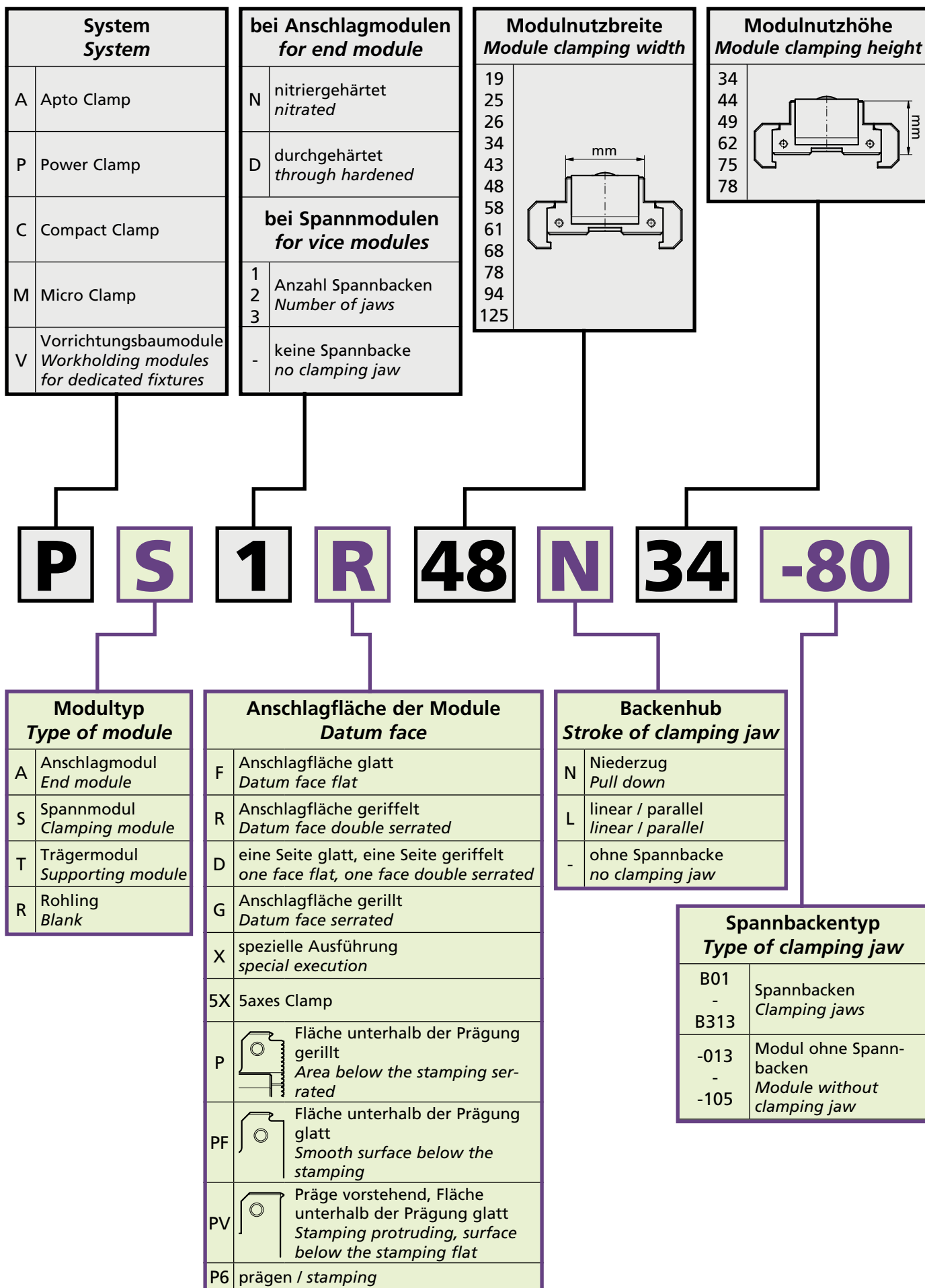
- The lower base rails serve both as a mechanical zero-point clamping system, but also as a vice.
- The tension acts directly at the workpiece, the workpiece is still, whether small, long or large, very accessible with short tools. The constraint is the machine table!
- 3-side machining is possible as 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.

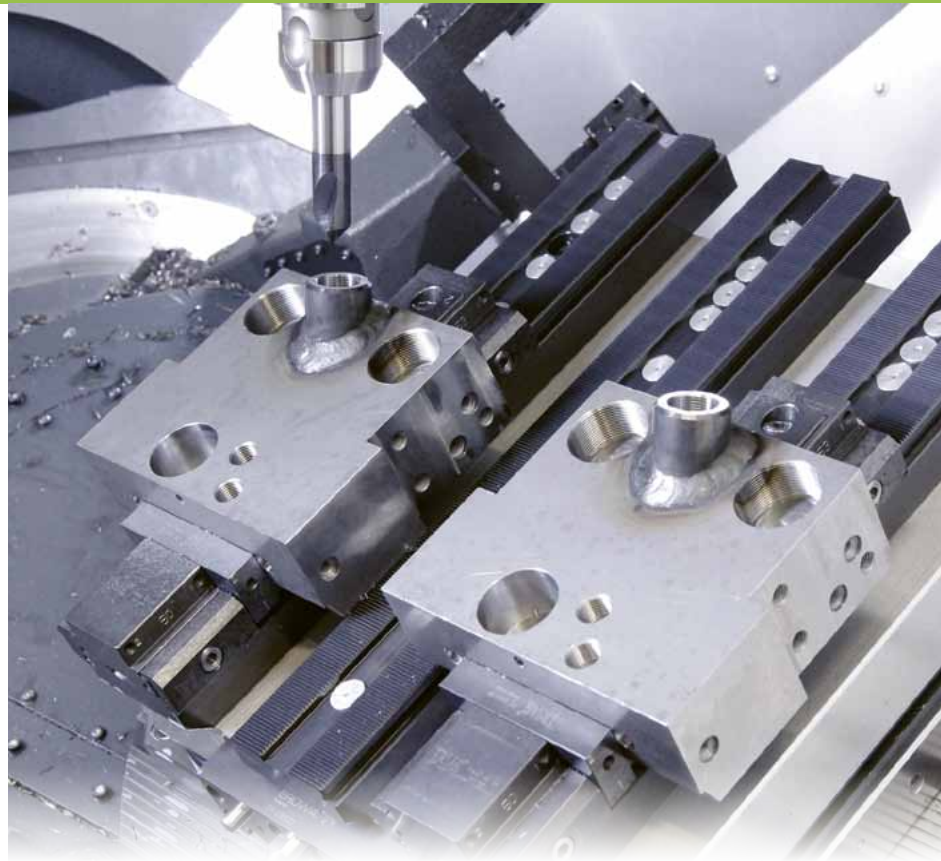


Geeignet sowohl für kleine ...
Especially suited for small ...



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





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.

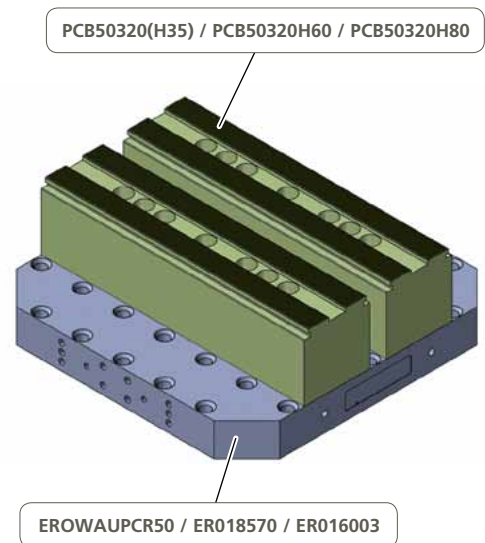
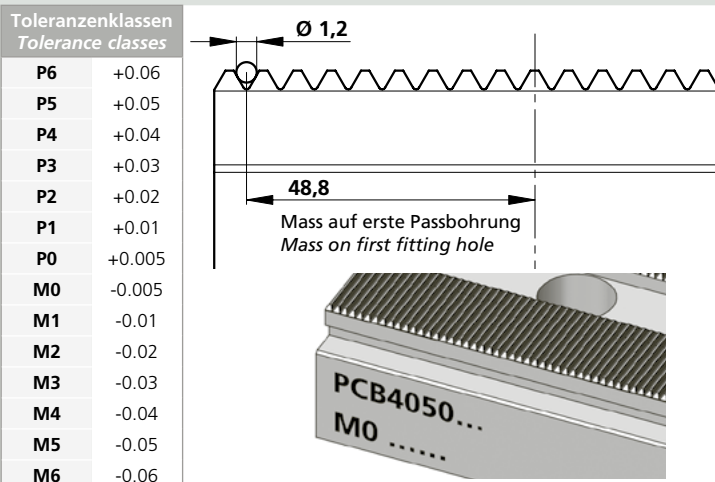
Die Power Clamp-Schiene dient als Basis für über 200 verschiedene Spannmodule, Zentrischspanner, Rohlingsmodule und Vakuumplatten.

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

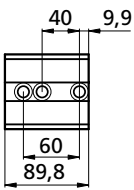


Separat bestellen / Separate order

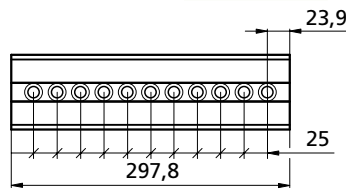
Bestellbeispiel / Ordering example: 2x PCB50320H80 & 1x ER018570



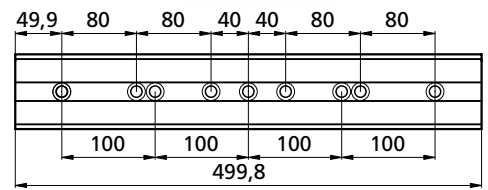
PCB6090 kg ~1,8



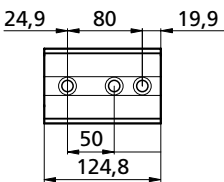
PCB25300 kg ~5,4



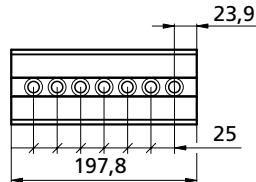
PCB4050500 kg ~9,9



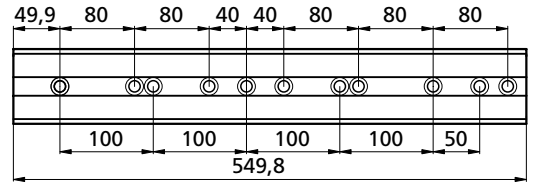
PCB4050125 kg ~2,3



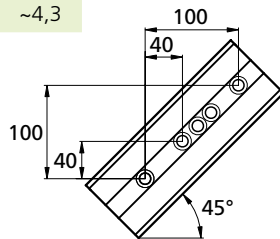
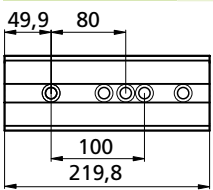
PCB25200 kg ~3,6



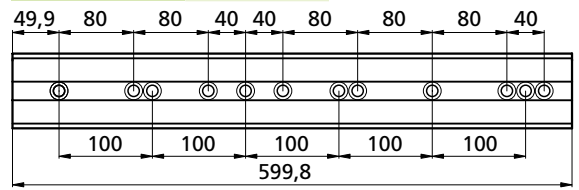
PCB4050550 kg ~10,8



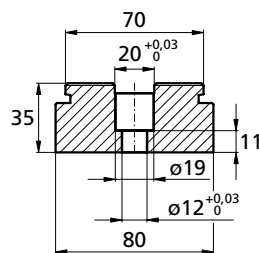
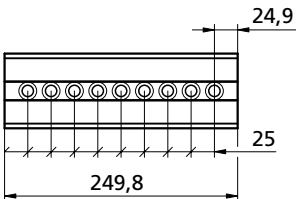
PCB4050220W2 kg ~4,3



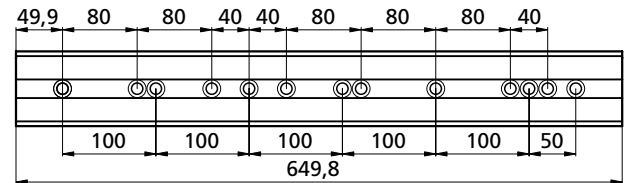
PCB4050600 kg ~11,8



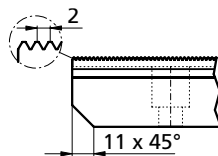
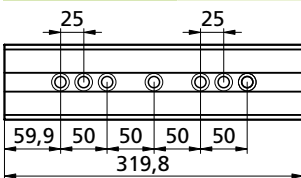
PCB2550250 kg ~4,8



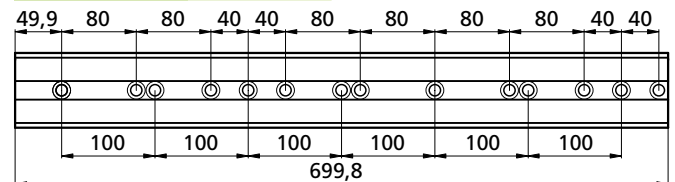
PCB4050650 kg ~12,8



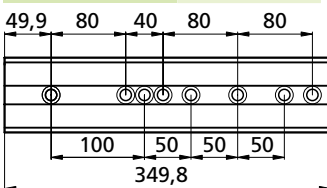
PCB50320 kg ~6,0



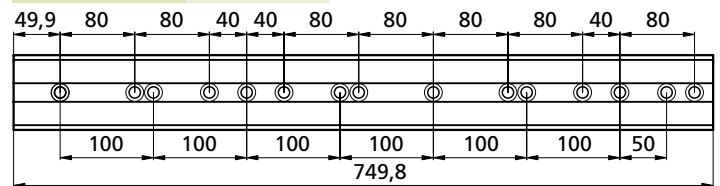
PCB4050700 kg ~13,8



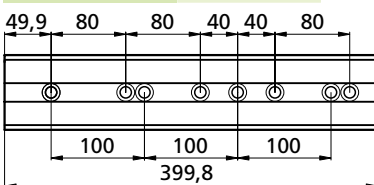
PCB4050350 kg ~6,9



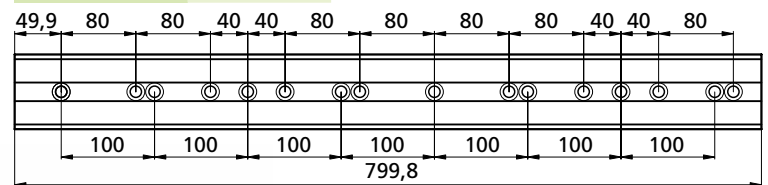
PCB4050750 kg ~14,8



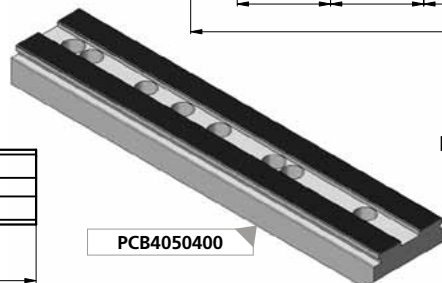
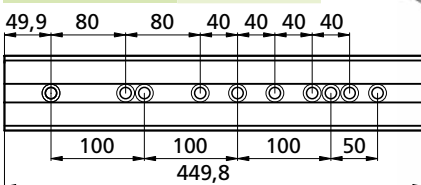
PCB4050400 kg ~7,9



PCB4050800 kg ~15,3

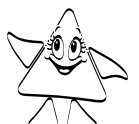


PCB4050450 kg ~8,9

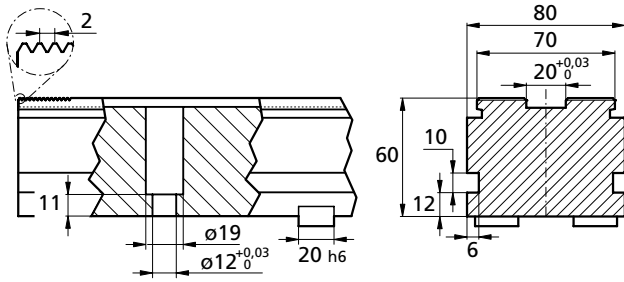


PCB4050400

Basisschienen in Zoll
Base rails in inch



Bestellbeispiel / Ordering example: **PCB4050125**

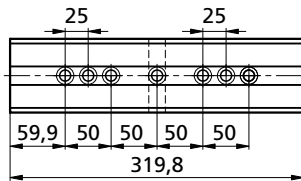


PCBR40 Befestigungsart / Mounting type

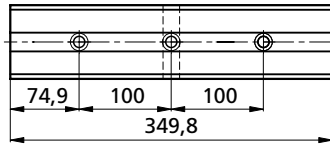
1. Befestigung 1. Fastening
Mit den seitlichen Pratten, kann die Basisschiene frei auf Ihrem Maschinentisch montiert werden.
With the lateral clamps, the base-rail can be mounted freely on your machine table.

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.

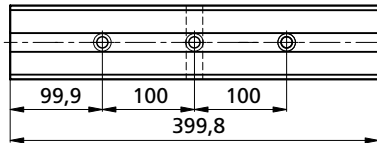
PCB50320H60
1x TF190449
2x M6X12ISO4762
2x SM1136-20
kg ~10,5



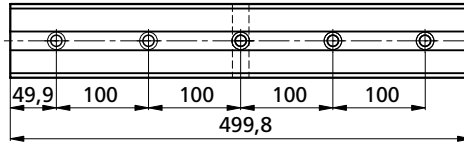
PCB100350H60
1x TH170888
2x M6X12ISO4762
2x SM1136-20
kg ~12,0



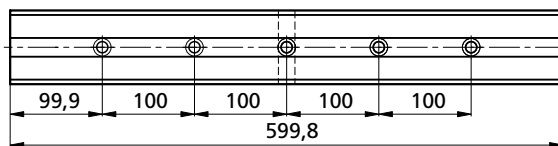
PCB100400H60
1x TB140546
2x M6X12ISO4762
2x SM1136-20
kg ~13,6



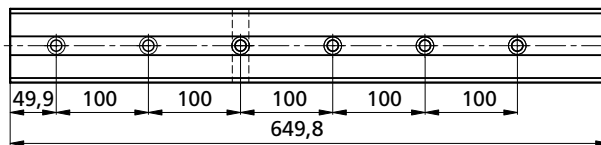
PCB100500H60
1x TB140553
2x M6X12ISO4762
2x SM1136-20
kg ~17,0



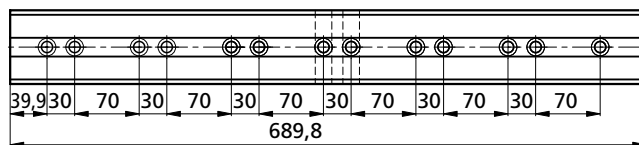
PCB100600H60
1x TB140556
2x M6X12ISO4762
2x SM1136-20
kg ~20,5



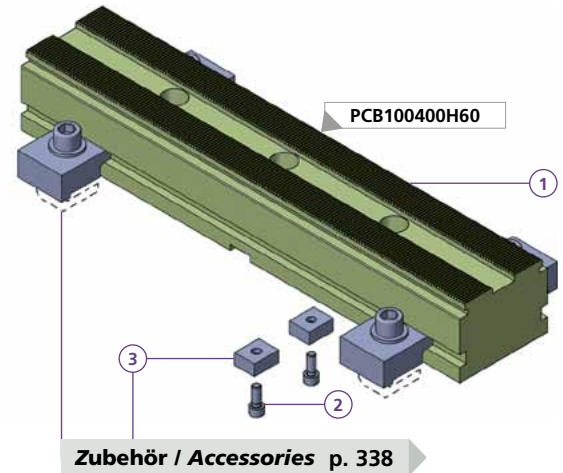
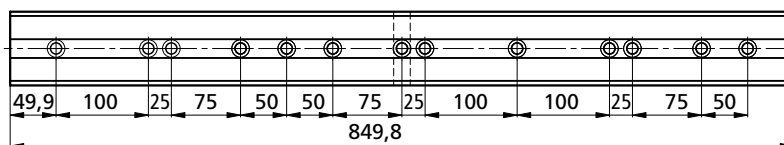
PCB100650H60
1x TB140559
2x M6X12ISO4762
2x SM1136-20
kg ~22,0



PCB100690H60
1x ZL100122
2x M6X12ISO4762
2x SM1136-20
kg ~22,6



PCB100850H60
1x TB140562
2x M6X12ISO4762
2x SM1136-20
kg ~28,2



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PCBR40

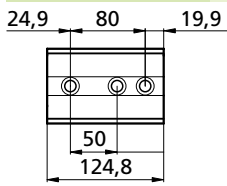
4	1x M12X45ISO4762
5	1x TN100251
6	1x TK200035
kg	~0,25

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.

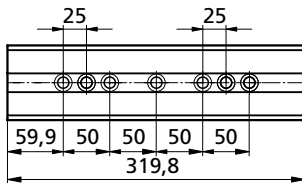
Bestellbeispiel / Ordering example: 1x PCB100400H60 & 2x M6X12ISO4762 & 2x SM1136-20



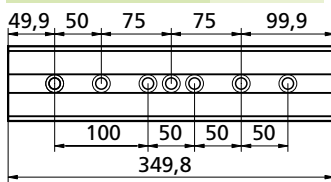
PCB4050125H80 kg ~7,5



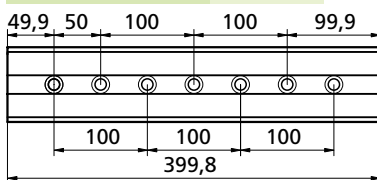
PCB50320H80 kg ~14,4



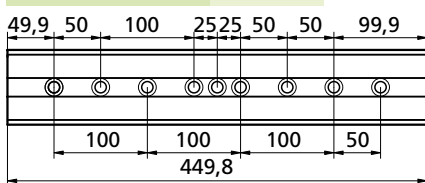
PCB50350H80 kg ~15,8



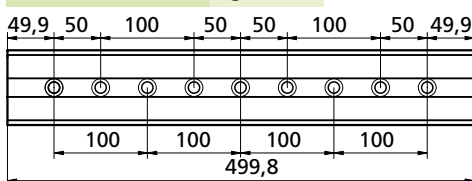
PCB50400H80 kg ~18,2



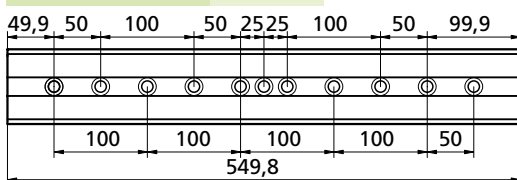
PCB50450H80 kg ~20,3



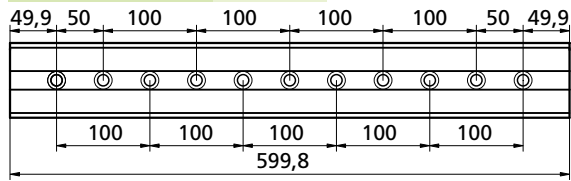
PCB50500H80 kg ~22,8



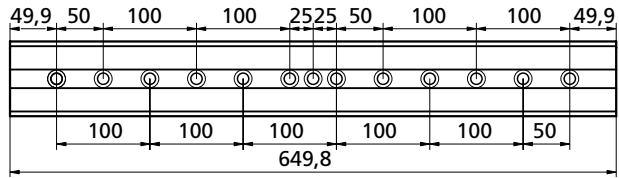
PCB50550H80 kg ~24,8



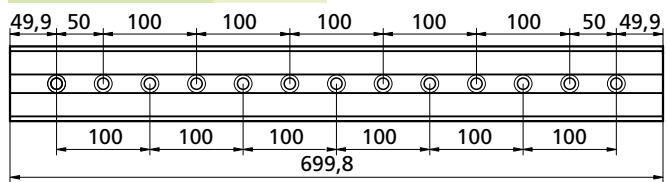
PCB50600H80 kg ~27,3



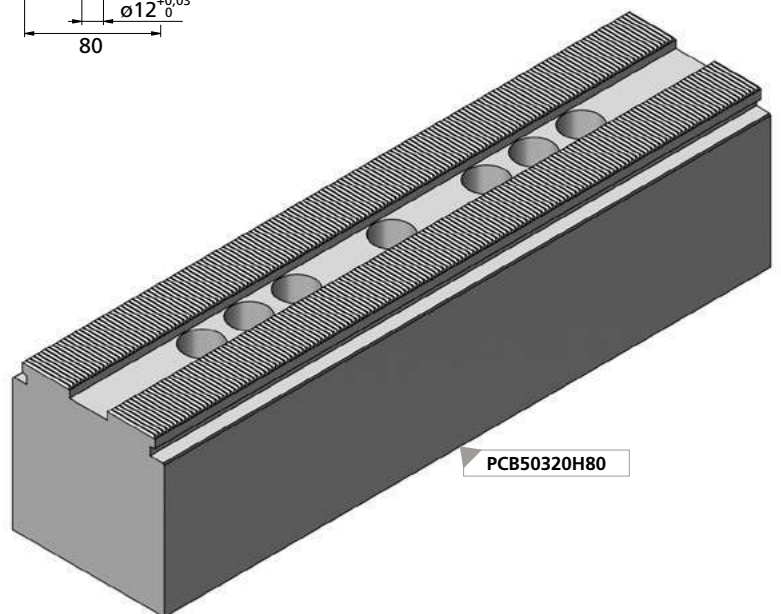
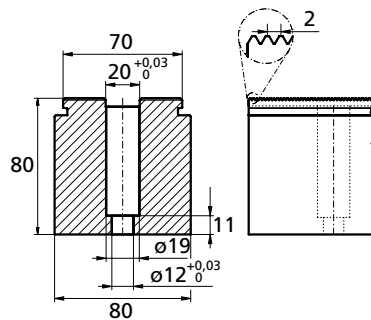
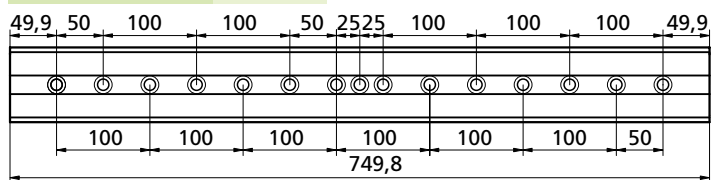
PCB50650H80 kg ~29,4



PCB50700H80 kg ~31,8



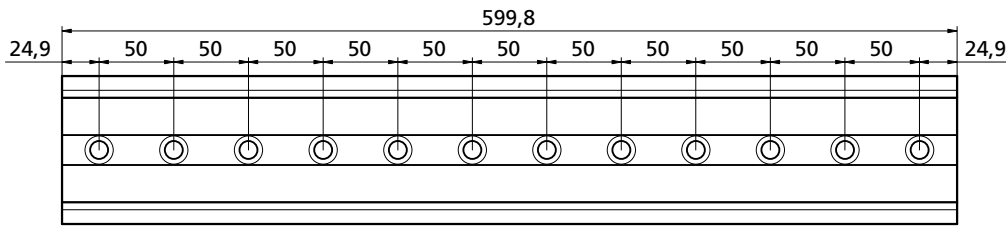
PCB50750H80 kg ~33,9



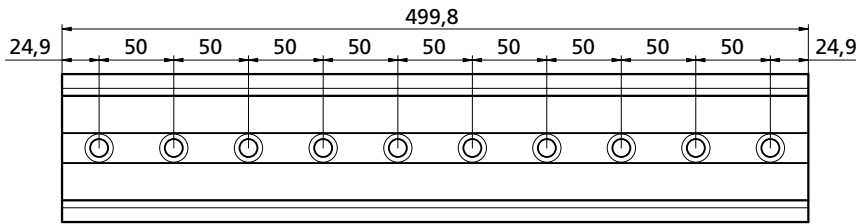
PCB50320H80



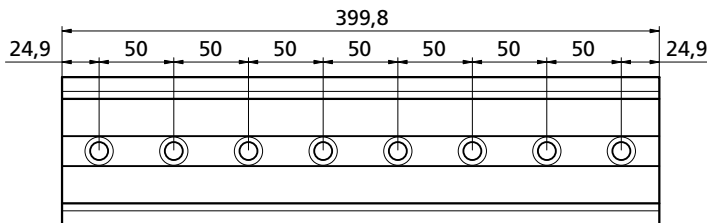
PCMB50600H175 kg ~39



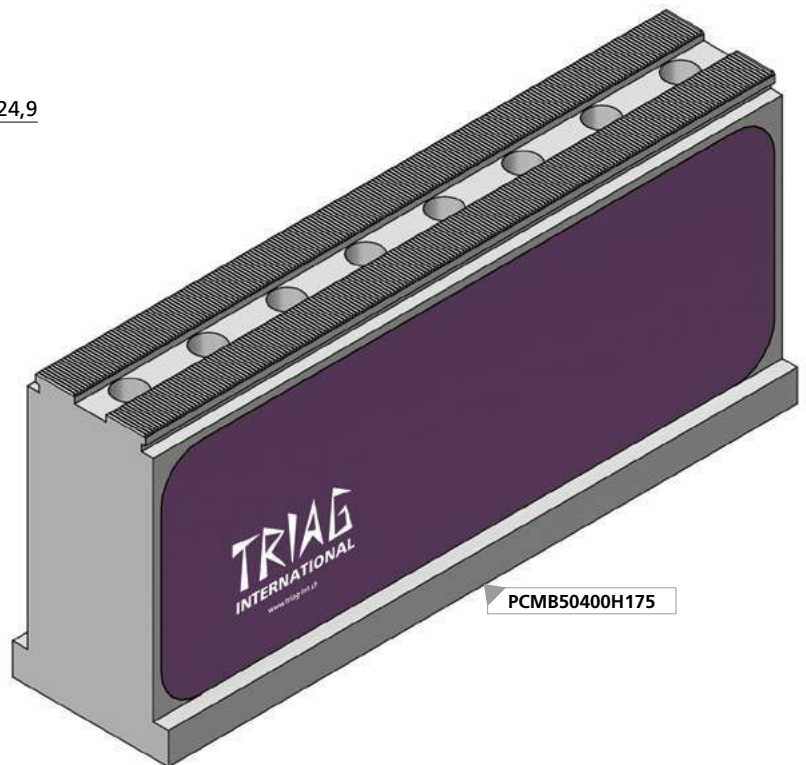
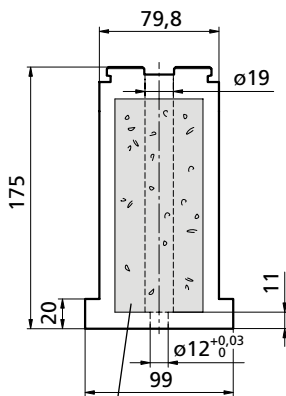
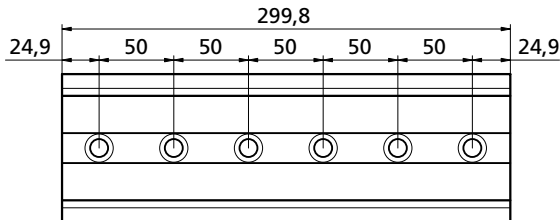
PCMB50500H175 kg ~34



PCMB50400H175 kg ~27



PCMB50300H175 kg ~22



Epoxy Mineral
 Für gute Vibrationsdämpfung
 For brilliant dampening effect

Kupplungsstück (Basisschienen zum koppeln) Coupling element (Basic rails to 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.

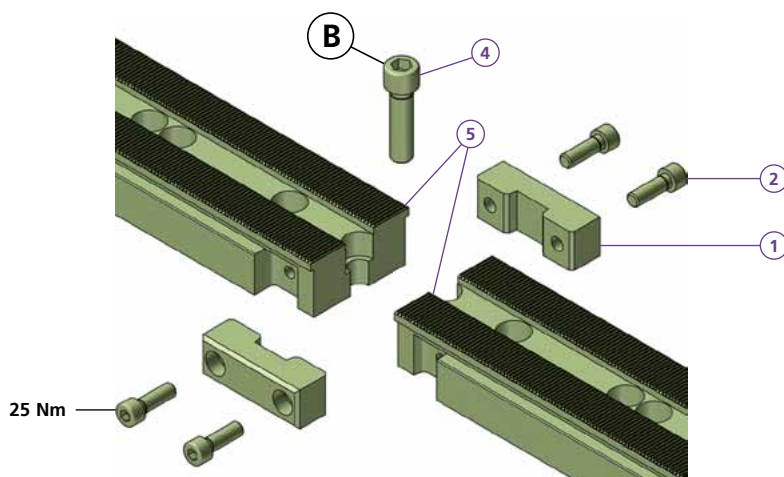
Coupling element for PCB base rails mounted on epoxy mineral tombstones

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.



Montageanleitung siehe Video
Assembly instructions see video

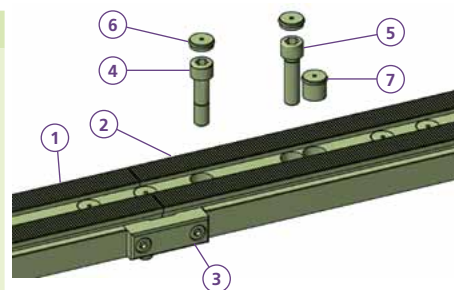


25 Nm

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

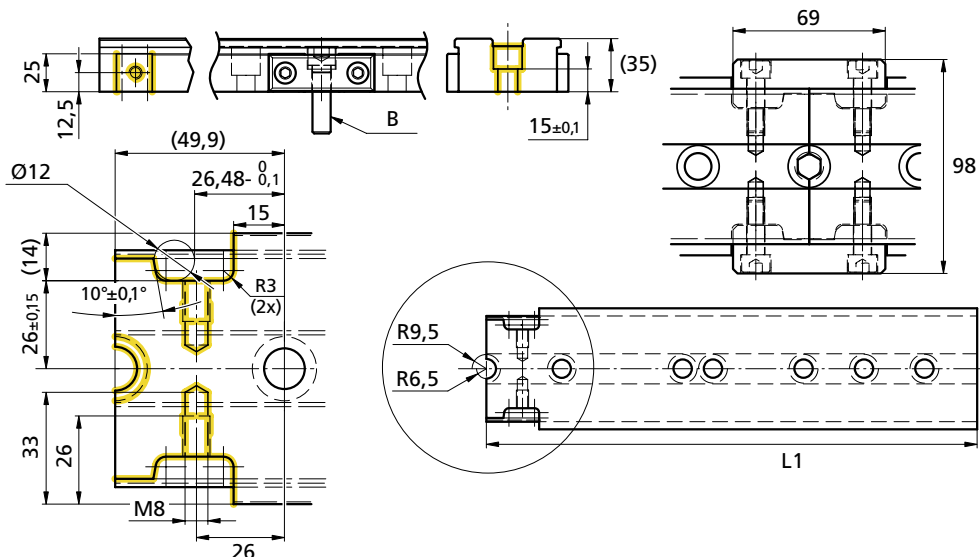
Bestellbeispiel / Ordering example: PCB4050250KP

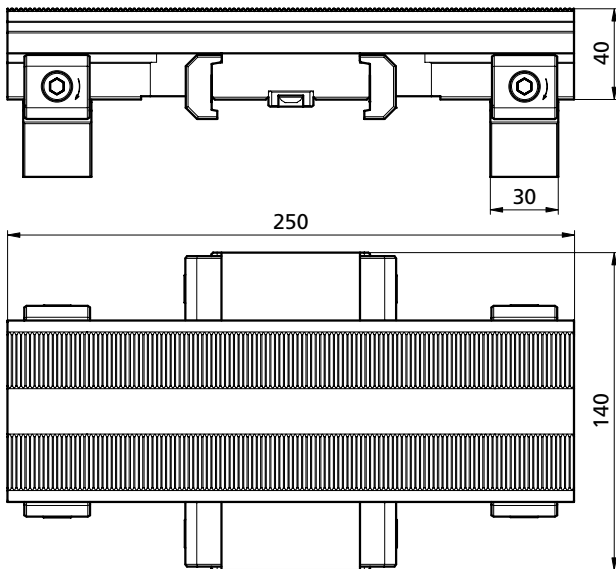
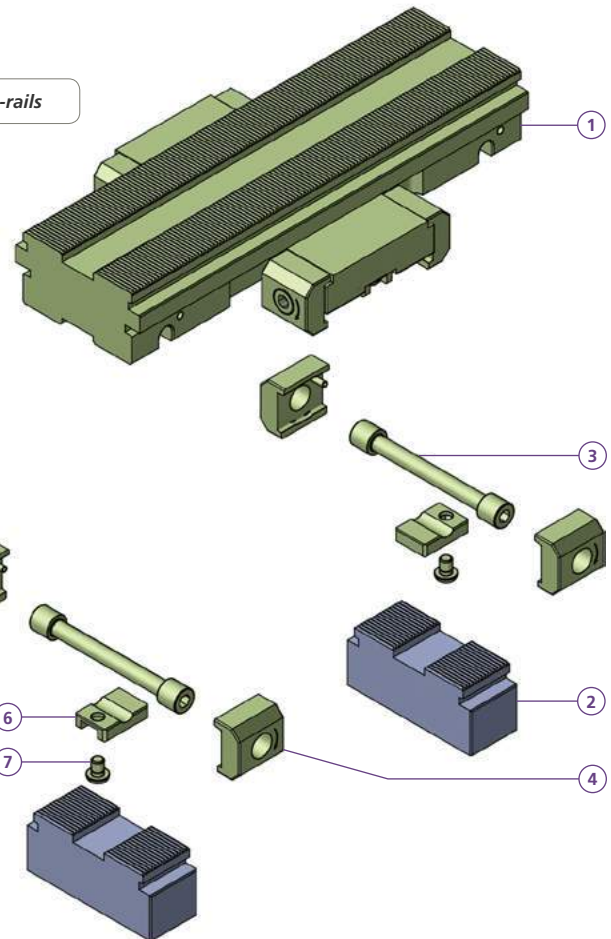
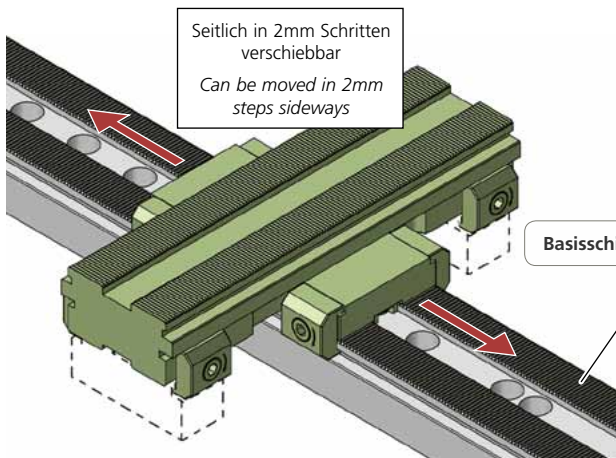
PCB850SET	PCB900SET	PCB950SET	PCB1000SET
1 1x PCB4050400KP	1 1x PCB4050650KP	1 1x PCB4050700KP	1 2x PCB4050500KP
2 1x PCB4050450KP	2 1x PCB4050250KP	2 1x PCB4050250KP	3 1x PCBP69SET
3 1x PCBP69SET	3 1x PCBP69SET	3 1x PCBP69SET	4 4x TWPAS1240
4 4x TWPAS1240	4 4x TWPAS1240	4 4x TWPAS1240	5 6x M12X40ISO4762
5 5x M12X40ISO4762	5 6x M12X40ISO4762	5 7x M12X40ISO4762	6 10x PCPF16L6
6 9x PCPF16L6	6 10x PCPF16L6	6 11x PCPF16L6	7 8x PCPF16L18
7 9x PCPF16L18	7 12x PCPF16L18	7 12x PCPF16L18	kg ~20,9
kg ~17,8	kg ~18,7	kg ~19,8	



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

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





PCB250Q90H35	
①	1x TH151032
②	2x —
③	4x PCS14
④	4x PCSP30L
⑤	4x PCSP30R
⑥	4x PCGU2030
⑦	1x M6X8ISO7380
kg	~8,18

Schienenhöhe / Rail height

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.

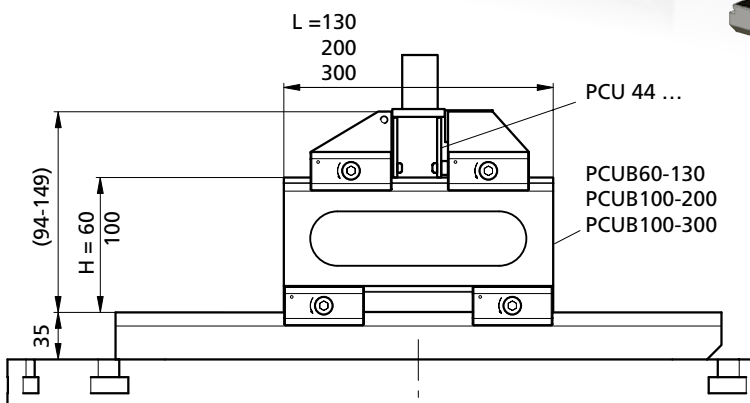
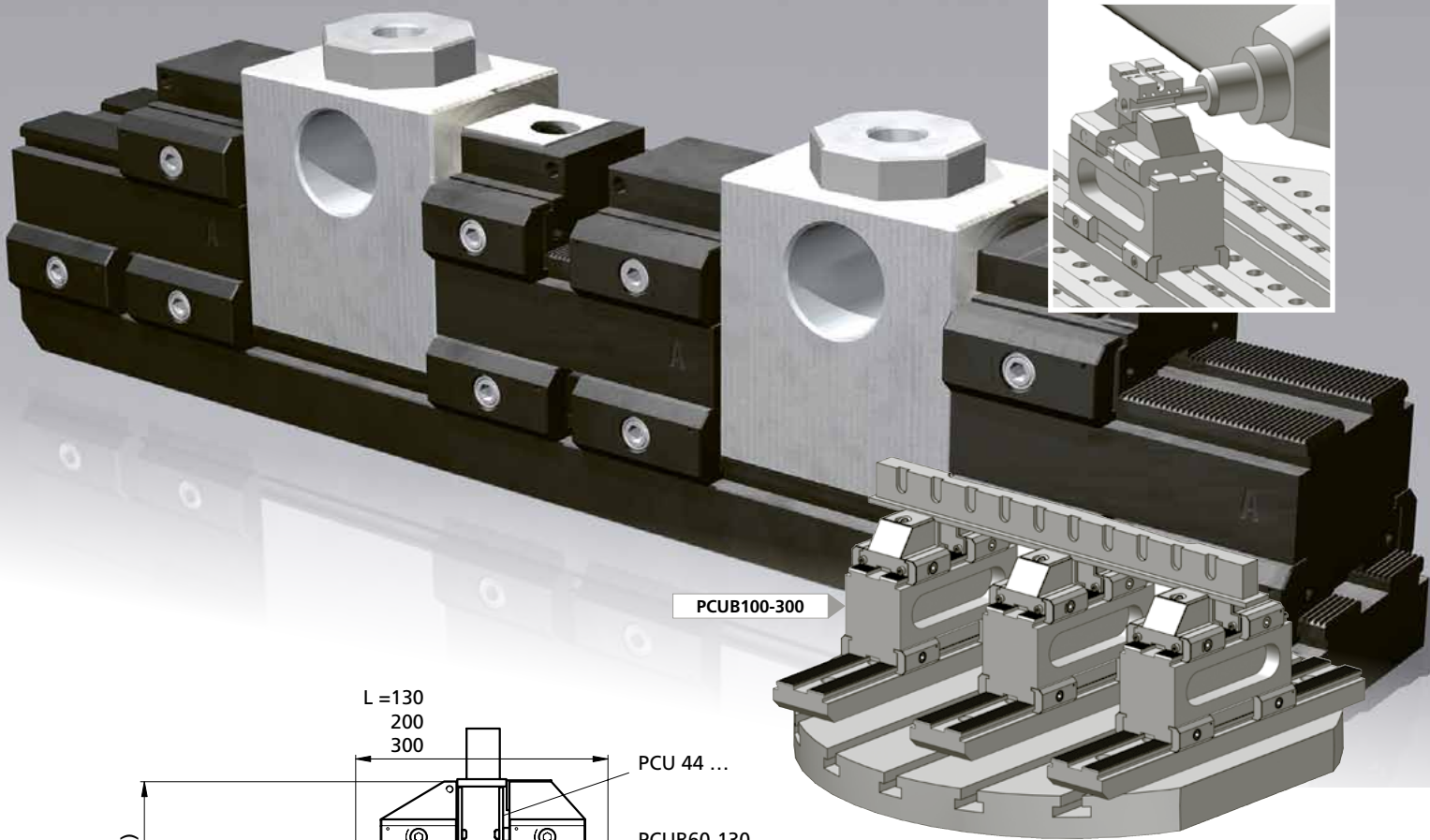
Bestellbeispiel / Ordering example: PCB250Q90H35

Erhöhung für 5-Achsenmaschinen
Riser for 5-axes machines

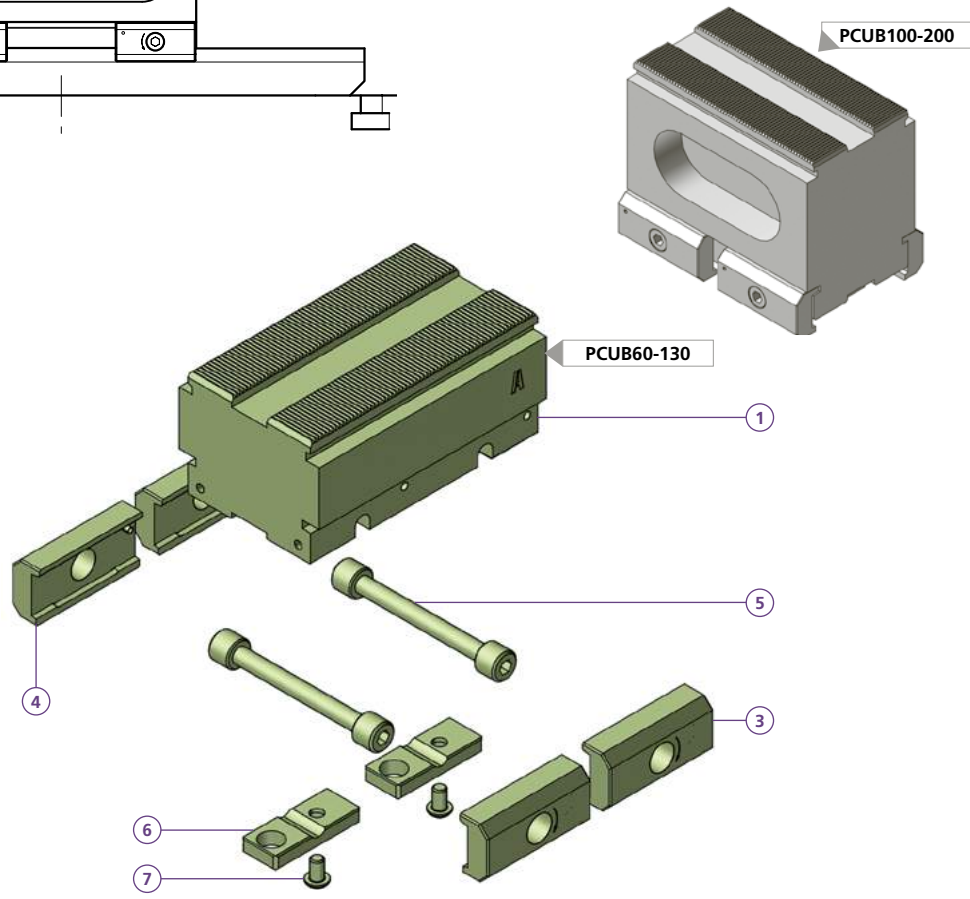
PCUB60-130
PCUB100-200
PCUB100-300



powerCLAMP



- | PCUB60-130 | |
|-------------|----------------|
| 1 | 1x TK120596 |
| 3 | 2x PCSP60R |
| 4 | 2x PCSP60L |
| 5 | 2x PCS14 |
| 6 | 2x PCGU2049 |
| 7 | 2x M6X8I5O7380 |
| 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 M6X8I5O7380 |
| L | = 300 |
| H | = 100 |
| kg | ~16 |



Bestellbeispiel / Ordering example: PCUB100-200

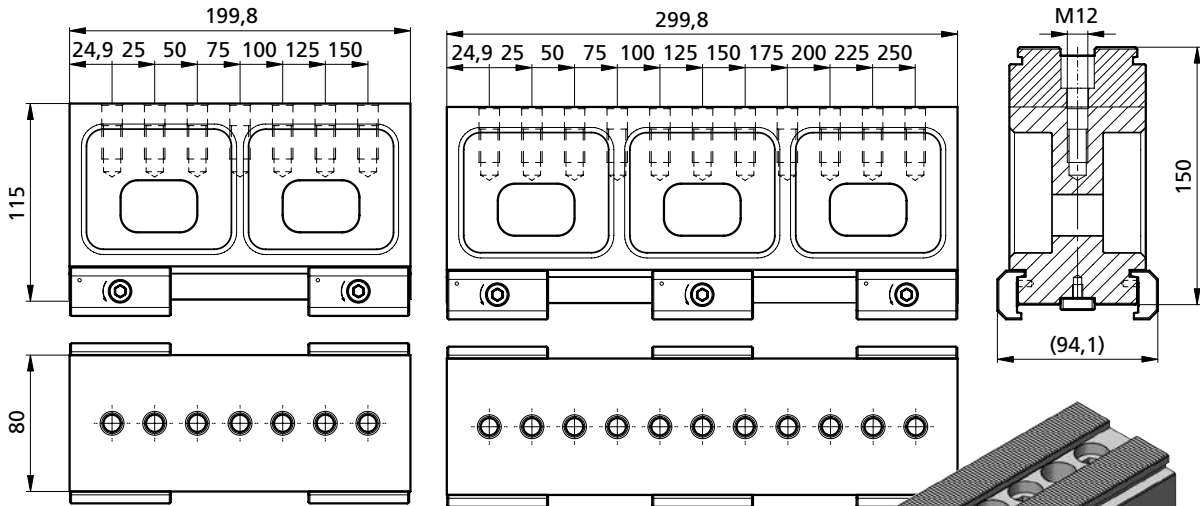




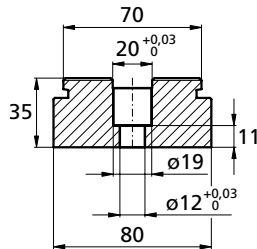
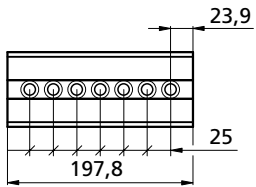
PCUB115-200-R25

PCUB115-300-R25

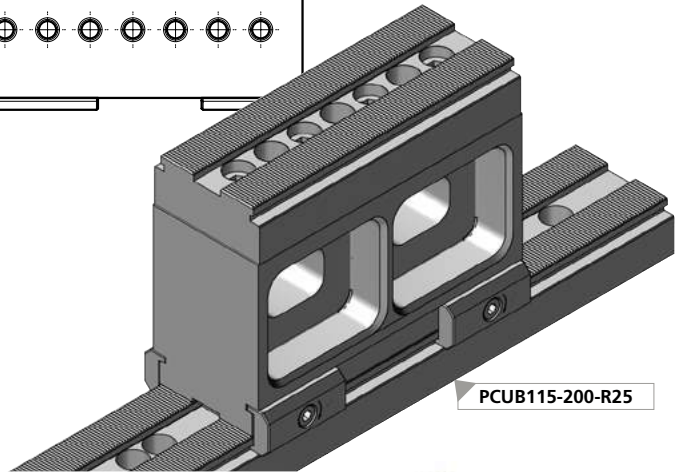
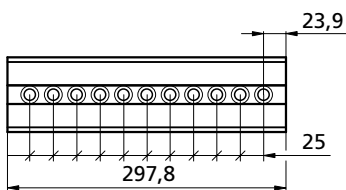
powerCLAMP



PCB25200 kg ~3,6



PCB25300 kg ~5,4



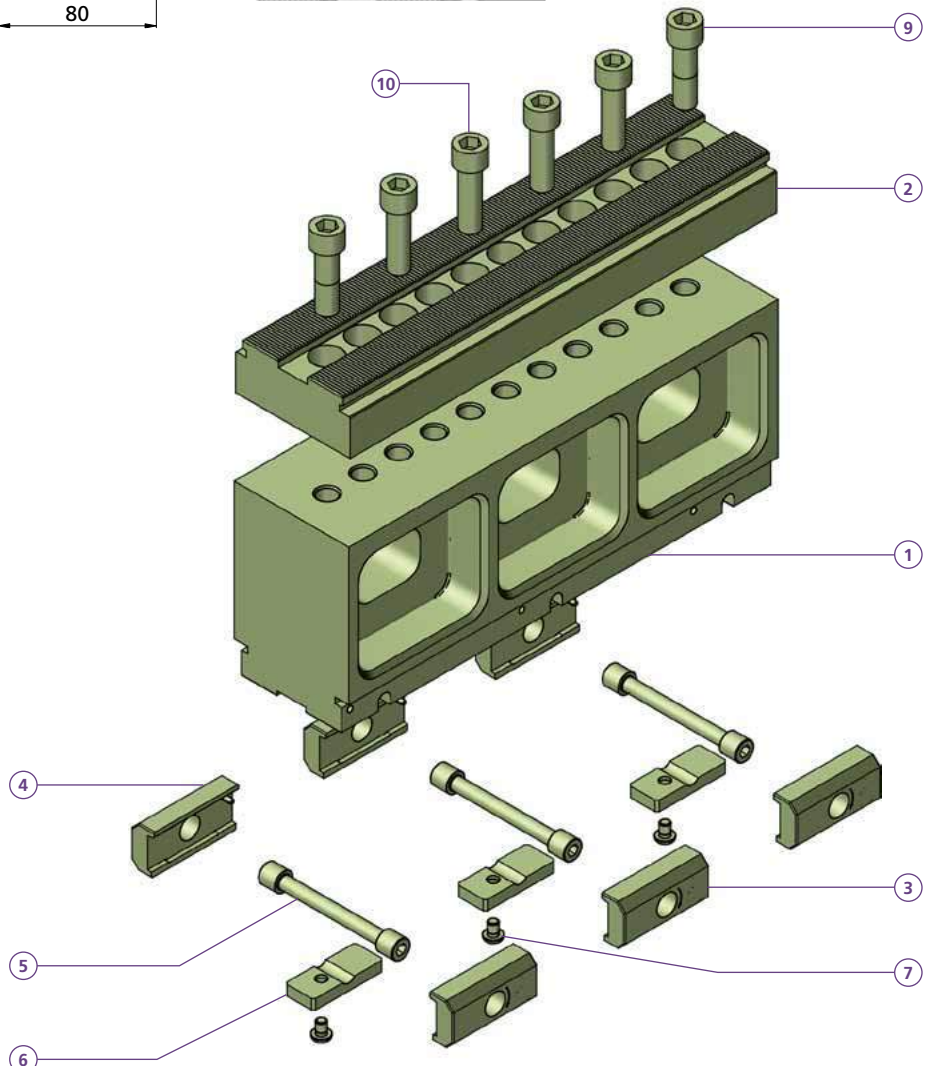
PCUB115-200-R25

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

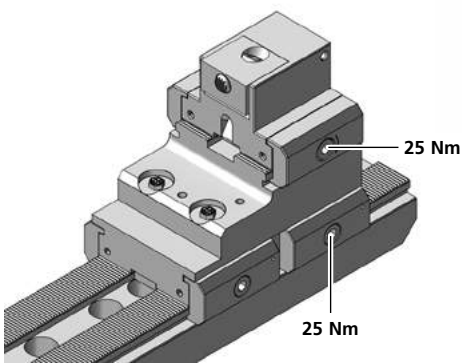
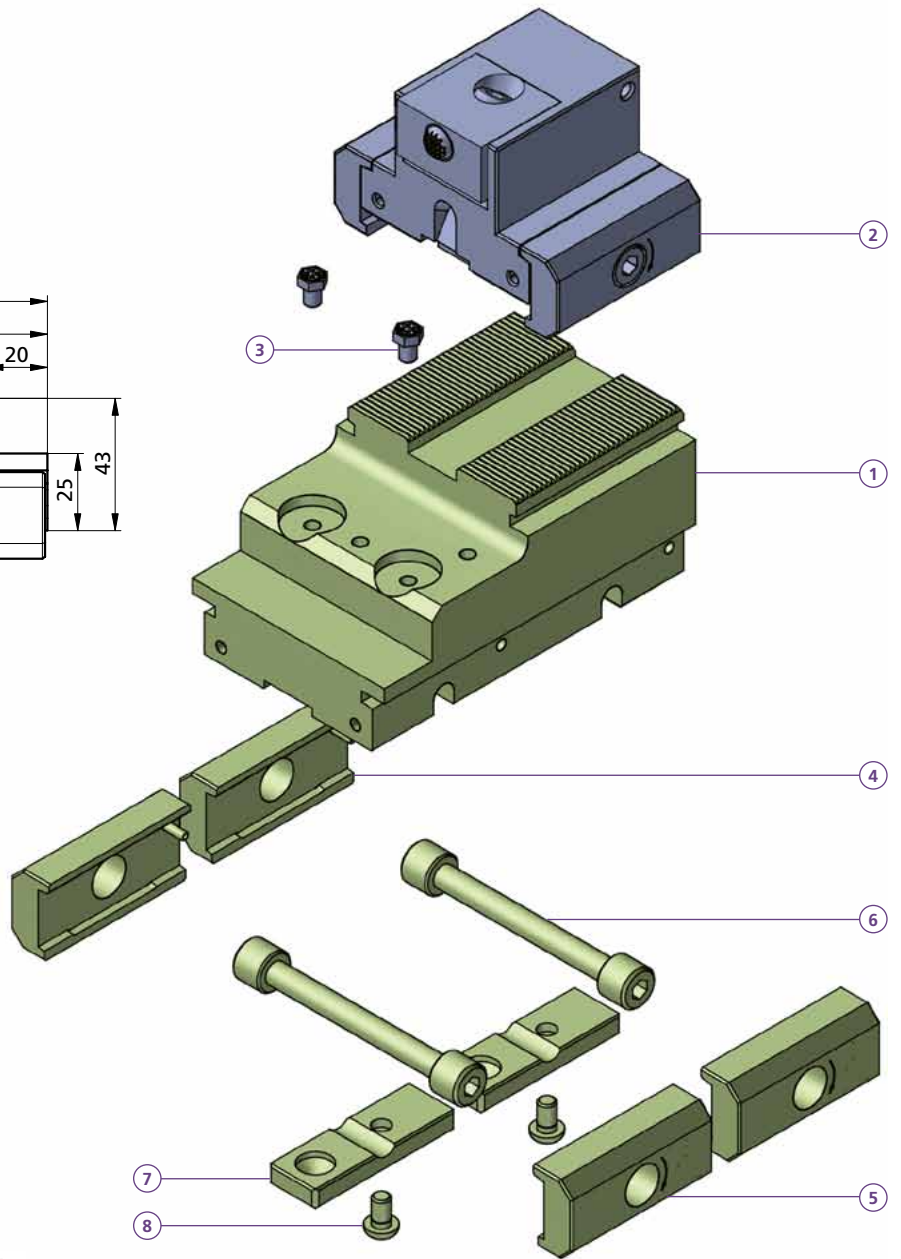
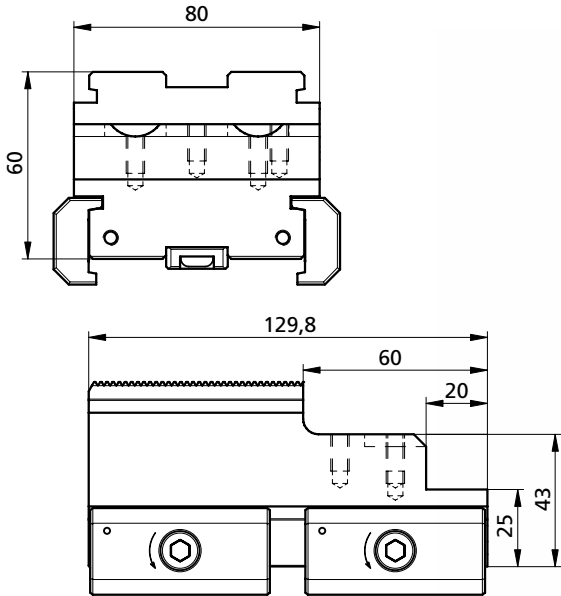


Bestellbeispiel / Ordering example: PCUB115-300-R25



PCUB60-70-130

powerCLAMP



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

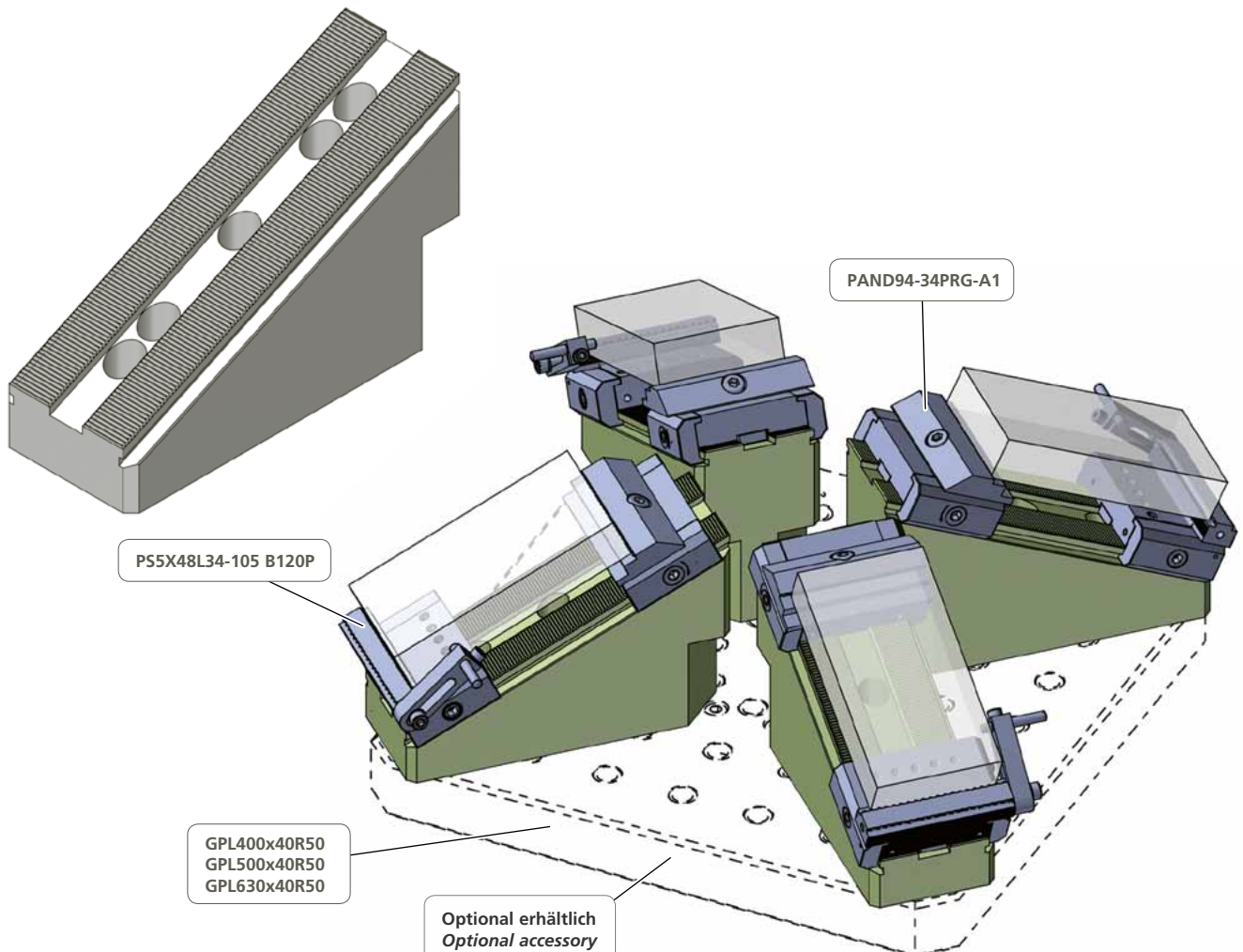
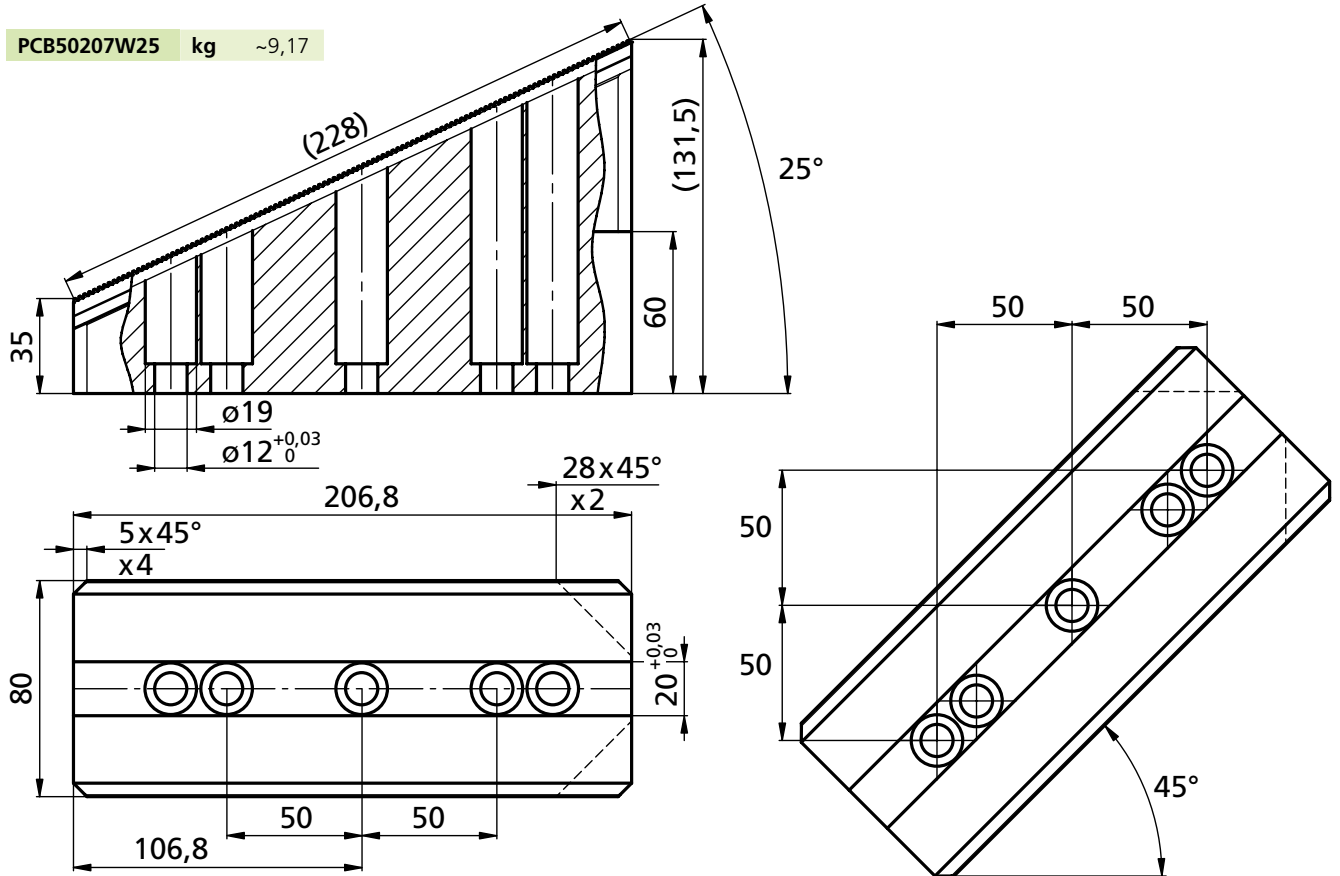
Schräge Basisschiene für 5-Achsenmaschinen

Slanted base rail for 5-axes machines

PCB50207W25 25°

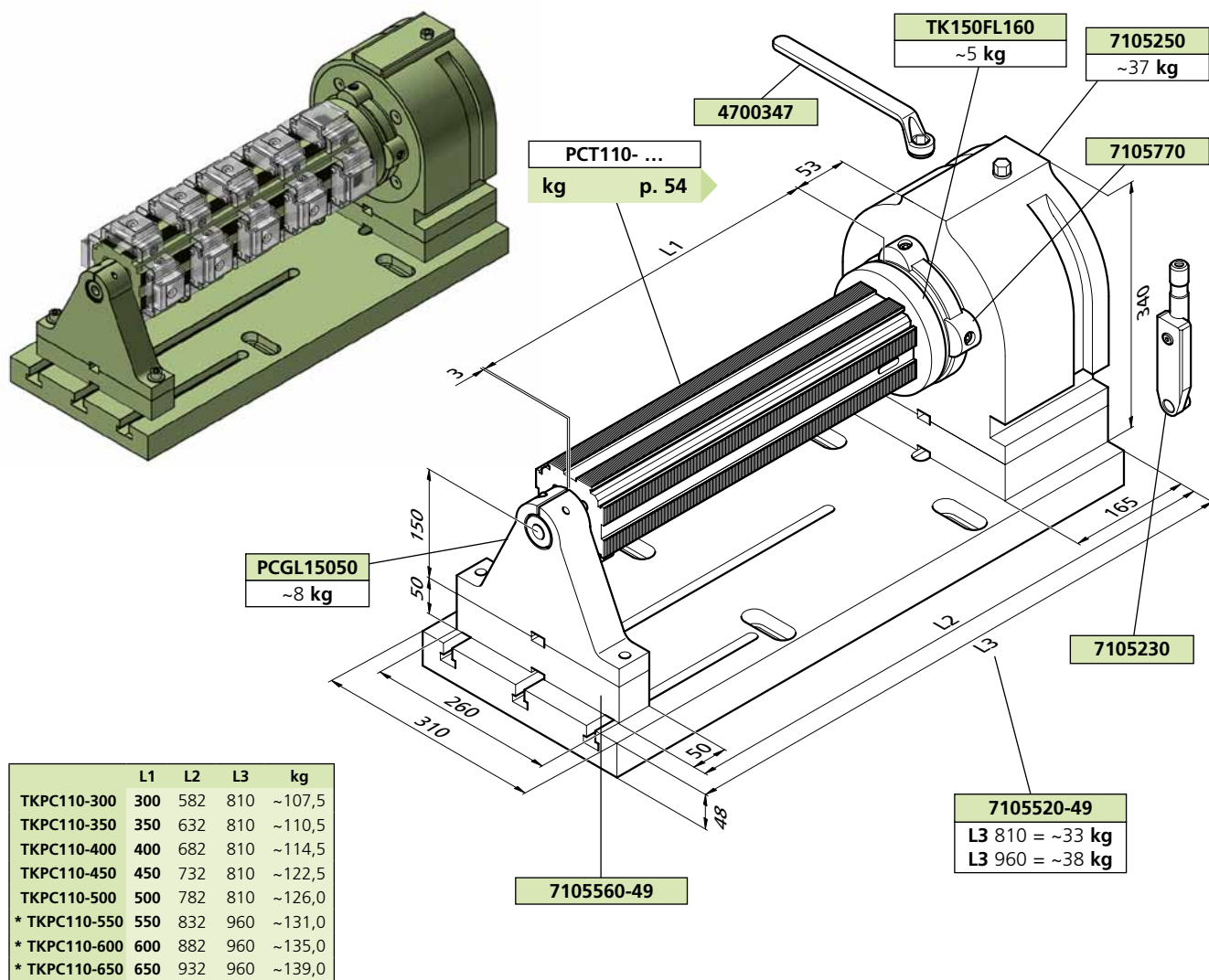


powerCLAMP



Bestellbeispiel / Ordering example: PCB50207W25

Separat bestellen / Separate order



* Entspricht nicht der Abbildung
Does not correspond to the illustration

Bestellbeispiel / Ordering example: TKPC110-300





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					

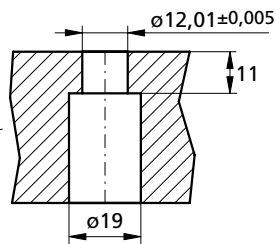
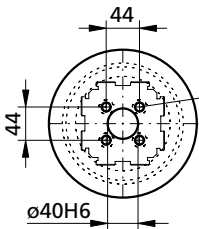
L	kg	Ø D		
PCMT150-700	~83	238	266	278
B=150x150				
PCMT150-750	~89	238	266	278
B=150x150				
PCMT150-800	~95	238	266	278
B=150x150				
PCMT150-850	~101	238	266	278
B=150x150				

PS1R43N49-B60

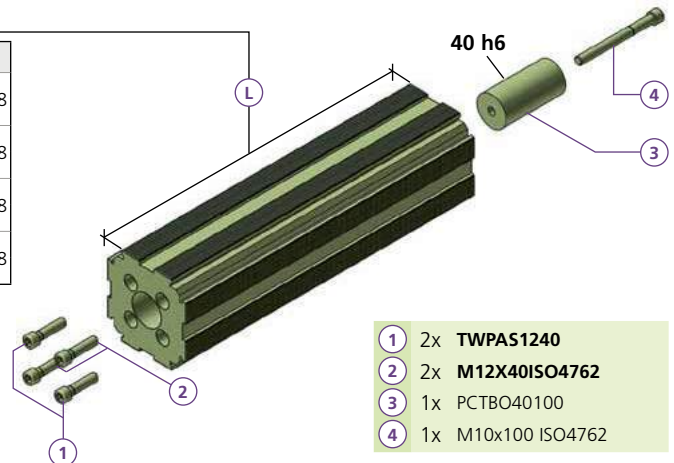
PS1R94N34-B80

PS1R94N49-B90

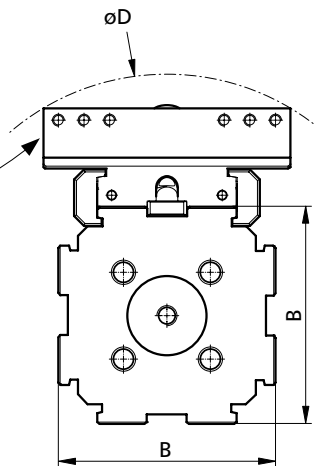
PS1R125N49-B95



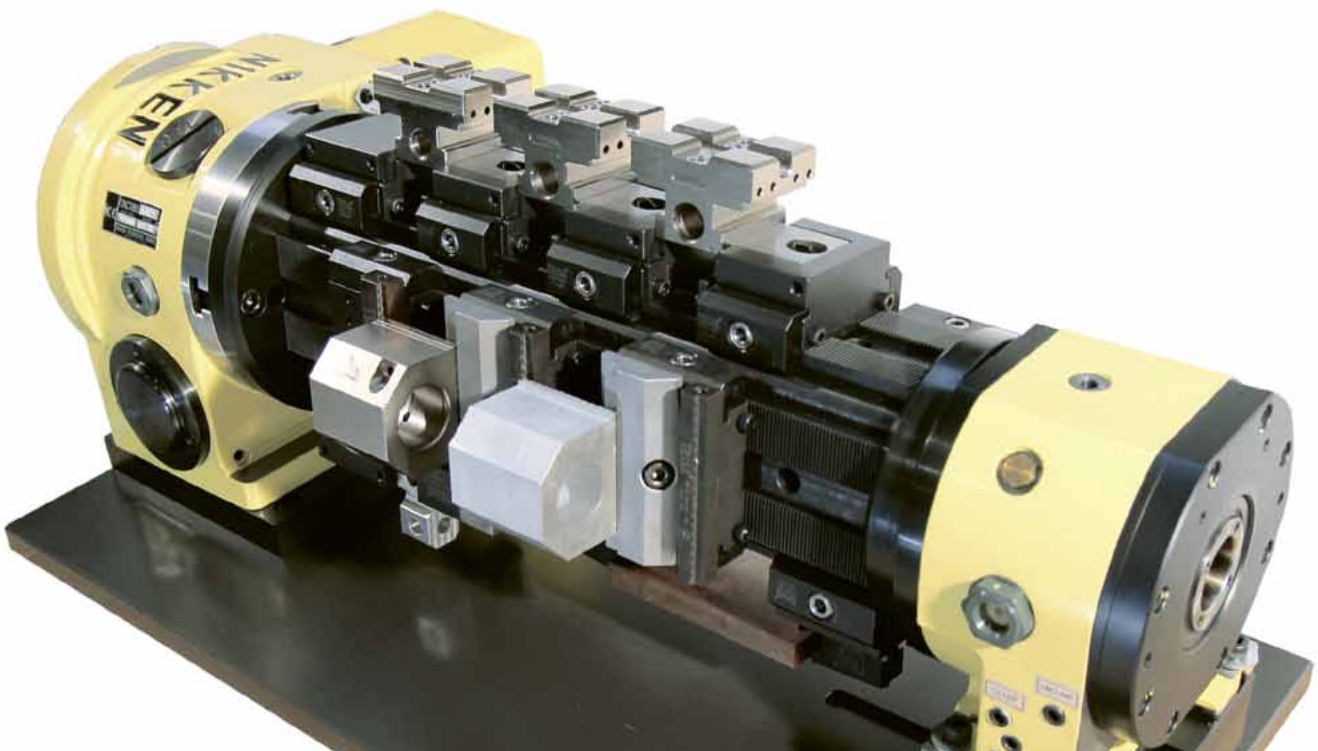
Monobloc powerCLAMP 110 x 110 x ...



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



Bestellbeispiel / Ordering example: PCT110-500





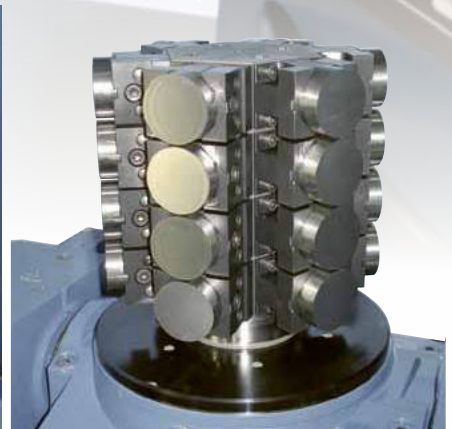
 powerCLAMP

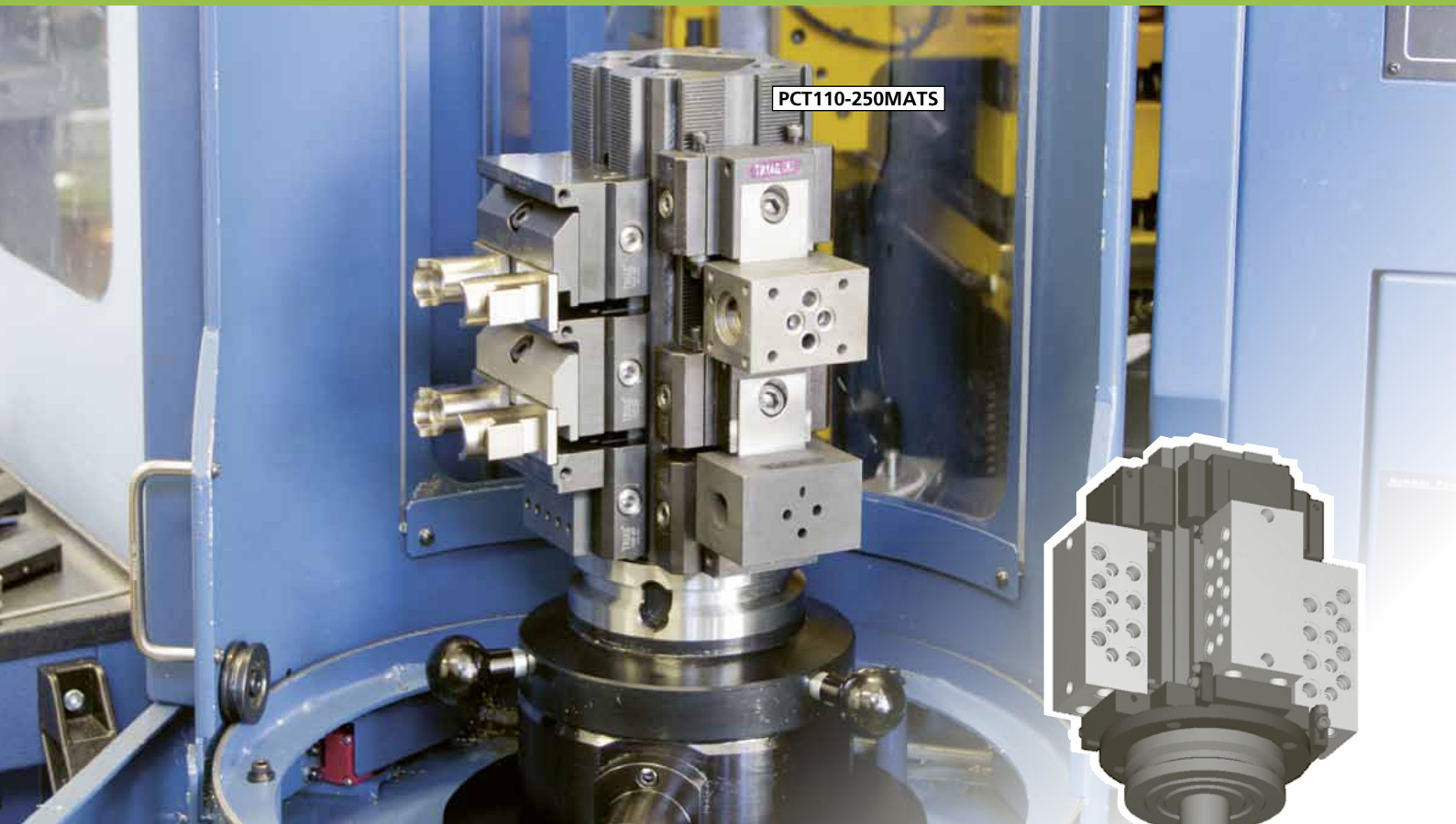
 microCLAMP

 powerCLAMP

 triCENTRO

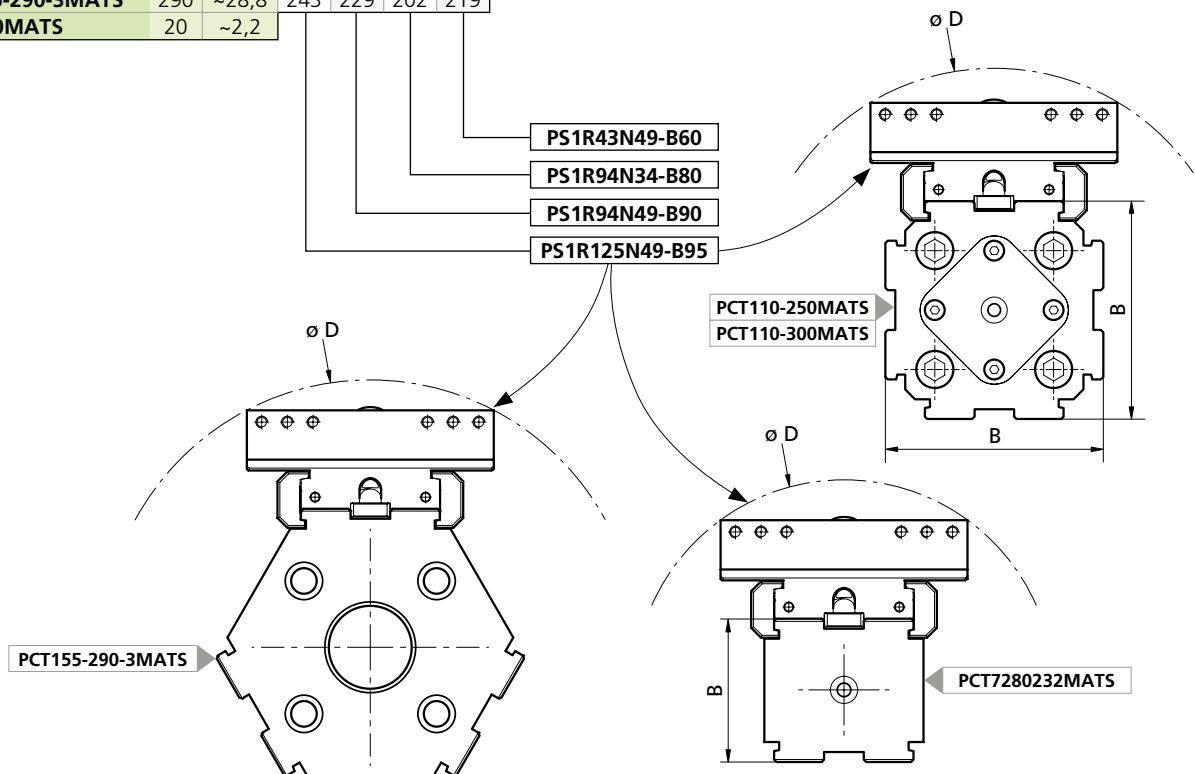
 microCLAMP





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				



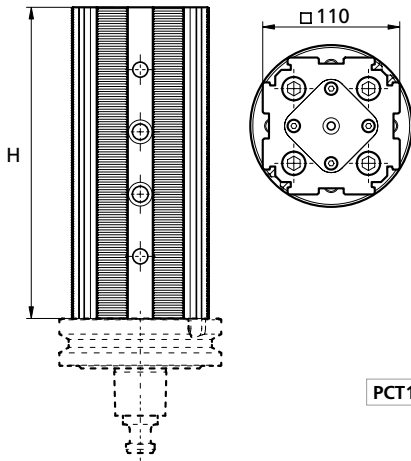
Bestellbeispiel / Ordering example: PCT110-250MATS

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

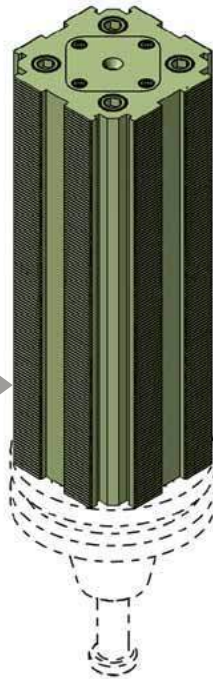
PCT7280232MATS
 GPL160MATS



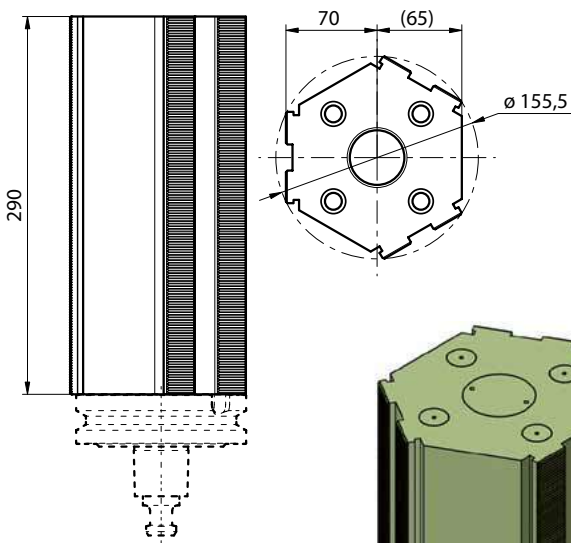
powerCLAMP



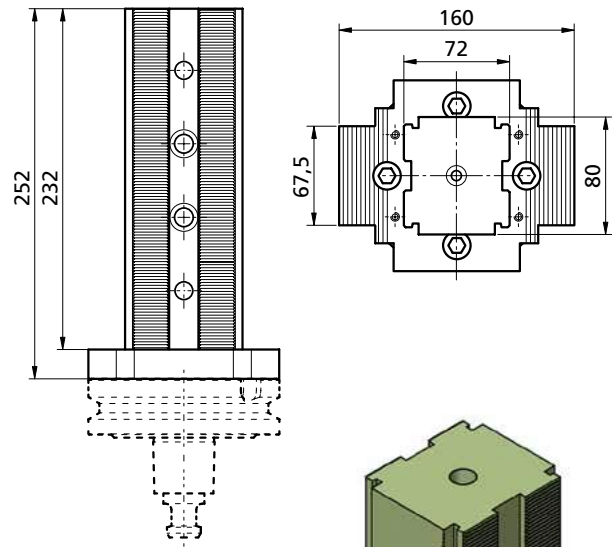
PCT110-250MATS



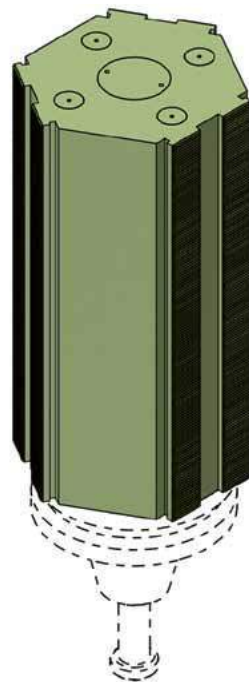
	H	kg
PCT110-250MATS	250	~20
PCT110-300MATS	300	~24



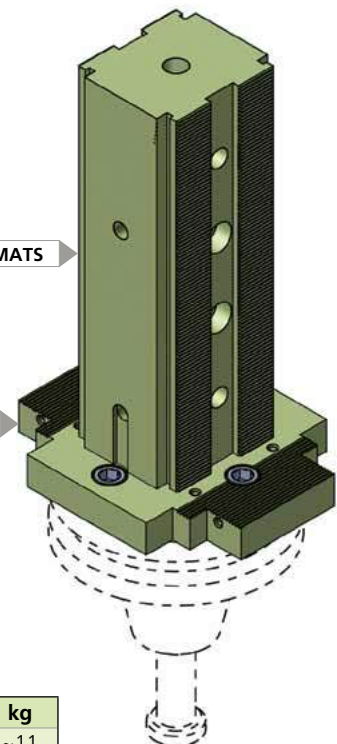
	H	kg
PCT155-290-3MATS	290	~28,8



PCT7280232MATS



GPL160MATS

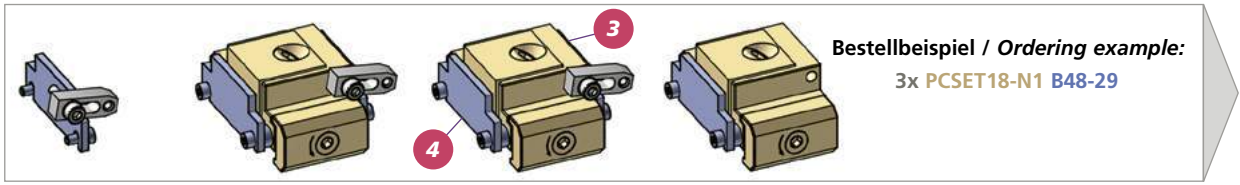


	H	kg
PCT7280232MATS	232	~11
GPL160MATS	20	~2,2

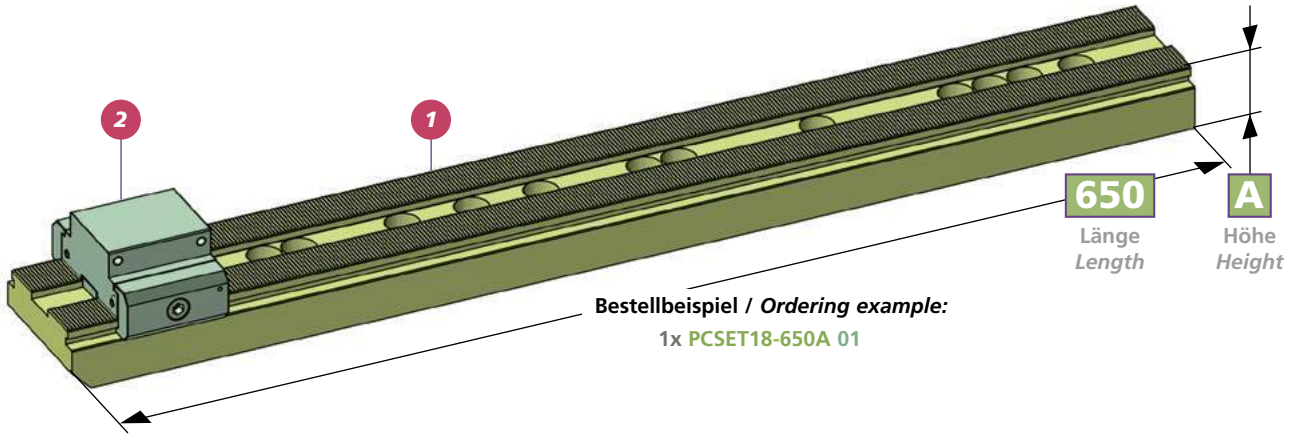
Separat bestellen / Separate order

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

2

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



...X

PCSET18-N1

B48-29

3

Niederzugspannmodule / Pull down clamp modules

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

Linearspannmodule / Linear clamp modules

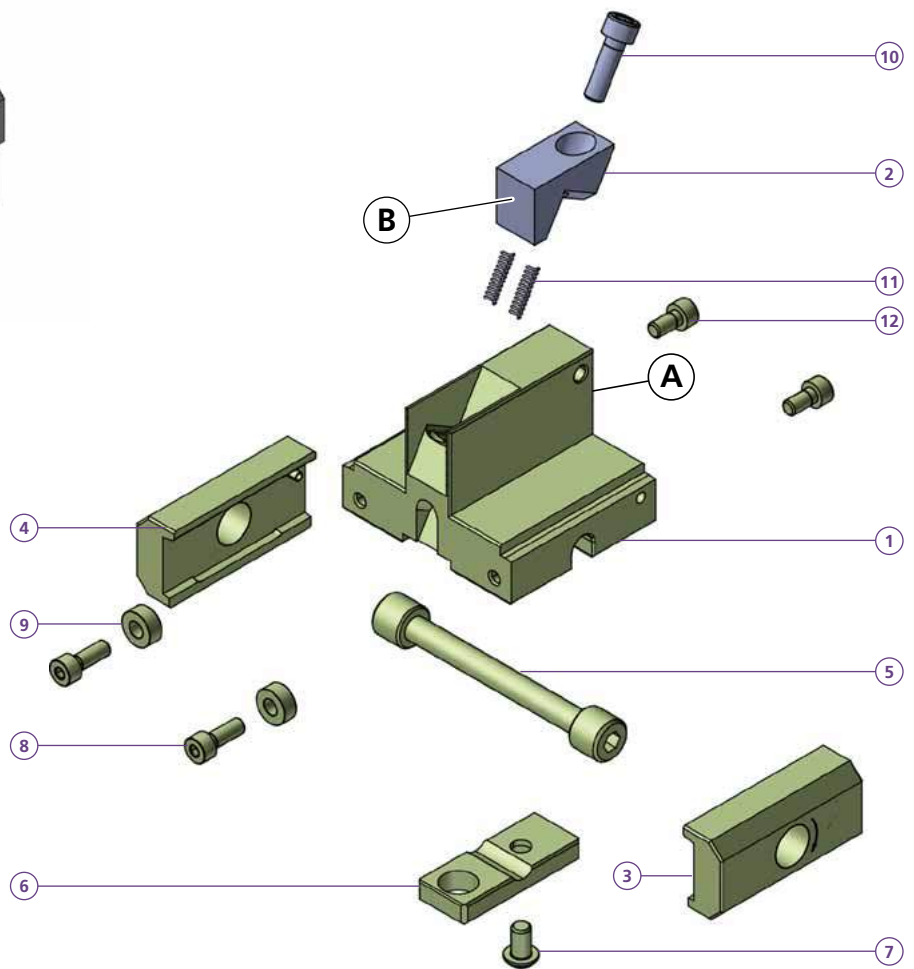
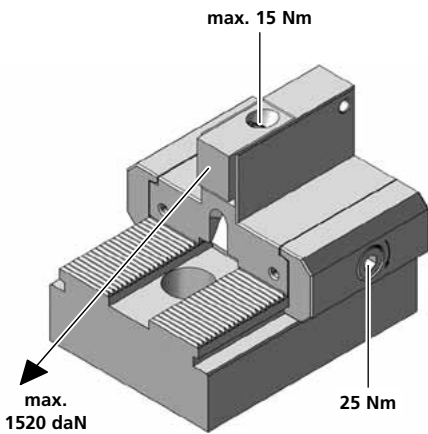
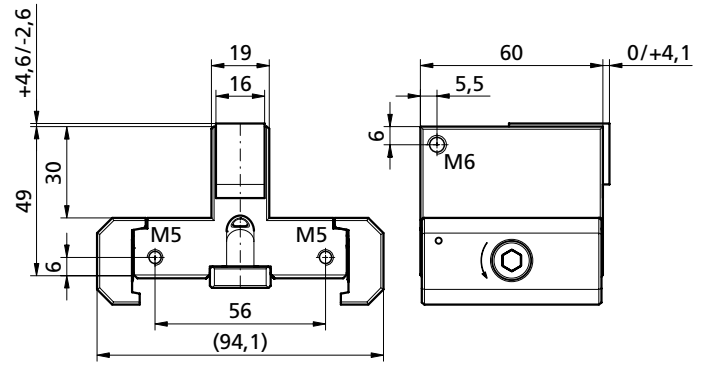
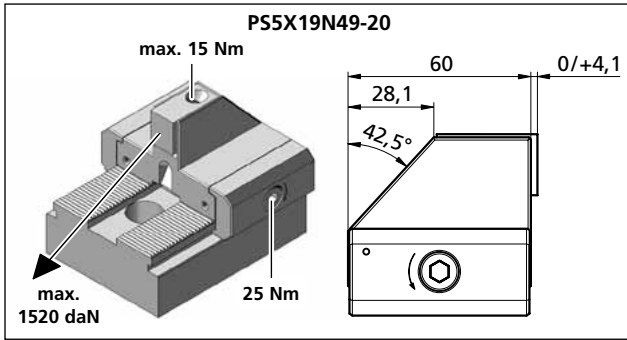
Breite / Width 48mm		Breite / Width 78mm		Breite / Width 94mm	
prägen / stamping					
 PS1 PF 48L34 B115P PCSET18-L1 H=34	 PS1 PF 48L49 B115P PCSET18-L2 H=49	 PS1 R 78L34 B141 PCSET18-L5 H=34	 PS1 F 78L34 B140 PCSET18-L6 H=34	 PS1 PF 94L34 B120P PCSET18-L9 H=34	 PS1 PF 94L49 B120P PCSET18-L11 H=49
 PS1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

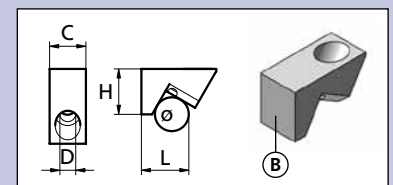
Breite / Width 48mm	Breite / Width 78mm	Breite / Width 94mm	Fränschlag Milling buffer																																																								
 PCU29047	 PCU39077	 PCU29093	1 x Inklusive / Included FA1240																																																								
<table border="1"> <thead> <tr> <th>B48-</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*																																																										
PCU 20	047																																																										
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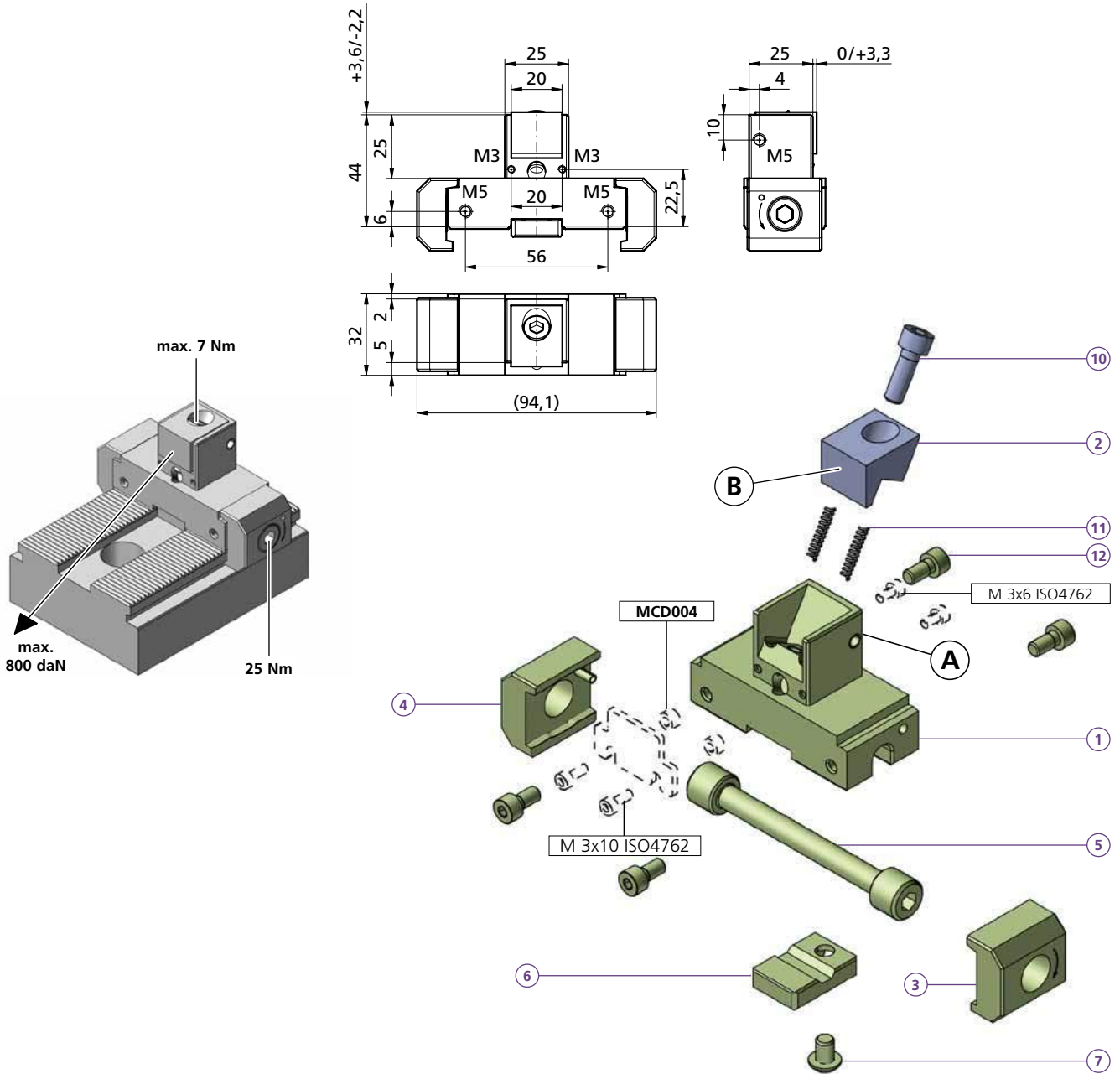


	PS5X19N49-20
1	1x TF140449
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,1
	PS1F19N49-20
1	1x TF150961
	PS1R19N49-20
1	1x TF140448
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M6X20ISO4762
11	2x FED0418
12	2x M5X10ISO4762
kg	~1,2

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

	B20	B21	B22
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





PS1F25N44-13	
①	1x TF150960
PS1R25N44-13	
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

Bestellbeispiel / Ordering example: 1x PS1R25N44-13 & 1x B14				
	B13	B14	B15	B16
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	M3X10ISO4762		
	2x	M3X6ISO4762		
	2x	MCD 004		

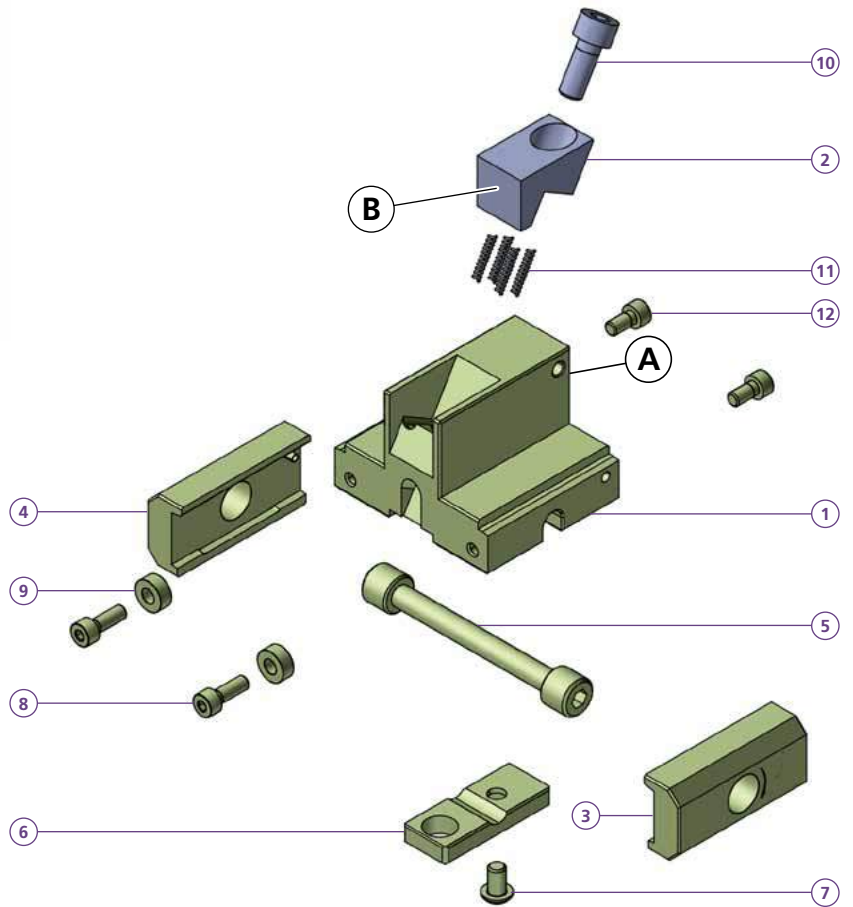
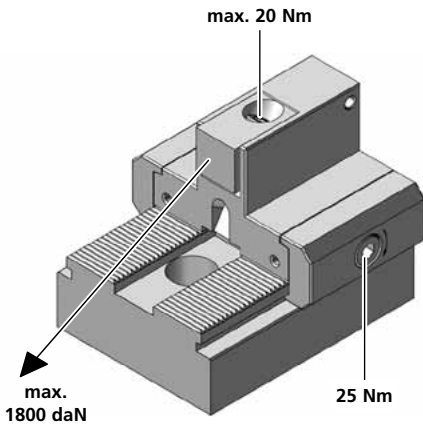
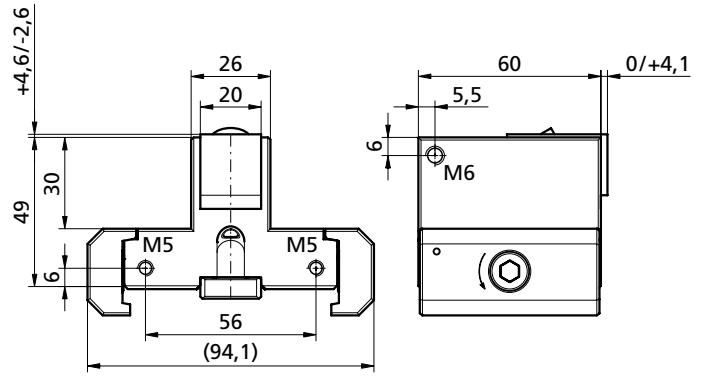
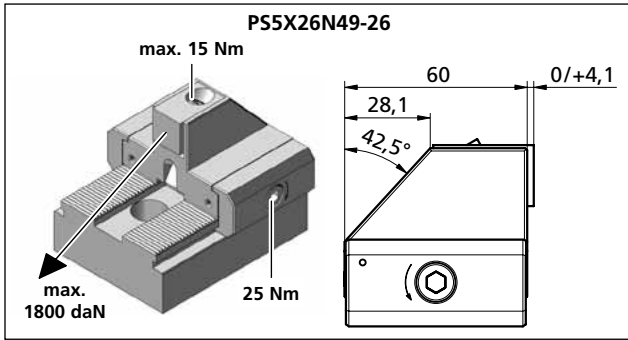
* = weicher Stahl / soft steel



PS1R/F26N49-26

PS5X26N49-26

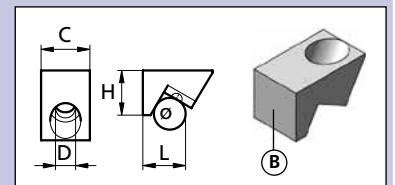
powerCLAMP



PS5X26N49-26	
1	1x TF140453
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,1
PS1F26N49-26	
1	1x TF140451
PS1R26N49-26	
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	B26	B27	B28
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

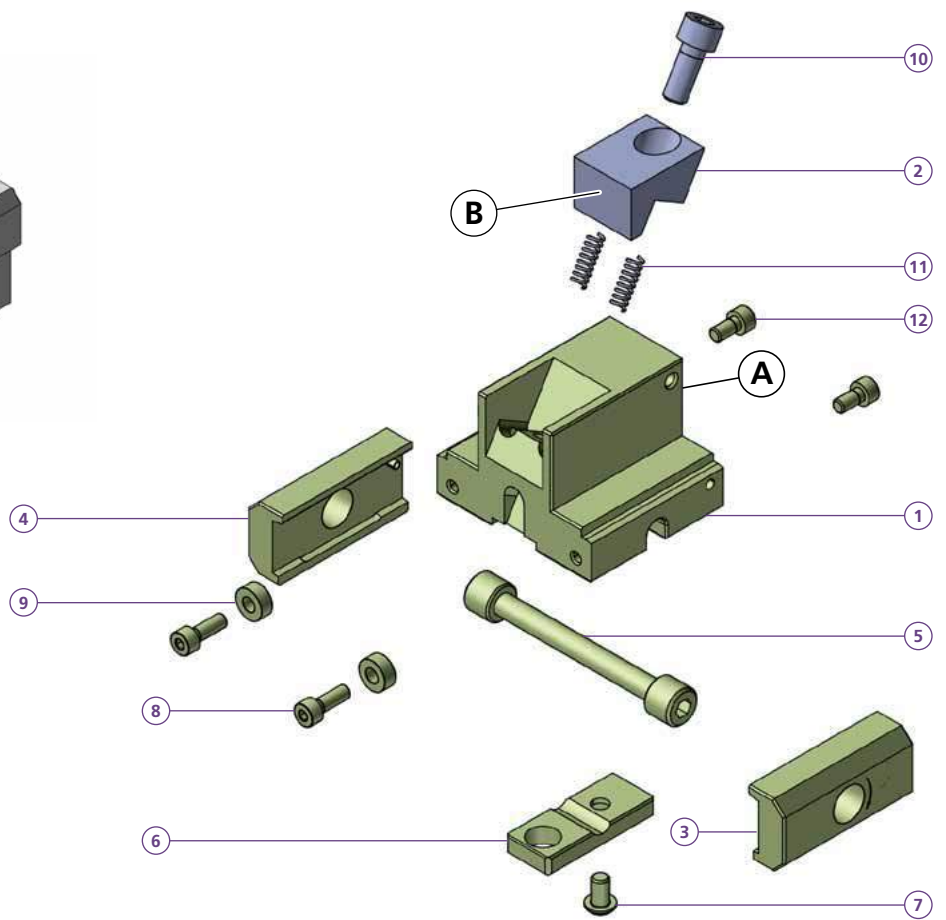
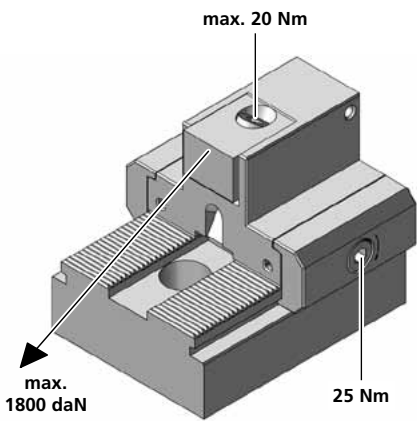
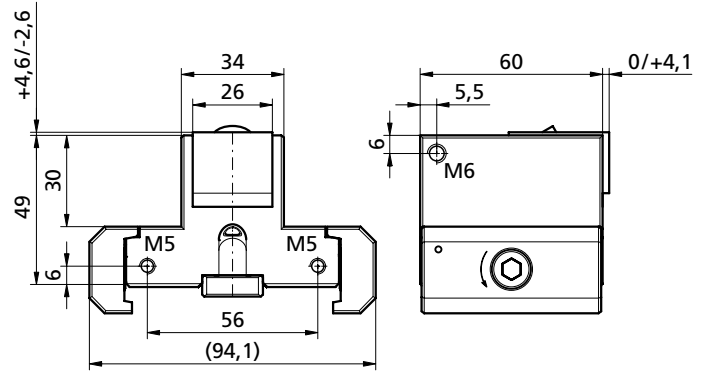
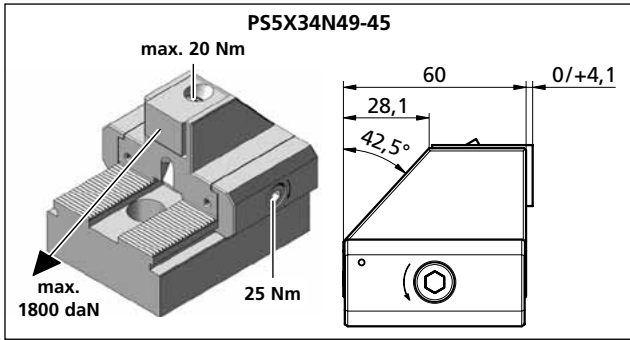




PS1R/F34N49-45

PS5X34N49-45

powerCLAMP



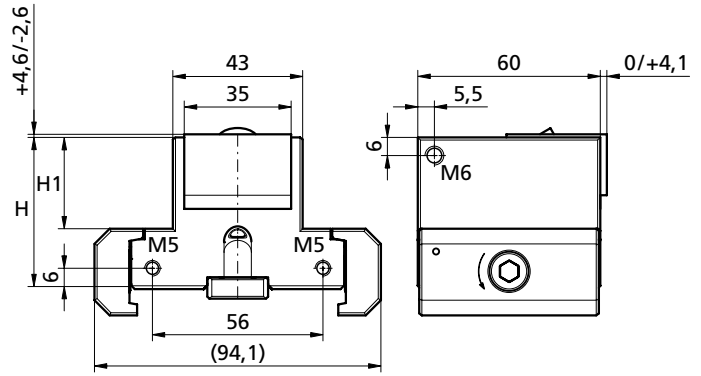
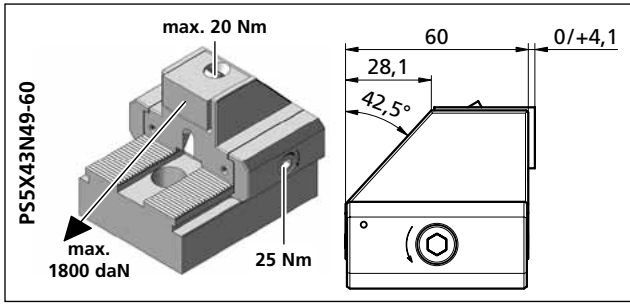
PS5X34N49-45	
1	1x TF140455
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,2
PS1F34N49-45	
1	1x TF191071
PS1R34N49-45	
1	1x TF140454
2	1x
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2049
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X20ISO4762
11	2x FED0618
12	2x M5X10ISO4762
kg	~1,3

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

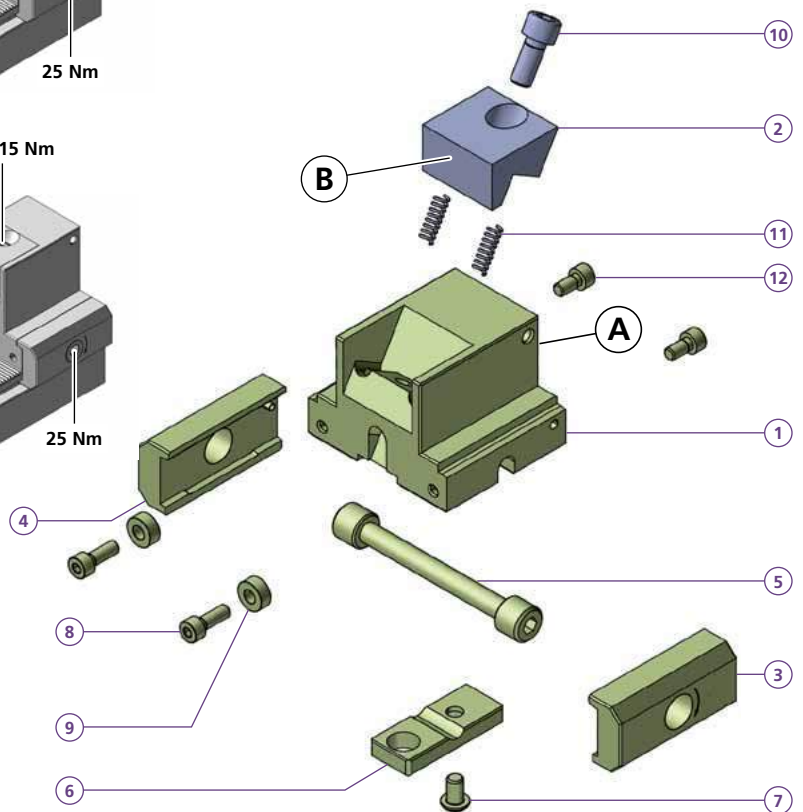
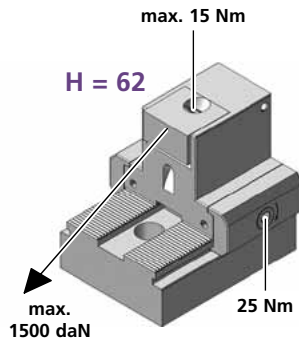
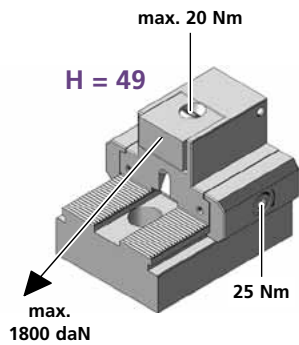
	B45	B46	B47	B47HM
C	26	26	26	26
H	20	20	20	20
L	19	19	19,1	19,1
D	9	9	9	9
e	12	12	12	12
i	HV700	HV700	*	HM
	x0,2mm	x0,2mm		
kg	~0,1	~0,1	~0,1	~0,1

* = weicher Stahl / soft steel

HM = Hartmetallbeschichtet / Carbide coated



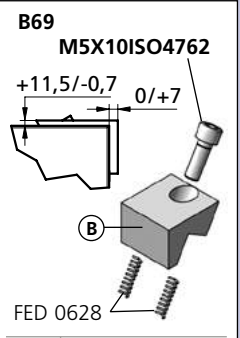
PS5X43N49-60
1x TF140458
2x PCD005
2x M5X14ISO4762
kg ~1,3
PS1F43N49-60
1x TF140456
PS1R43N49-60
1x TH160507
1x
1x PCSP60R
1x PCSP60L
1x PCS14
1x PCGU2049
1x M6X8ISO7380
2x M5X14ISO4762
2x PCD005
1x M8X20ISO4762
2x FED0618
2x M5X10ISO4762
H = 49
H1 = 30
kg ~1,4
PS1F43N62-60
1x TF140459
PS1R43N62-60
1x TF140460
H = 62
H1 = 43
kg ~1,7



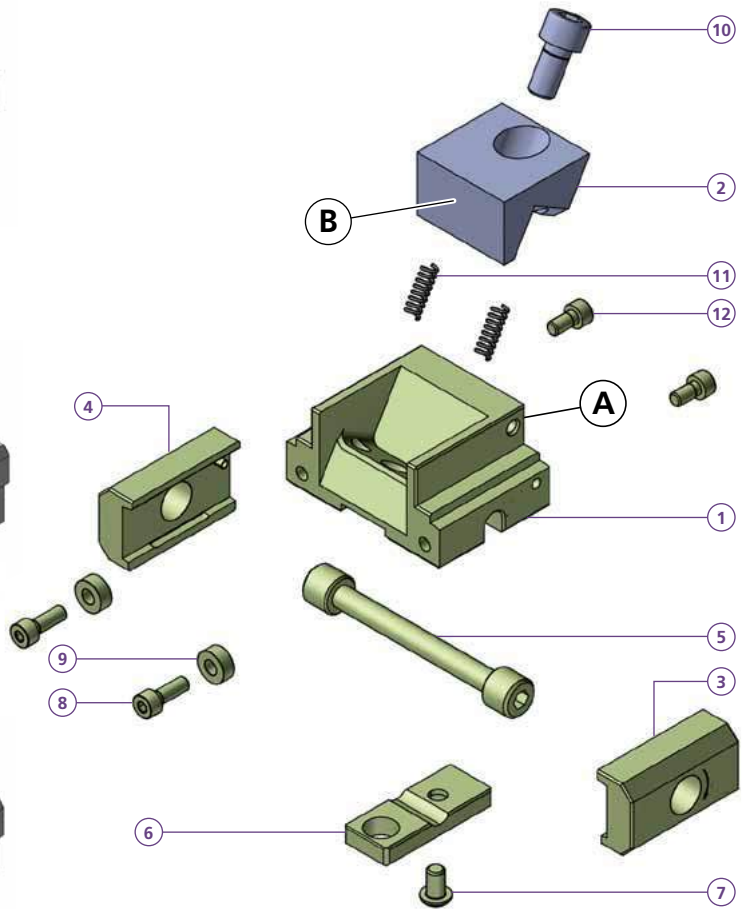
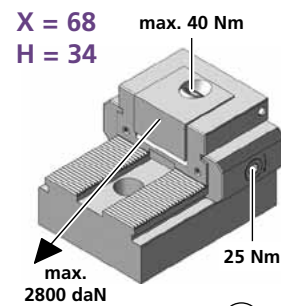
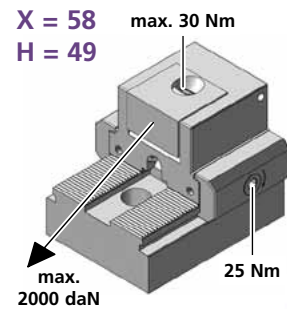
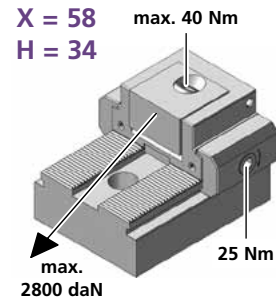
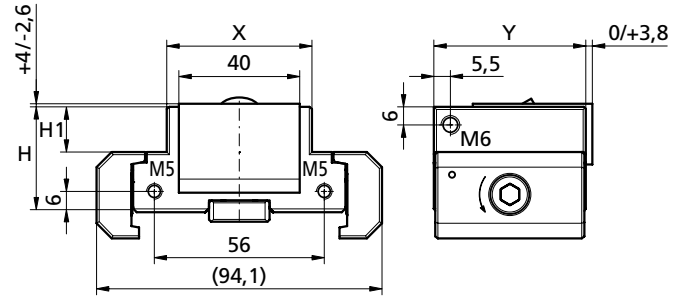
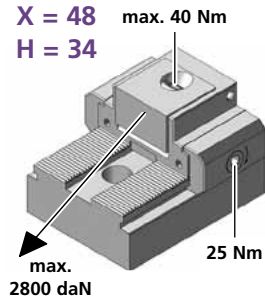
Bestellbeispiel / Ordering example: 1x PS1R43N49-60 & 1x B61

	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

	B58	B60, B61, B62, B62HM	B65, B66, B67	B68	B77	B79F, B79R
Spannbacke mit CCPDR Jaw with CCPDR						



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

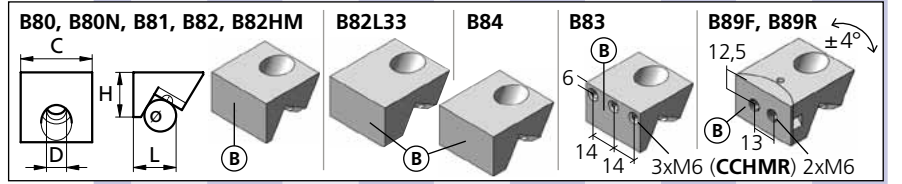
- 1 1x TK120129
 - 3 1x PCSP60R
 - 4 1x PCSP60L
- X = 58
H = 49
H1 = 30
Y = 60
kg ~1,6

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

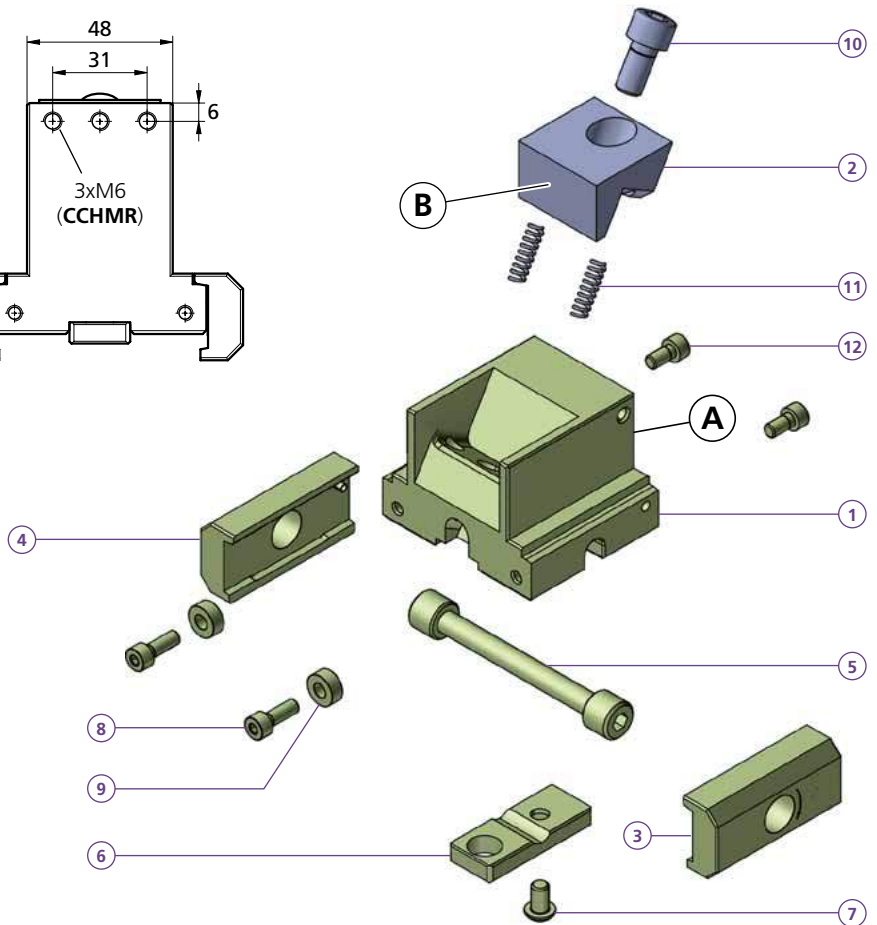
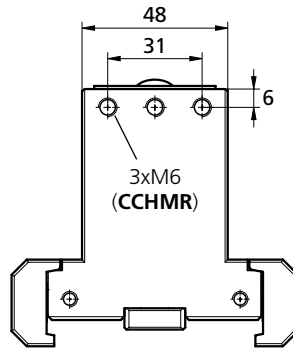
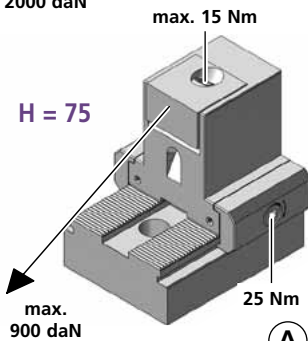
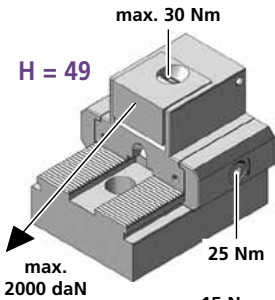
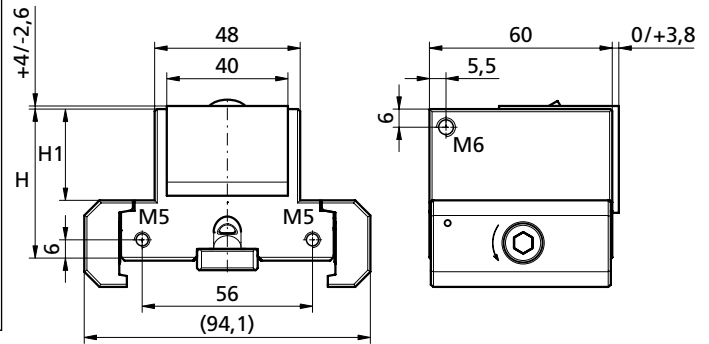
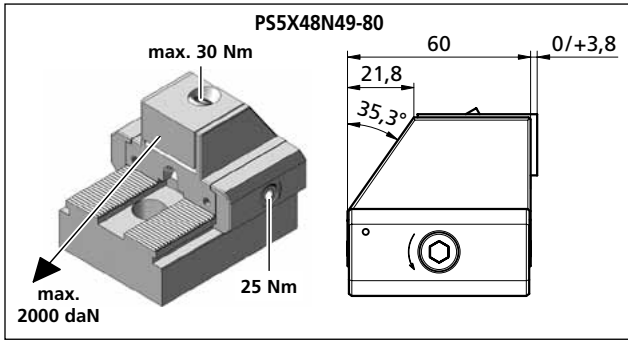
	B80	B80N	B81	B82	B82L33	B82HM	B83	B84	B89F	B89R
C	40	40	40	40	40	40	40	40	40	40
H	25	25	25	25	25	25	25	25	25	25
L	22	22	22	22,2	33	22,2	22	26,3	29	29
D	11	11	11	11	11	11	11	11	11	11
ø	15	15	15	15	15	15	15	15	15	15
i	56HRC	HV700 x0,2mm	56HRC	*	*	56HRC	HV700 x0,2mm	*	HV700 x0,2mm	HV700 x0,2mm
kg	~0,2	~0,2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

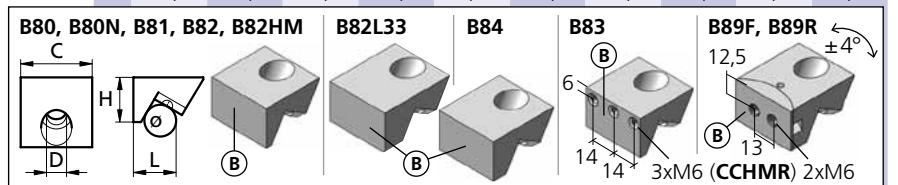


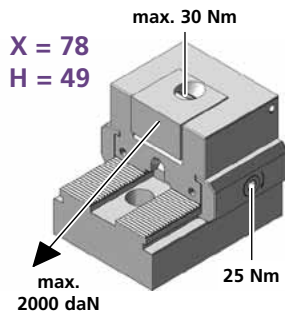
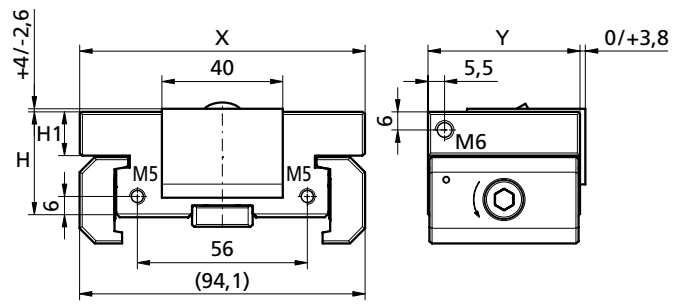
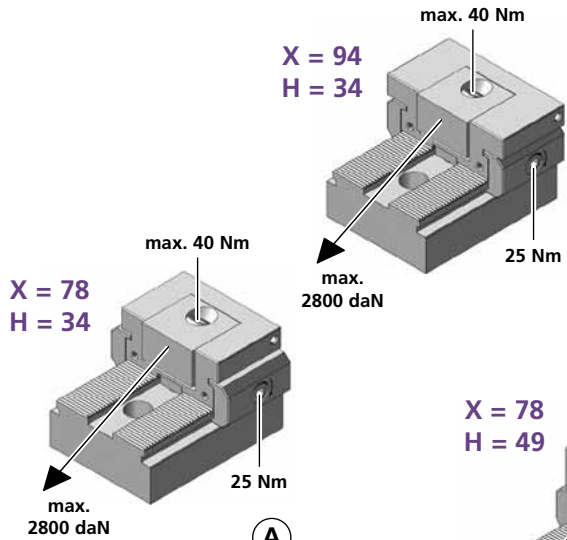
PS5X48N49-80
1x TF140469
2x PCD005
2x M5X14ISO4762
kg ~1,3
PS1F48N49-80
1x TF140467
PS1R48N49-80
1x TF140468
1x [Component 2]
1x PCSP60R
1x PCSP60L
1x PCS14
1x PCGU2049
1x M6X8ISO7380
2x M5X14ISO4762
2x PCD005
1x M10X25ISO4762
2x FED0618
2x M5X10ISO4762
H = 49
H1 = 30
kg ~1,4

PS1R48N75-80
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

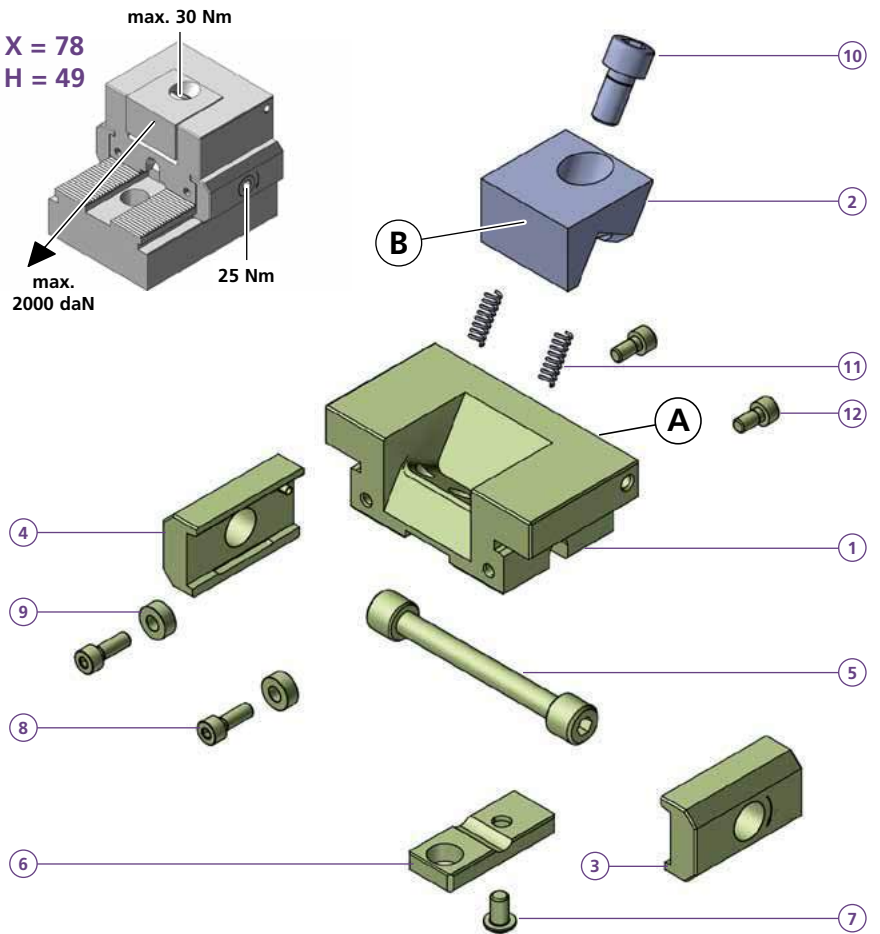
PS1R78N49-80

- 1 1x TF140475

- 3 1x PCSP60R

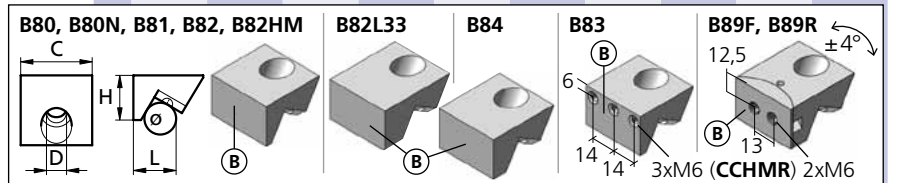
- 4 1x PCSP60L

X = 78
H = 49
H1 = 30
Y = 60
kg ~1,8



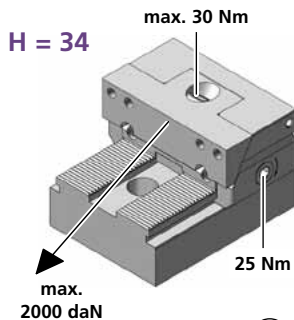
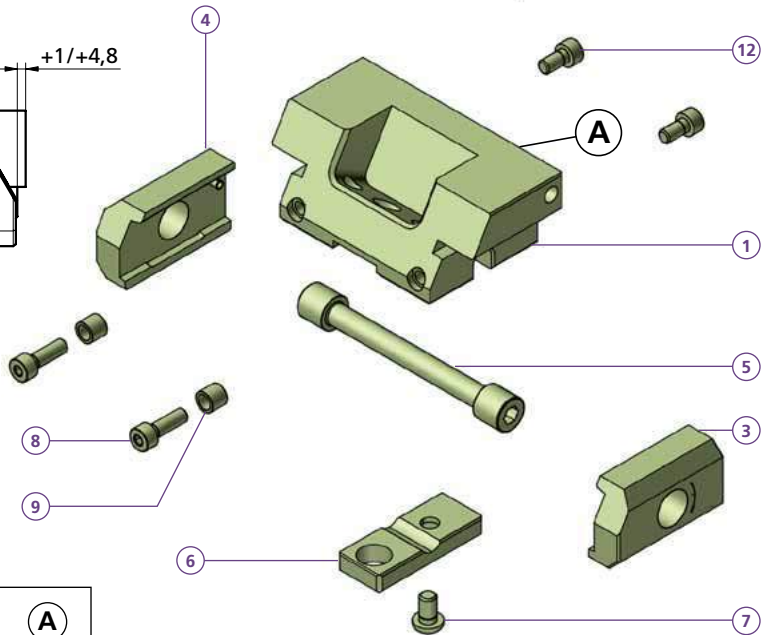
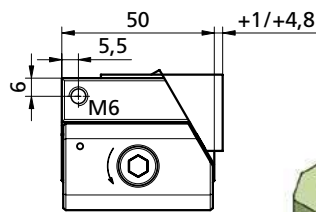
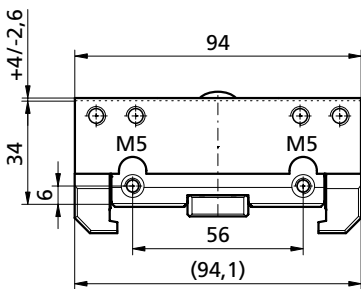
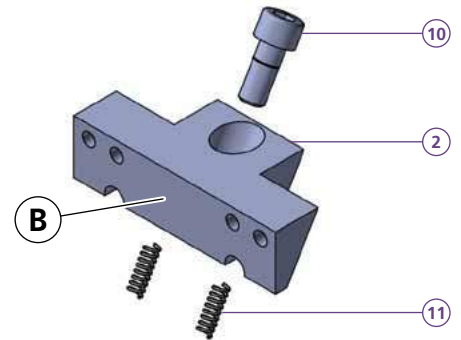
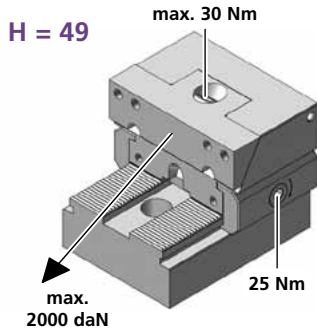
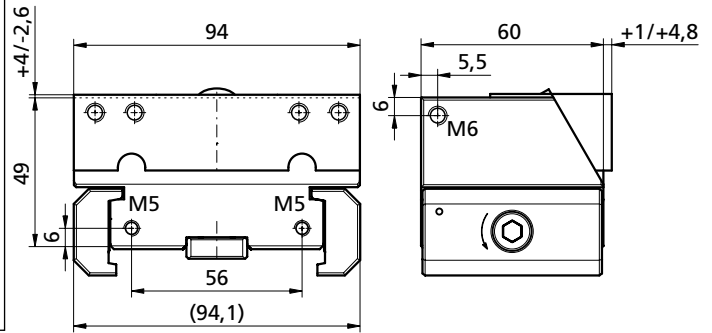
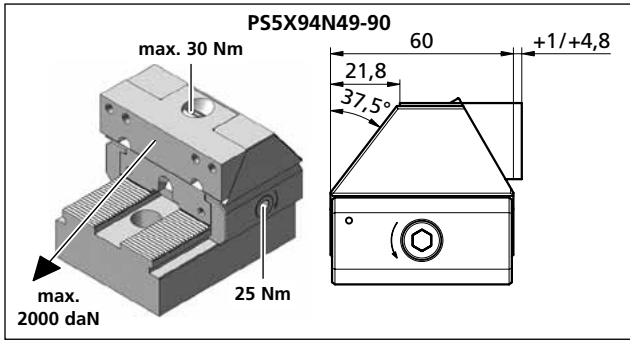
Bestellbeispiel / Ordering example: 1x PS1R94N34-80 & 1x B80

	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



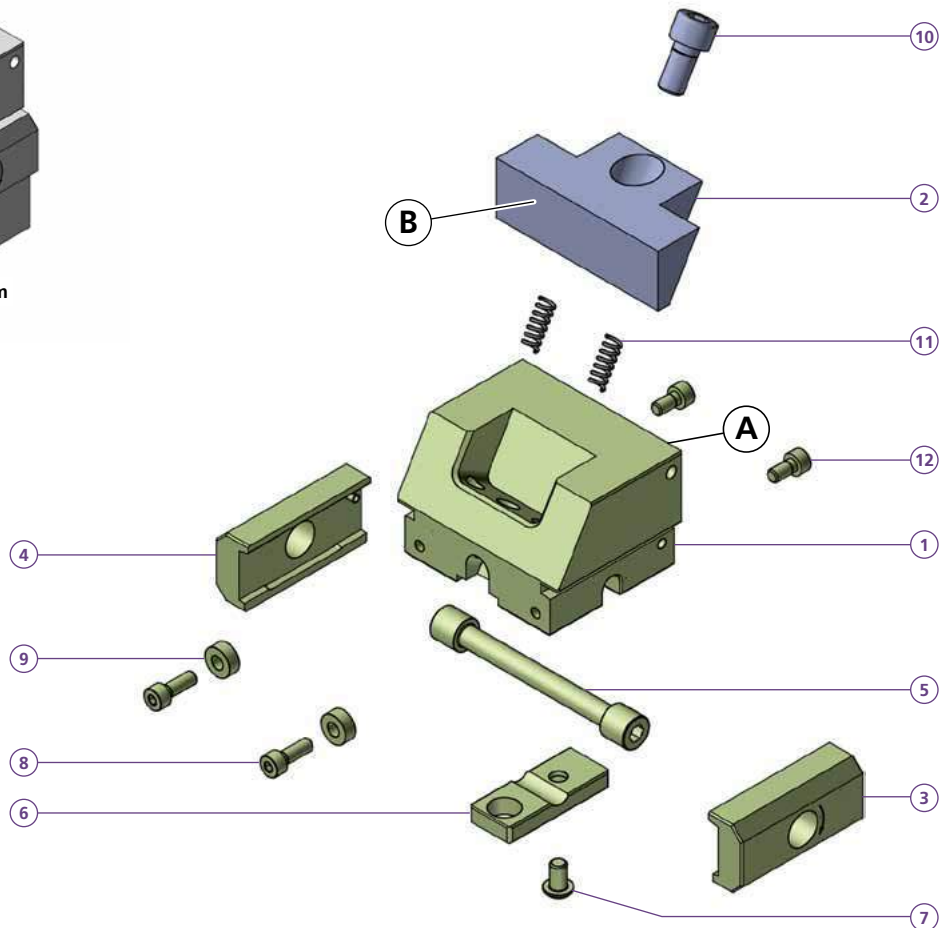
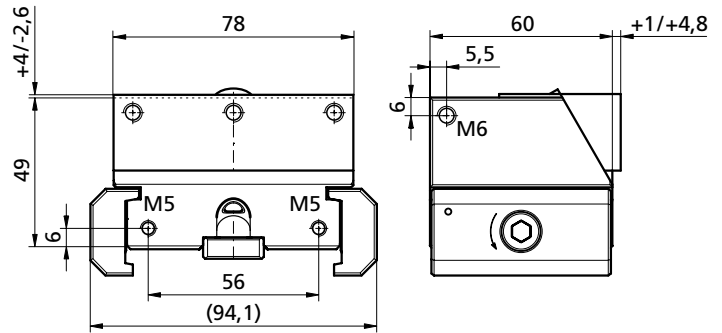
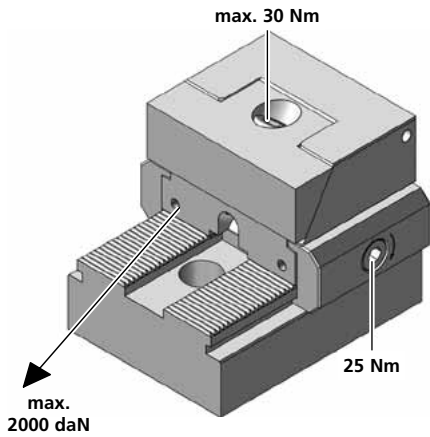
PS1F94N34-90	A
1 1x TF140478	
PS1R94N34-90	
1 1x TF140479	
2 1x _____	
3 1x PCSP50RF	
4 1x PCSP50LF	
5 1x PCS14	
6 1x PCGU2049	
7 1x M6X8ISO7380	
8 2x M5X16ISO4762	
9 2x PCD008	
10 1x M10X25ISO4762	
11 2x FED0618	
12 2x M5X10ISO4762	
H = 34	
kg ~1,0	

PS5X94N49-90	A
1 1x TF140482	
3 1x PCSP60R	
4 1x PCSP60L	
9 2x PCD005	
8 2x M5X14ISO4762	
kg ~1,8	
PS1F94N49-90	
1 1x TF140480	
PS1R94N49-90	
1 1x TF140481	
2 1x _____	
3 1x PCSP60R	
4 1x PCSP60L	
8 2x M5X14ISO4762	
9 2x PCD005	
H = 49	
kg ~2,0	

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

B	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



PS1F78N49-90	
1	1x TH160490
PS1R78N49-90	
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

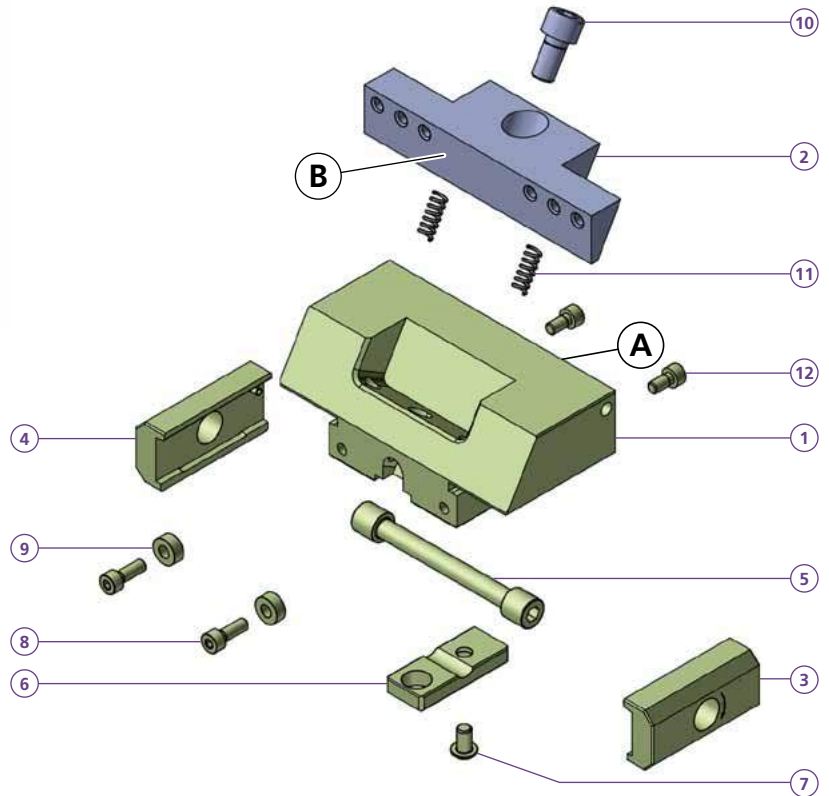
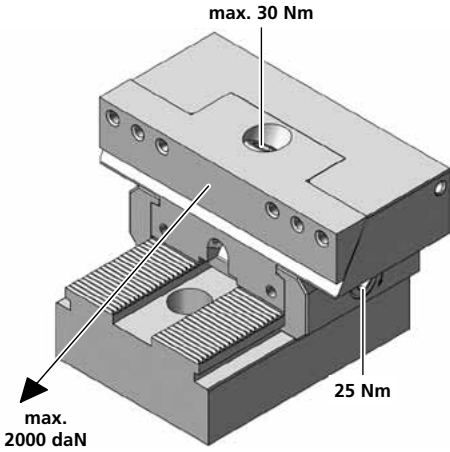
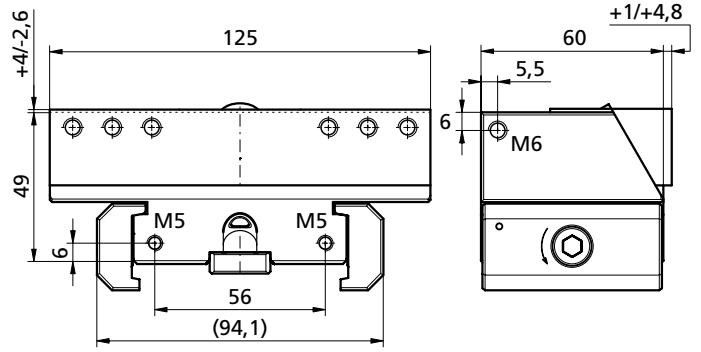
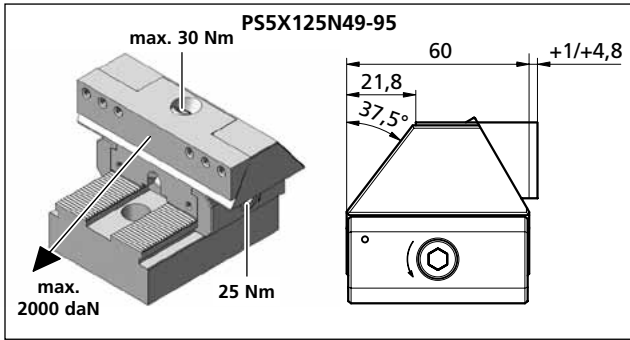
	B90F78	B90W78	B90R78
C	78	78	78
H	25	25	25
L	23	28	23
D	11	11	11
ø	15	15	15
i	HV700	*	HV700
	x0,2mm		x0,2mm
kg	~0,3	~0,37	~0,3

B90R78

78
27 27
6
3xM6 (CCHMR)

B90F78, B90W78

* = weicher Stahl / soft steel



37,5°	PS5X125N49-95
1	1x TF140485
9	2x PCD005
8	2x M5X14ISO4762
kg	~2,0
	PS1F125N49-95
1	1x TF140483
	PS1R125N49-95
1	1x TF140484
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	~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

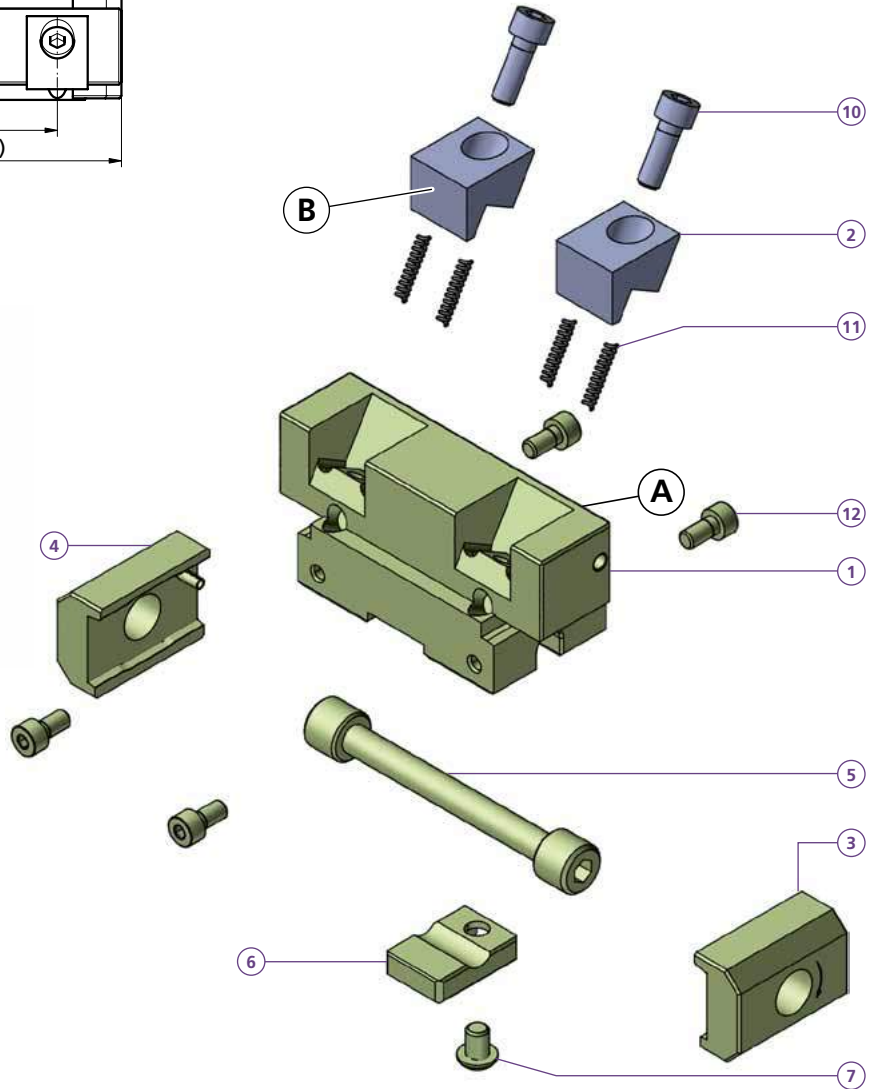
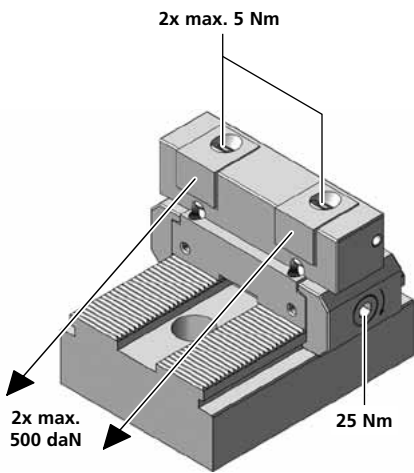
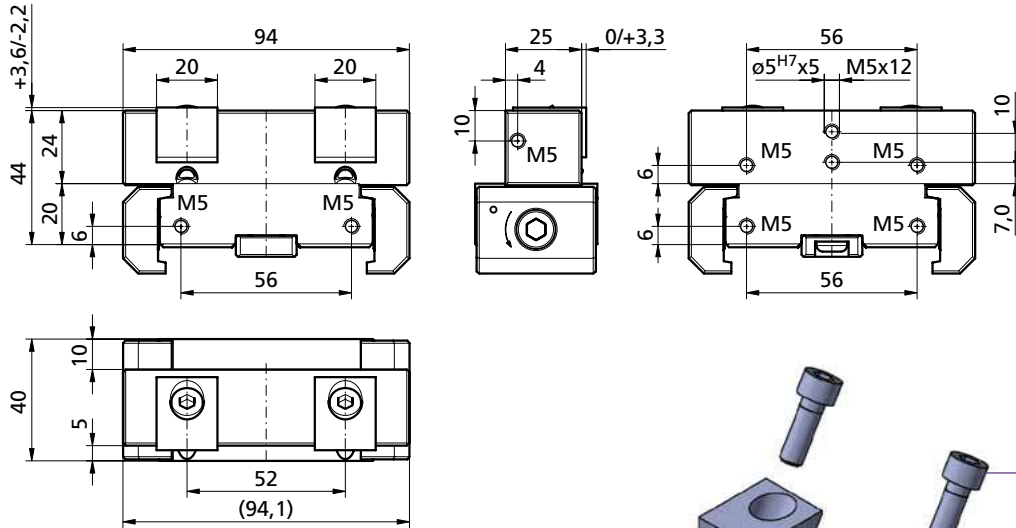
B95, B96, B97, B99		B98	
6xM6 (CCHMR)		110	
		84	
		58	
		6	

Separat bestellen / Separate order



PS2G94N44-13

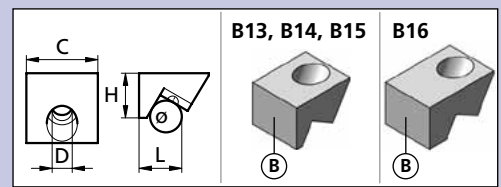
powerCLAMP



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

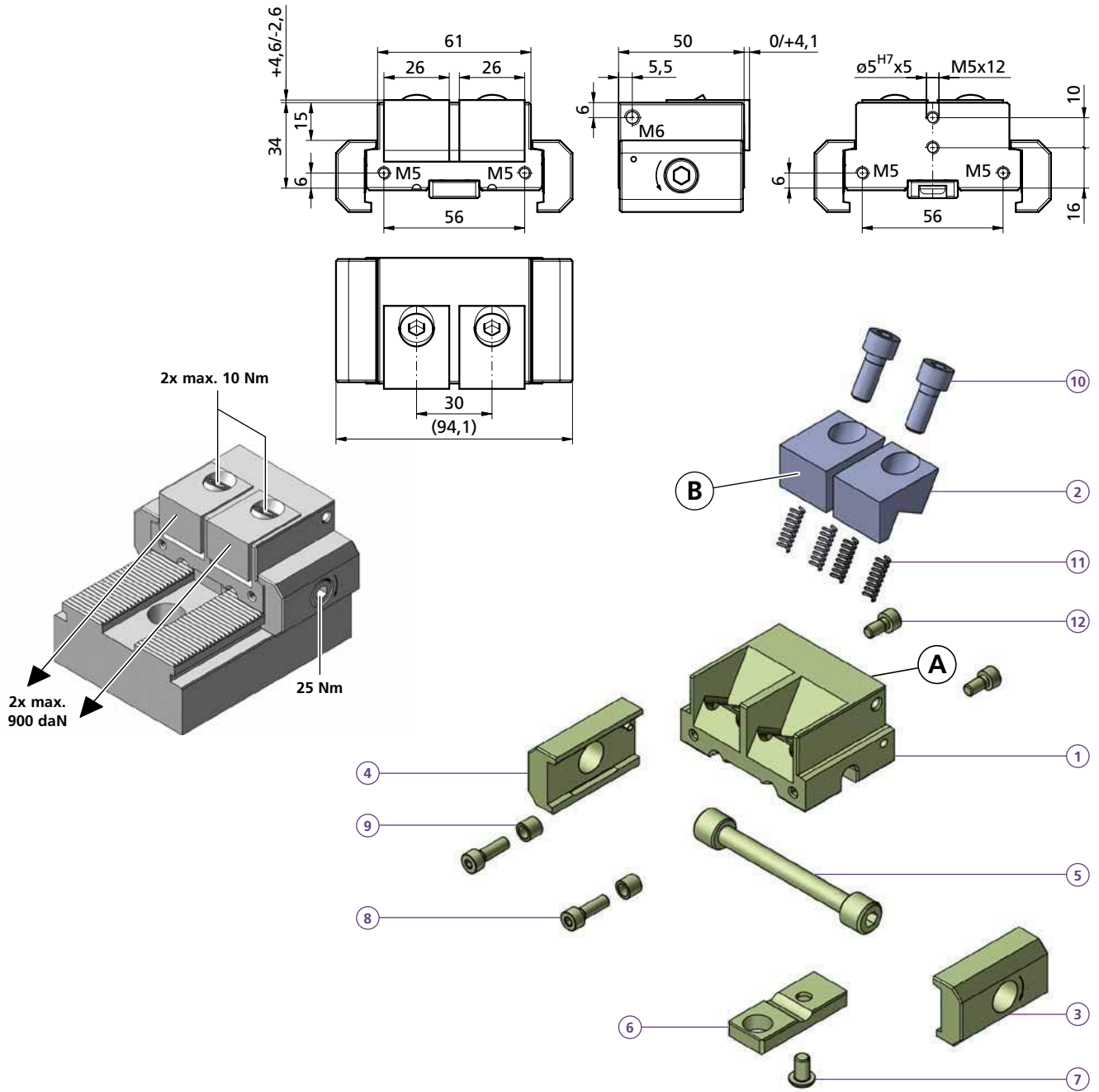
	B13	B14	B15	B16
C	20	20	20	20
H	16	16	16	16
L	13,8	13,8	13,8	19
D	6,5	6,5	6,5	6,5
ø	10	10	10	10
i	HV700	HV700	*	*
	x0,2mm	x0,2mm		
kg	~0,05	~0,05	~0,05	~0,06

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



* = weicher Stahl / soft steel

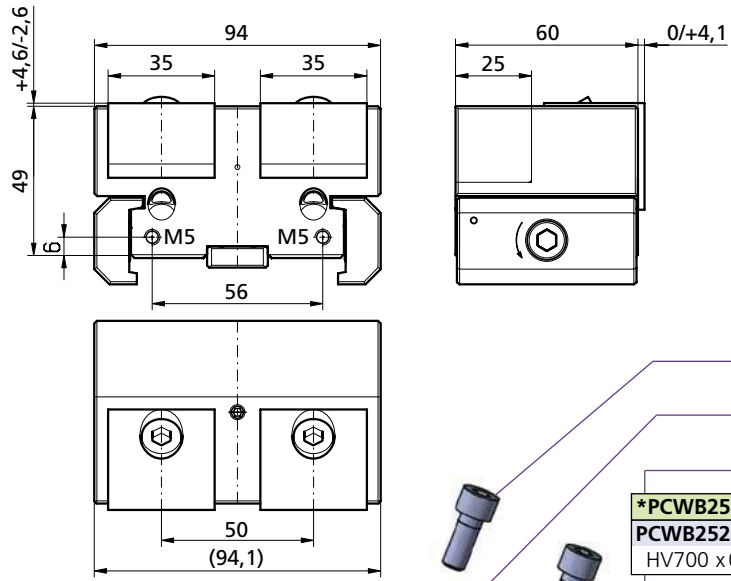
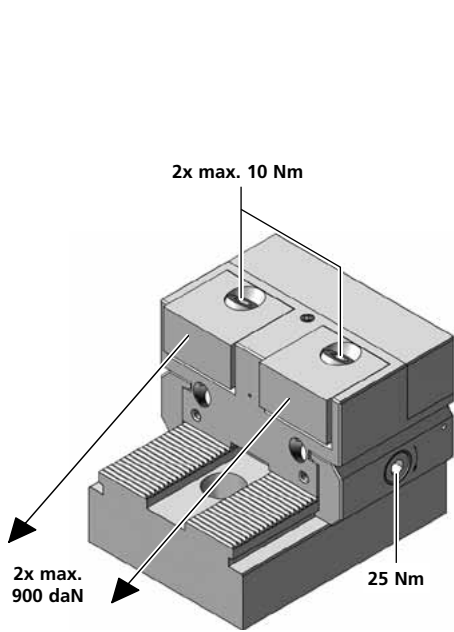
Separat bestellen / Separate order



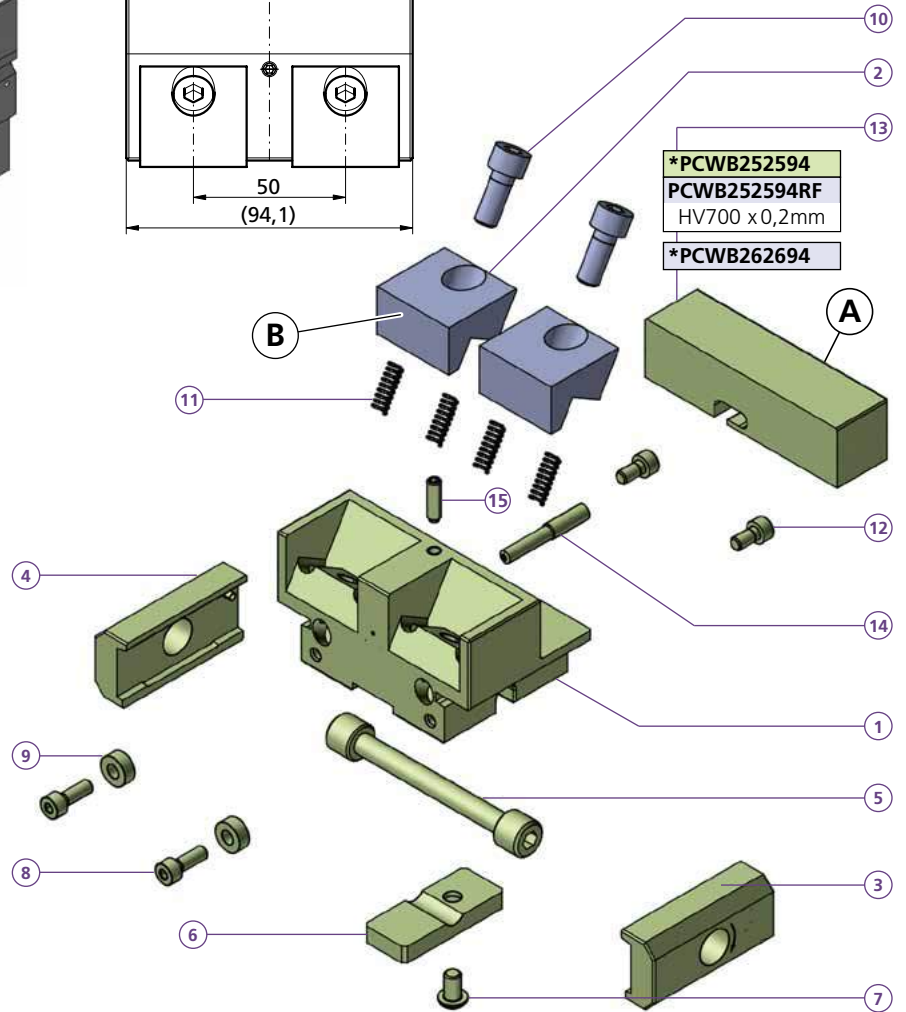
	PS2F61N34-45
①	1x TF140487
	PS2R61N34-45
①	1x TF140488
②	2x
③	1x PCSP50R
④	1x PCSP50L
⑤	1x PCS14
⑥	1x PCGU2049
⑦	1x M6X8ISO7380
⑧	2x M5X16ISO4762
⑨	2x PCD008
⑩	2x M8X20ISO4762
⑪	4x FED0618
⑫	2x M5X10ISO4762
kg	~1,0

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



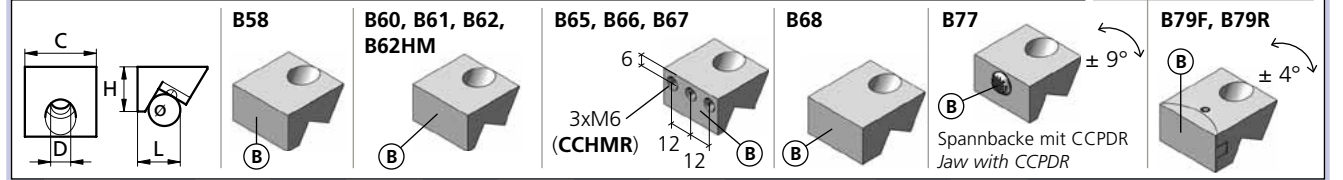
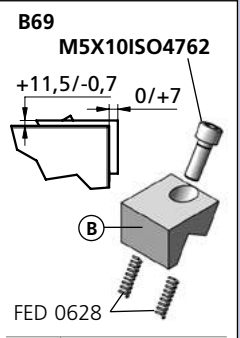
- PS2X94N49-60**
- 1 1x TF140489
 - 2 2x _____
 - 3 1x PCSP60R
 - 4 1x PCSP60L
 - 5 1x PCS14
 - 6 1x PCGU2049
 - 7 1x M6X8ISO7380
 - 8 2x M5X14ISO4762
 - 9 2x PCD005
 - 10 2x M8X20ISO4762
 - 11 4x FED0618
 - 12 2x M5X10ISO4762
 - 13 1x PCWB252594
 - 14 1x PCBO060540
 - 15 1x M5X16ISO4026
- kg ~1,2



*PCWB252594
PCWB252594RF
HV700 x0,2mm
*PCWB262694

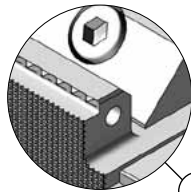
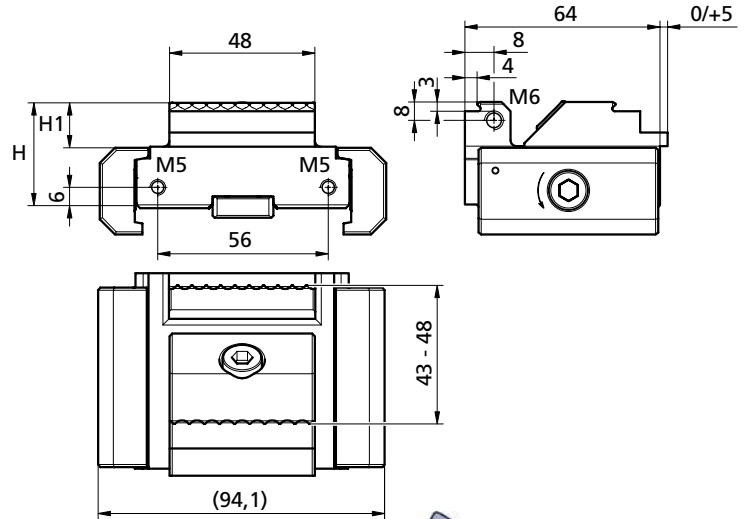
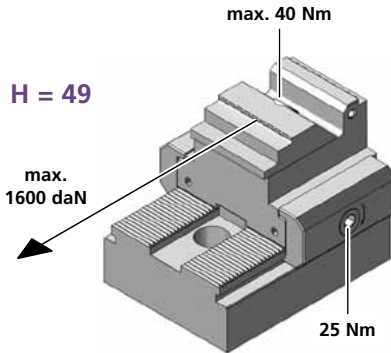
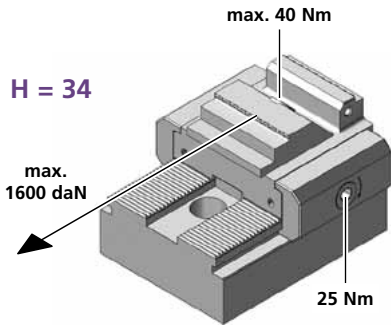
B Bestellbeispiel / Ordering example: 1x PS2X94N49-60 & 2x B58

	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	HV700	HV700	*	*	56HRC	HV700	HV700
		x0,2mm	x0,2mm	x0,2mm								x0,2mm	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



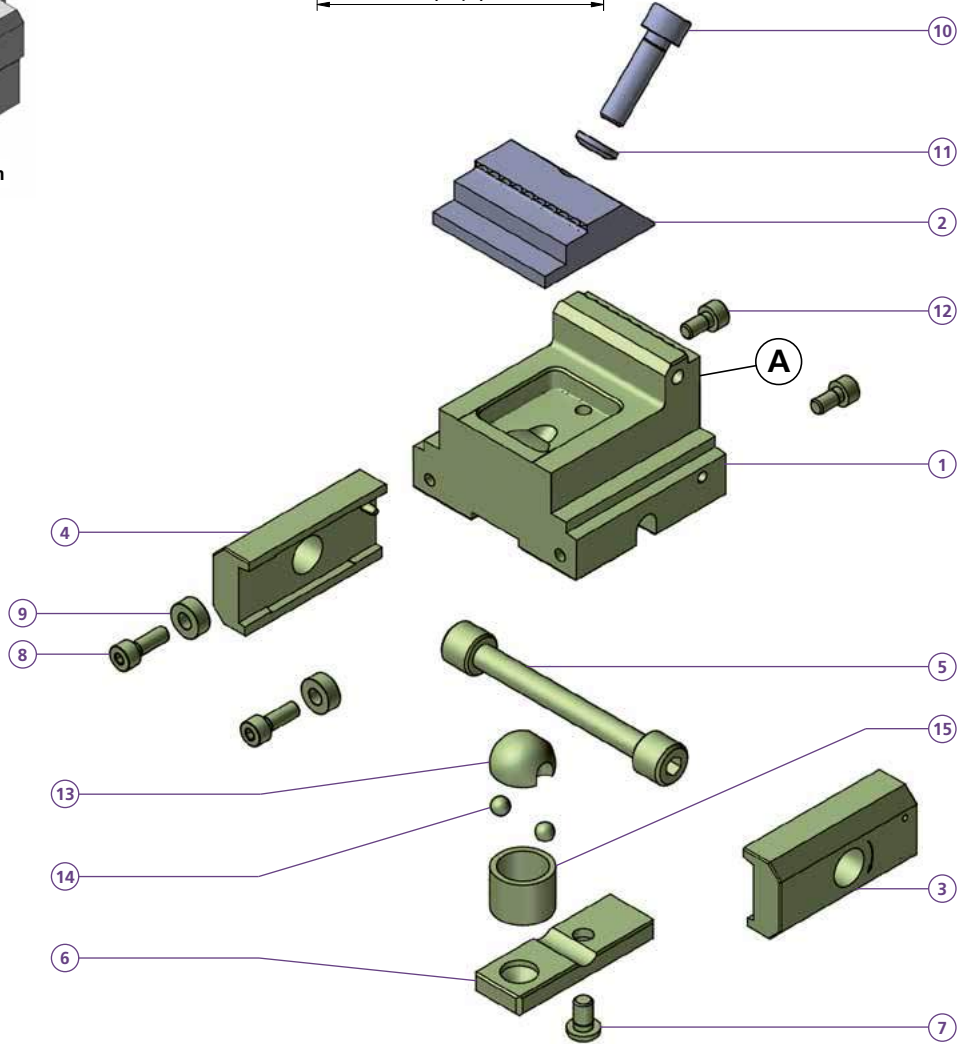
* = weicher Stahl / soft steel HM = Hartmetallbeschichtet / Carbide coated ALU = ENAW-7022

Separat bestellen / Separate order



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 BN869d=6
- H = 34
H1 = 15
kg ~1,0



p. 84

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

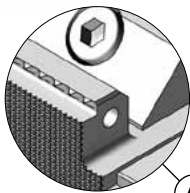
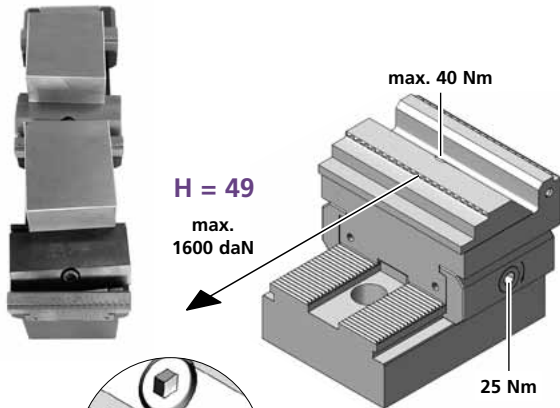
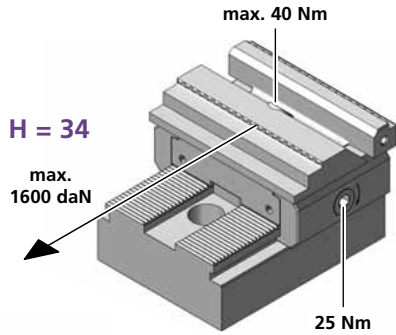
Linear



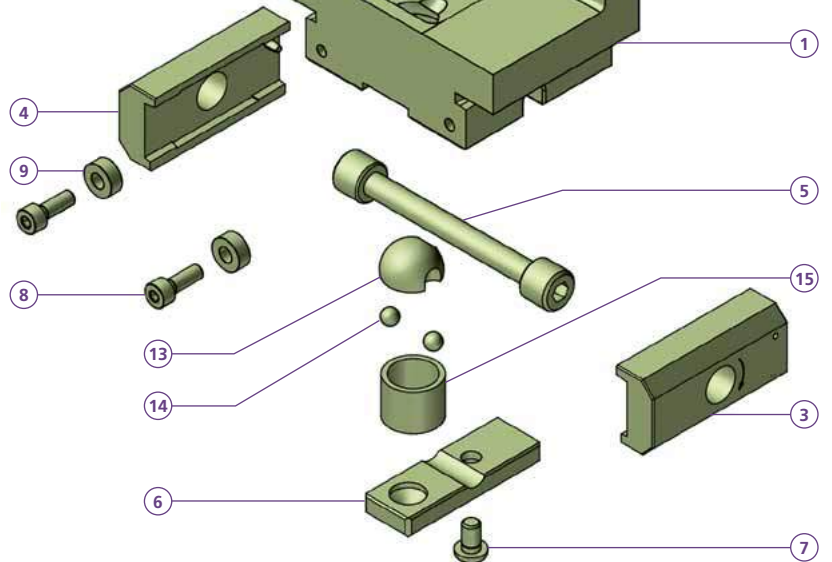
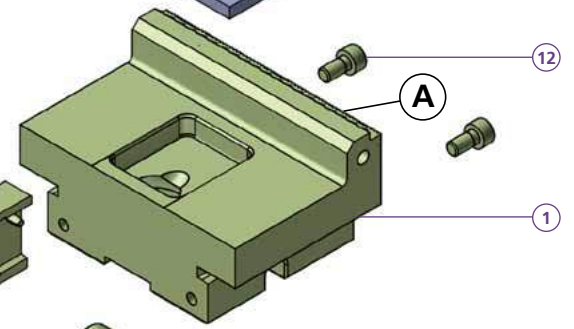
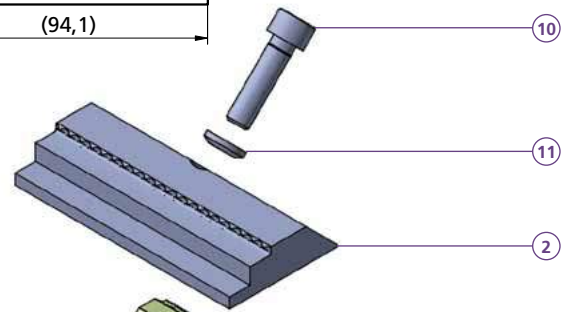
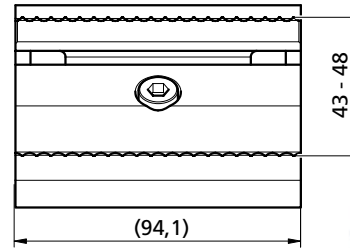
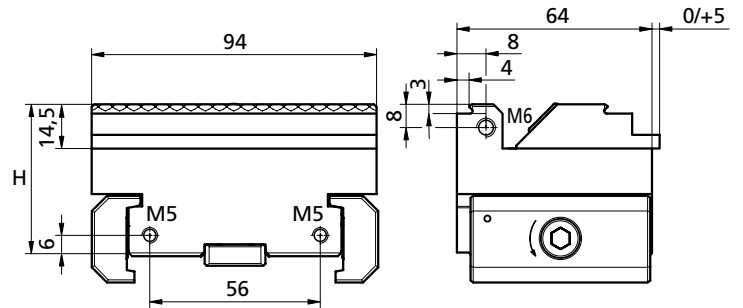
prägen
stamping



powerCLAMP



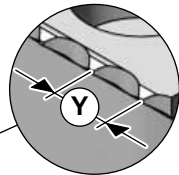
A



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 BN869d=6
- 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

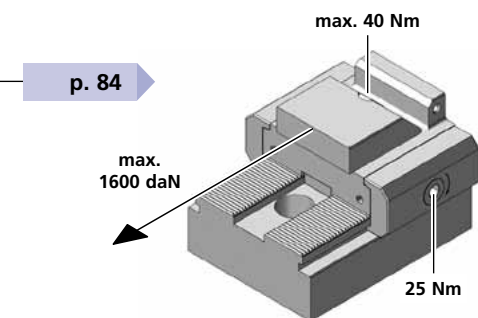
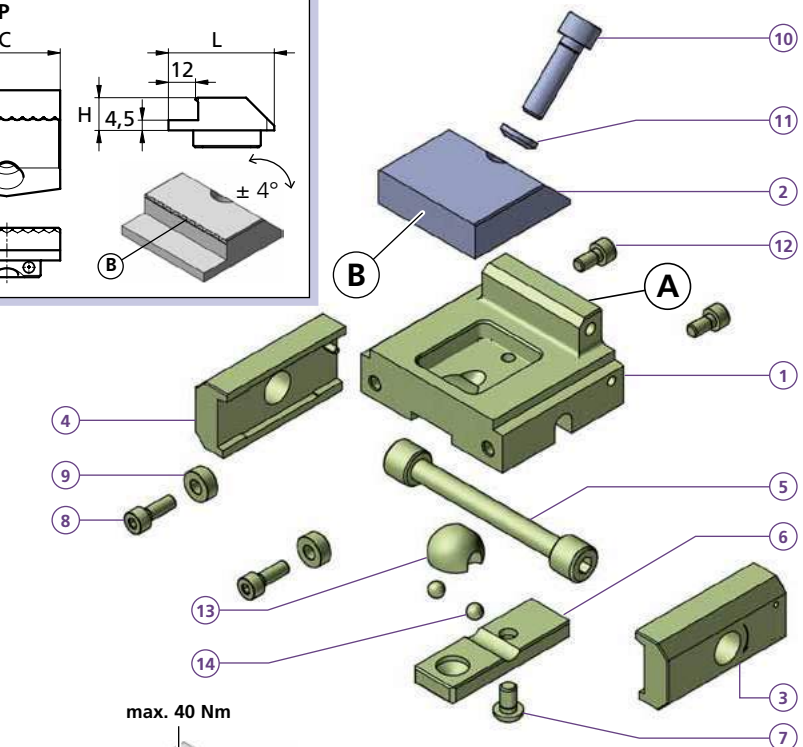
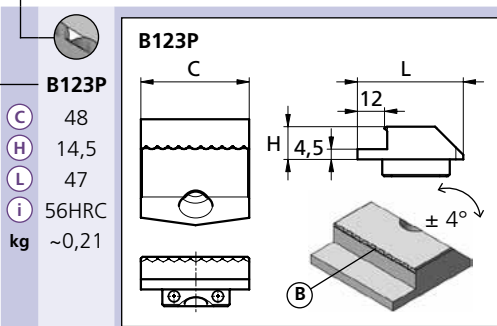
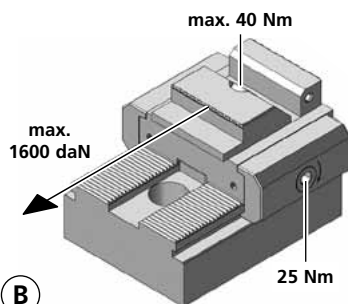
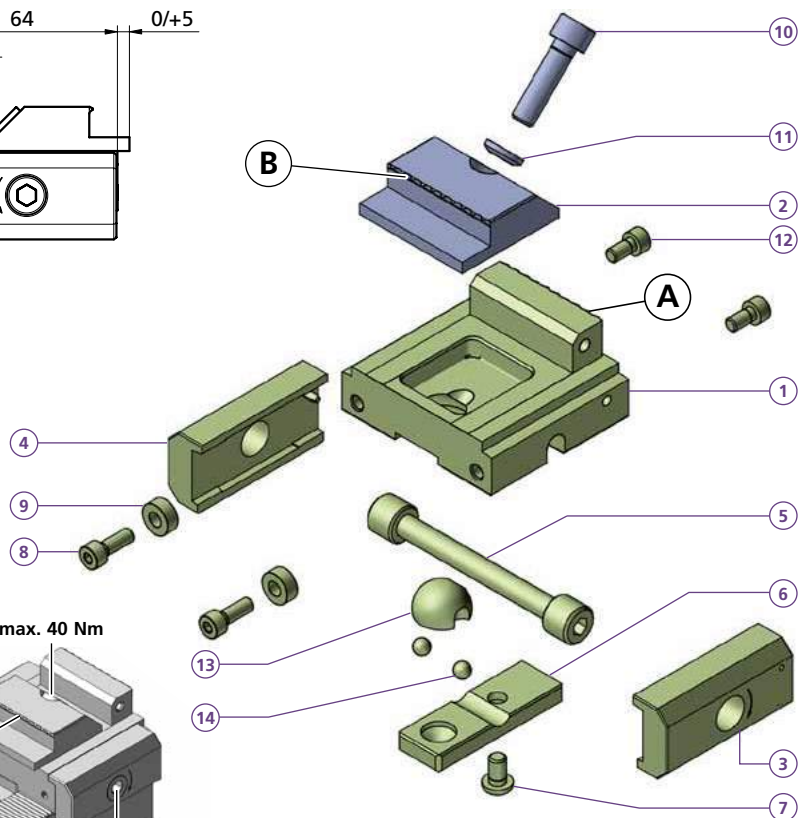
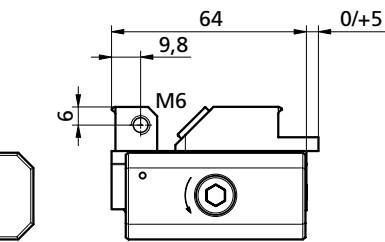
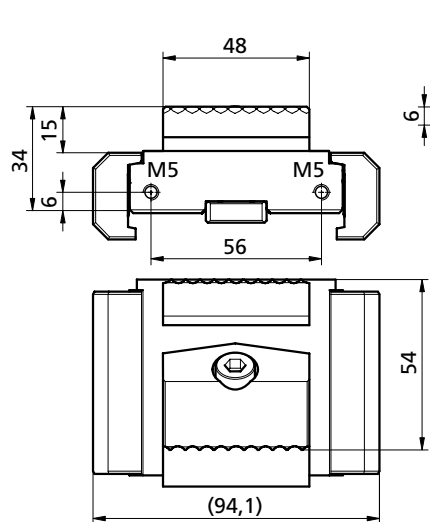
- 1 1x TK140783
 - 15 1x PCD20L15
- H = 49
kg ~1,8

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	BN869d=6
kg		~1,0

PS1R48L34-105

PS1F48L34-105

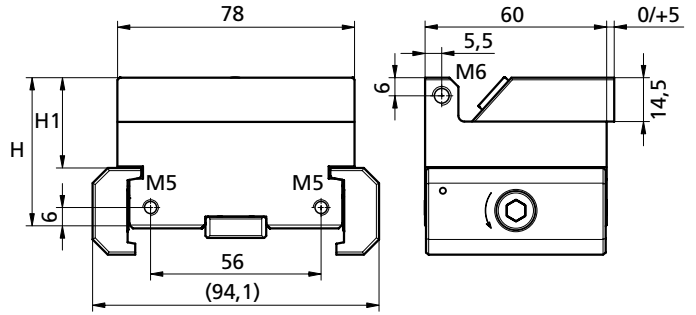
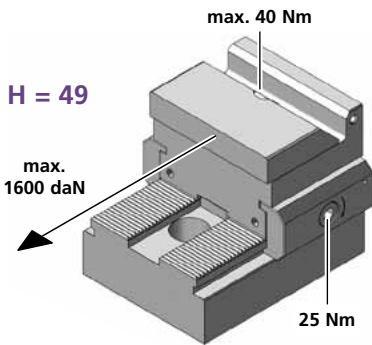
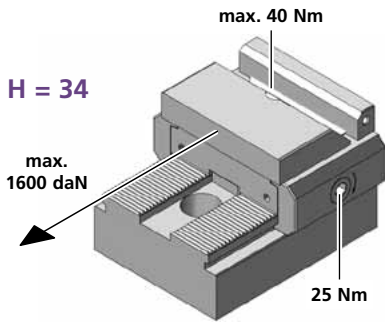
1	1x	TF140573
2	1x	
3	1x	PCSP60R
4	1x	PCSP60L
5	1x	PCS14
6	1x	PCGU2059
7	1x	M6X8ISO7380
8	2x	M5X14ISO4762
9	2x	PCD005
10	1x	M8X30ISO4762
11	1x	PCUSR14
12	2x	M5X10ISO4762
13	1x	PCKMR45M8
14	2x	BN869d=6
kg		~1,0

p. 84

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

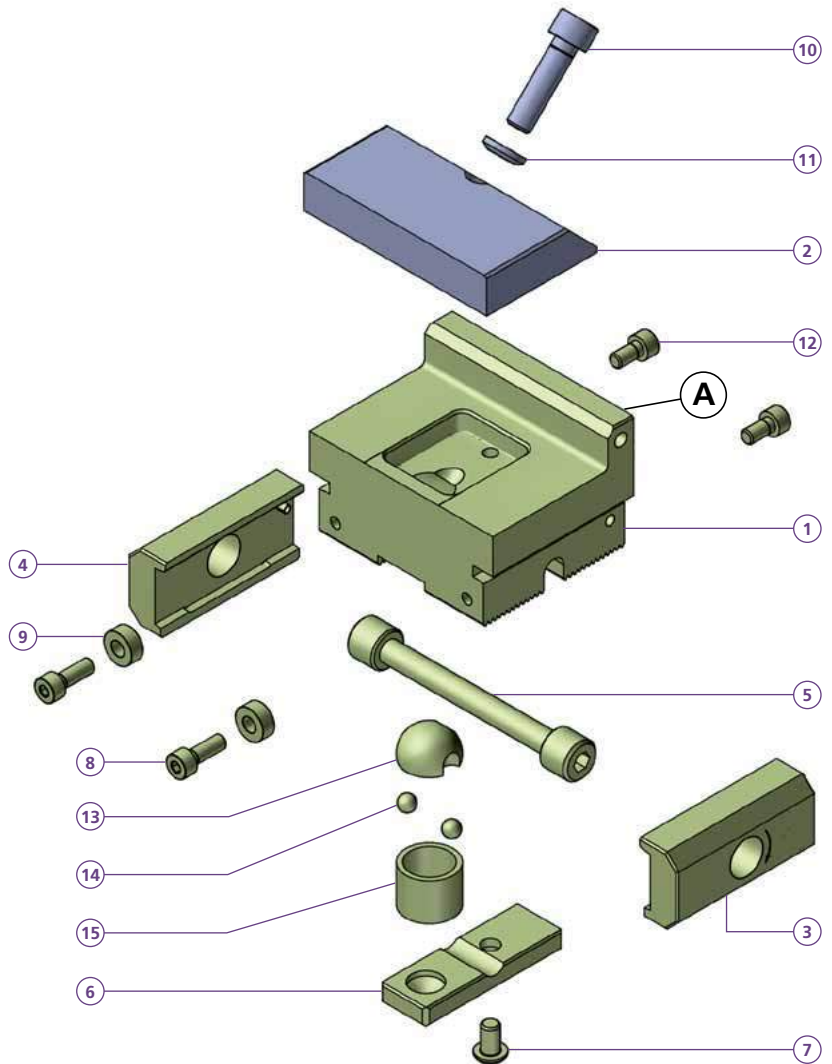
Separat bestellen / Separate order



- 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 BN869d=6
- H = 34
H1 = 15
kg ~1,0

p. 84

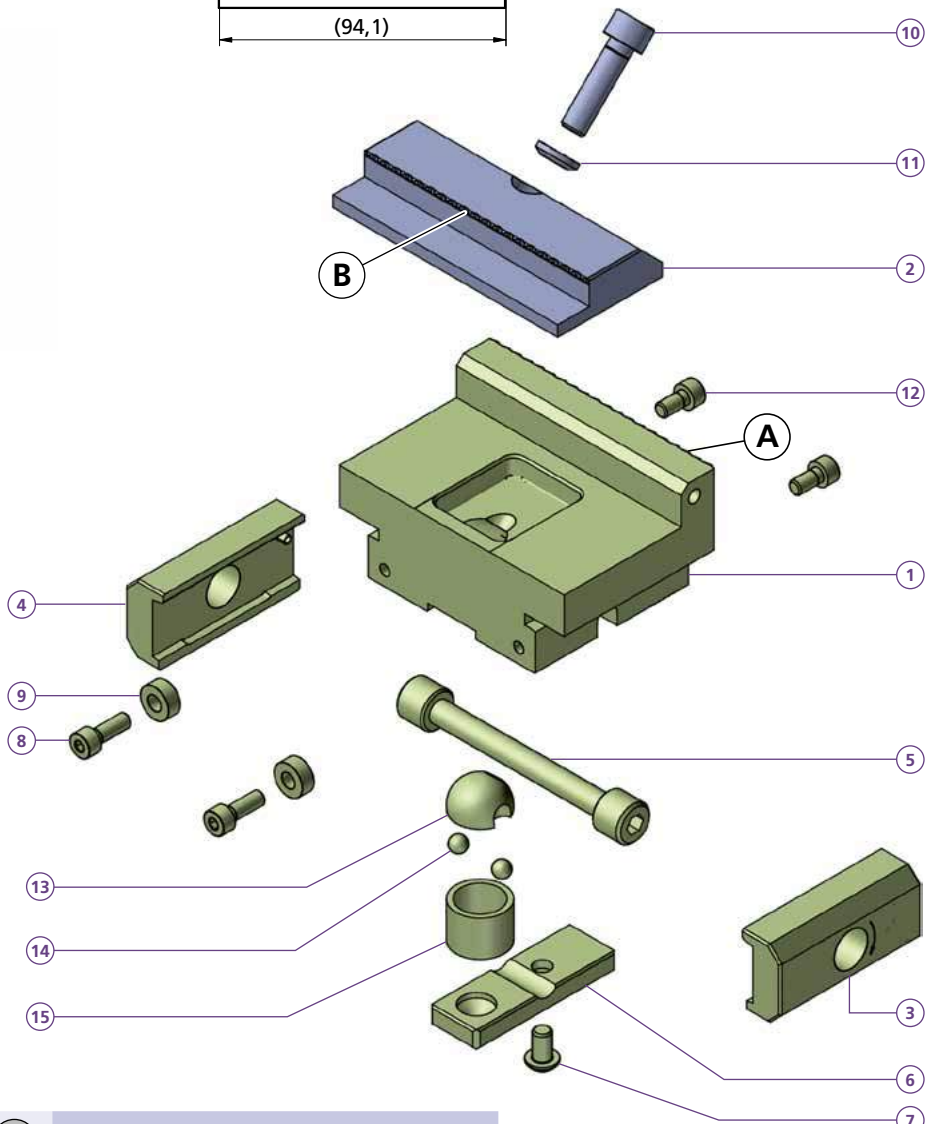
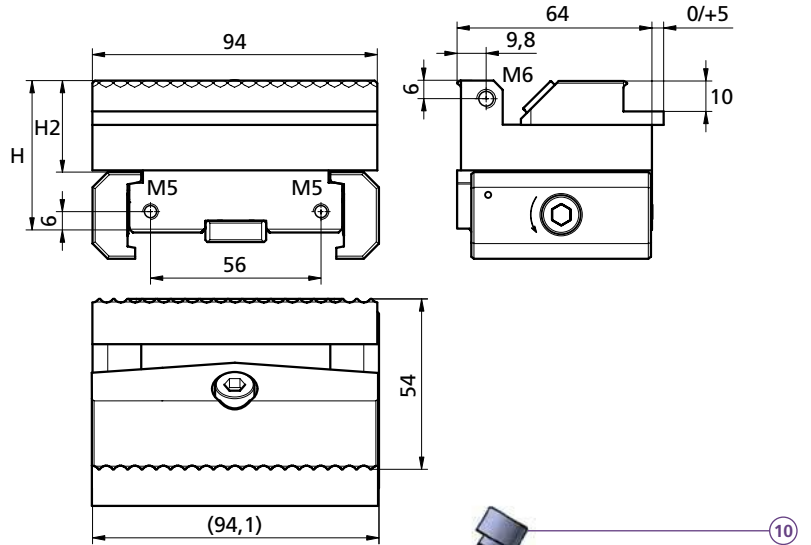
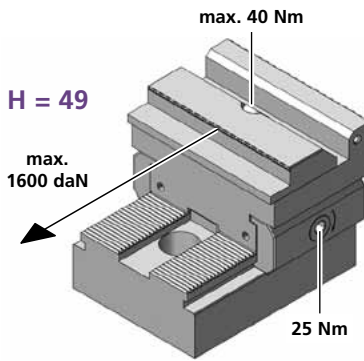
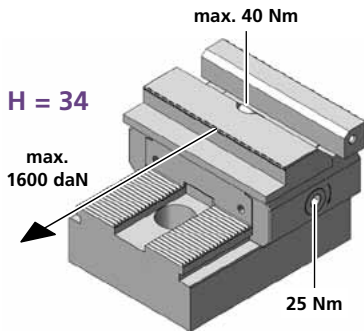
- PS1R78L49-105**
- 1 1x TK110399
 - 15 2x PCD20L15
- PS1F78L49-105**
- 1 1x TK110400
 - 15 2x PCD20L15
- H = 49
H1 = 30
kg ~1,5



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

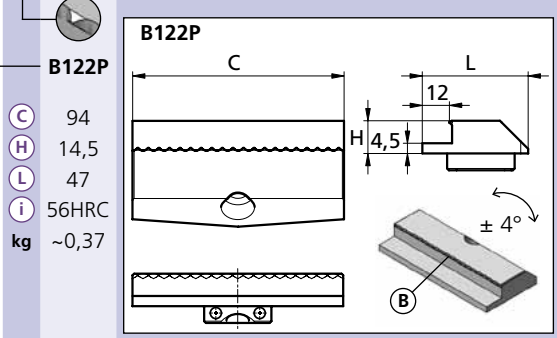
Drehmoment Torque		Spannkraft Workholding force		
Nm	(lb-ft)	~daN	~(lb)	~t
10	7,4	= 400	880	0,4
20	14,8	= 800	1'760	0,8
30	22,2	= 1'200	2'650	1,2
40	29,6	= 1'600	3'530	1,6

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 BN869d=6
H	= 34
H1	= 15
kg	~1,1

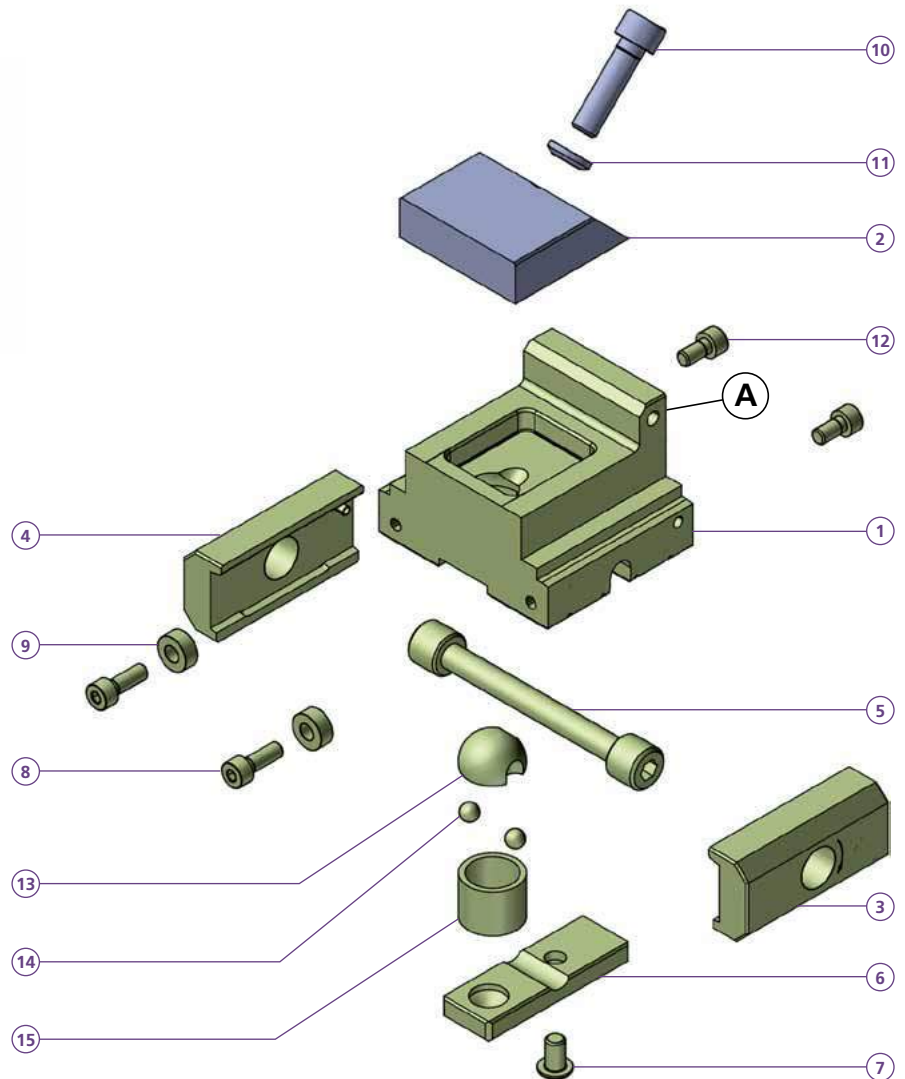
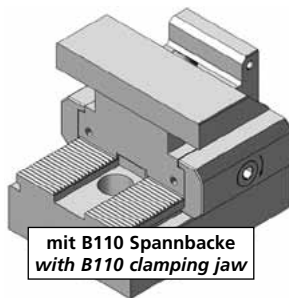
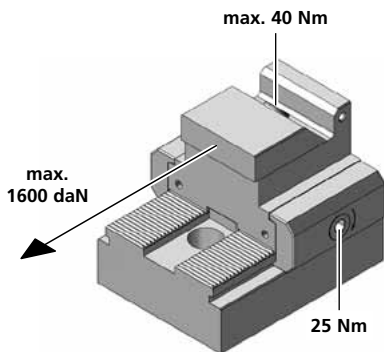
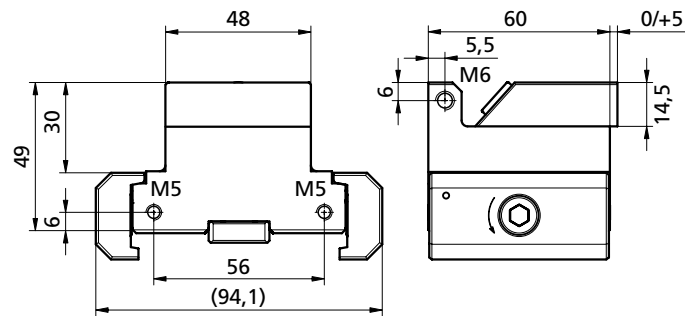
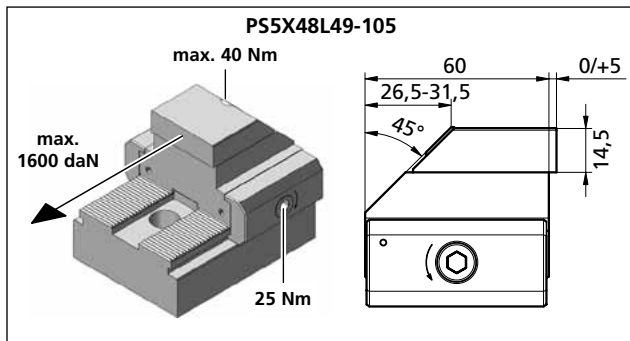
PS1PV94L49-105	
1	1x TK110250
15	1x PCD20L15
H	= 49
H1	= 30
kg	~1,8


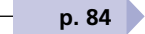


Bestellbeispiel / Ordering example:
1x PS1PV94L49-105 & 1x B122P

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



	PS5X48L49-105
1	1x TF190651
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,2
	PS1F48L49-105
1	1x TF140673
	PS1R48L49-105
1	1x TF140672
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 BN869d=6
15	1x PCD20L15
kg	~1,3

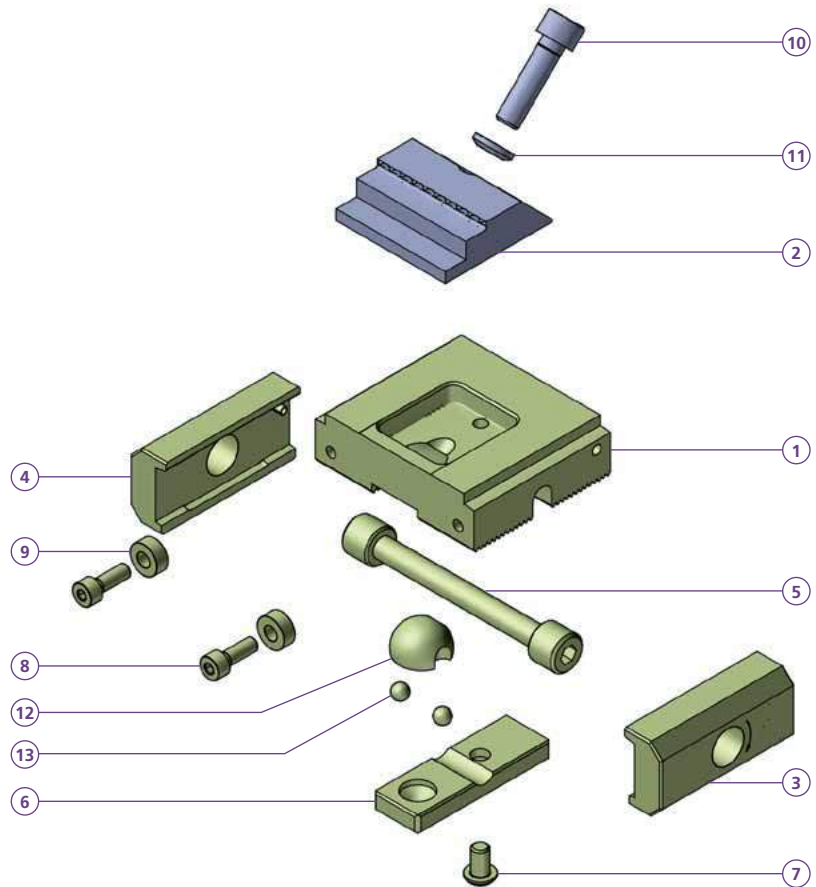
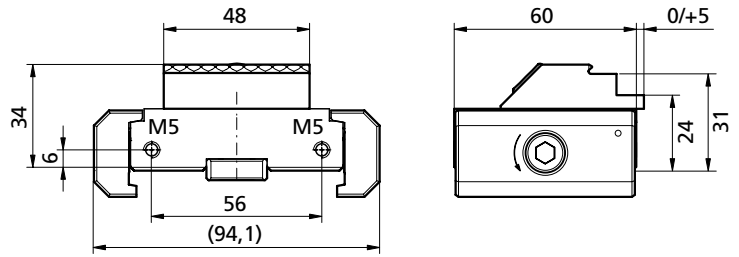
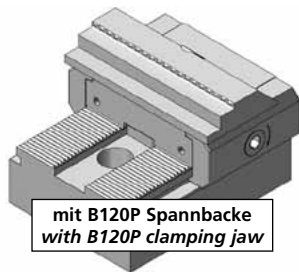
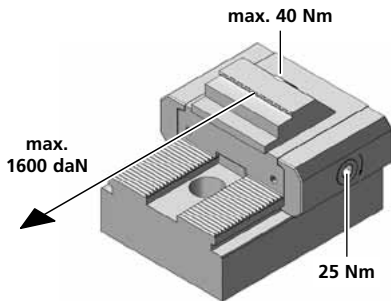


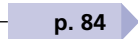
Bestellbeispiel / Ordering example:
1x PS1F48L49-105 & 1x B105

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

Separat bestellen / Separate order

PS5X48L34-105

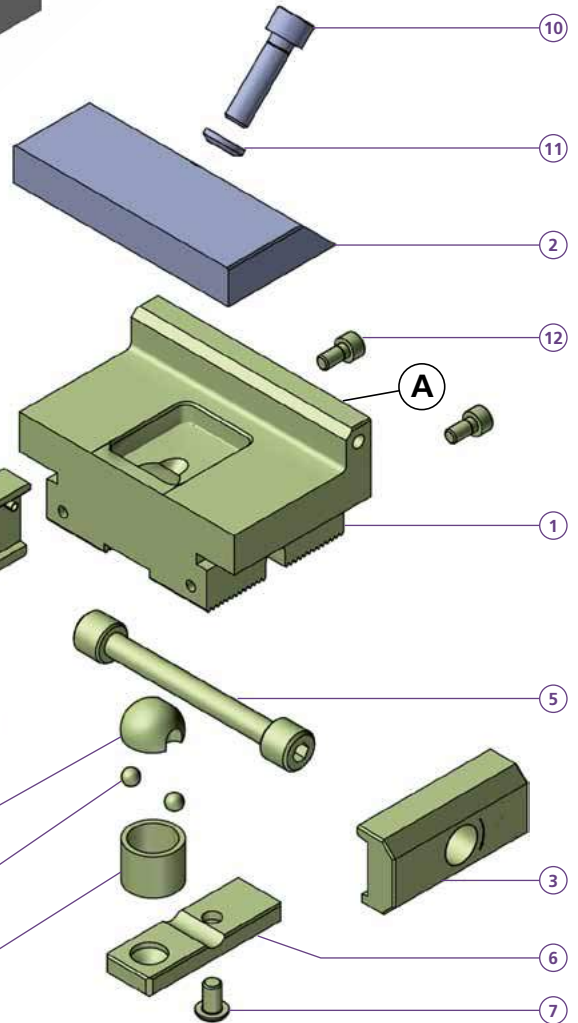
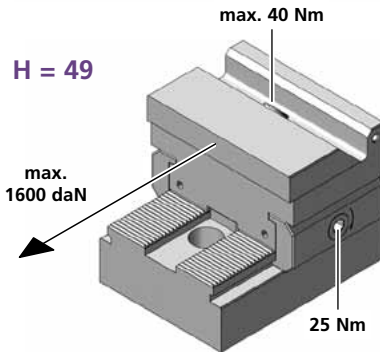
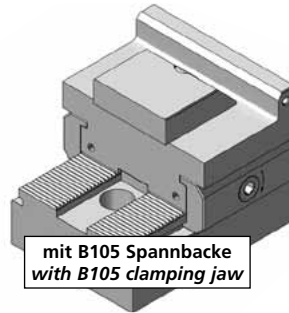
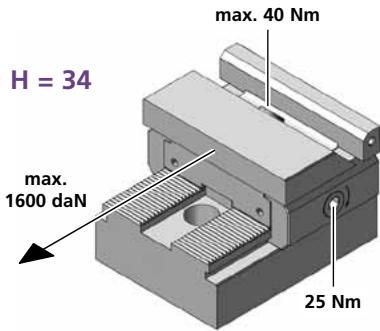
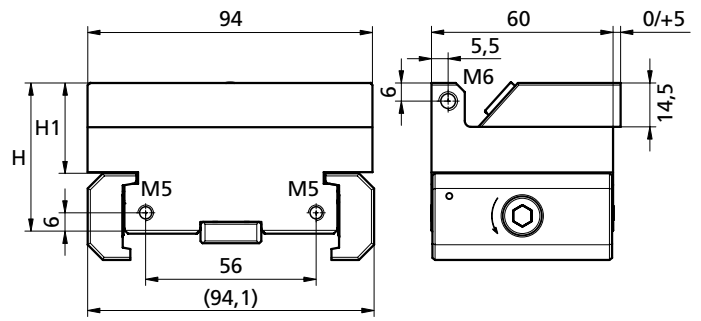
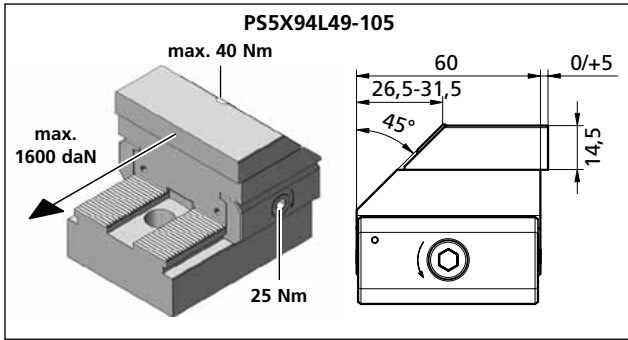


PS5X48L34-105	
1	1x TB210599
2	1x 
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X28ISO4762
11	1x PCUSR16
12	1x PCKMR45M8
13	2x BN869d=6
kg	~0,9

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

Separat bestellen / Separate order

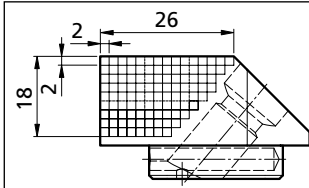


	PS5X94L49-105
1	1x TW100186
15	2x PCD20L15
9	2x PCD005
8	2x M5X14ISO4762
kg	~1,5
	PS1F94L34-105
1	1x TH130785
	PS1R94L34-105
1	1x TH130786
2	1x p. 84
3	1x PCSP60R
4	1x PCSP60L
5	1x PCS14
6	1x PCGU2059
7	1x M6X8ISO7380
8	2x M5X14ISO4762
9	2x PCD005
10	1x M8X30ISO4762
11	1x PCUSR14
12	2x M5X10ISO4762
13	1x PCKMR45M8
14	2x BN869d=6
H	= 34
H1	= 15
kg	~1,0

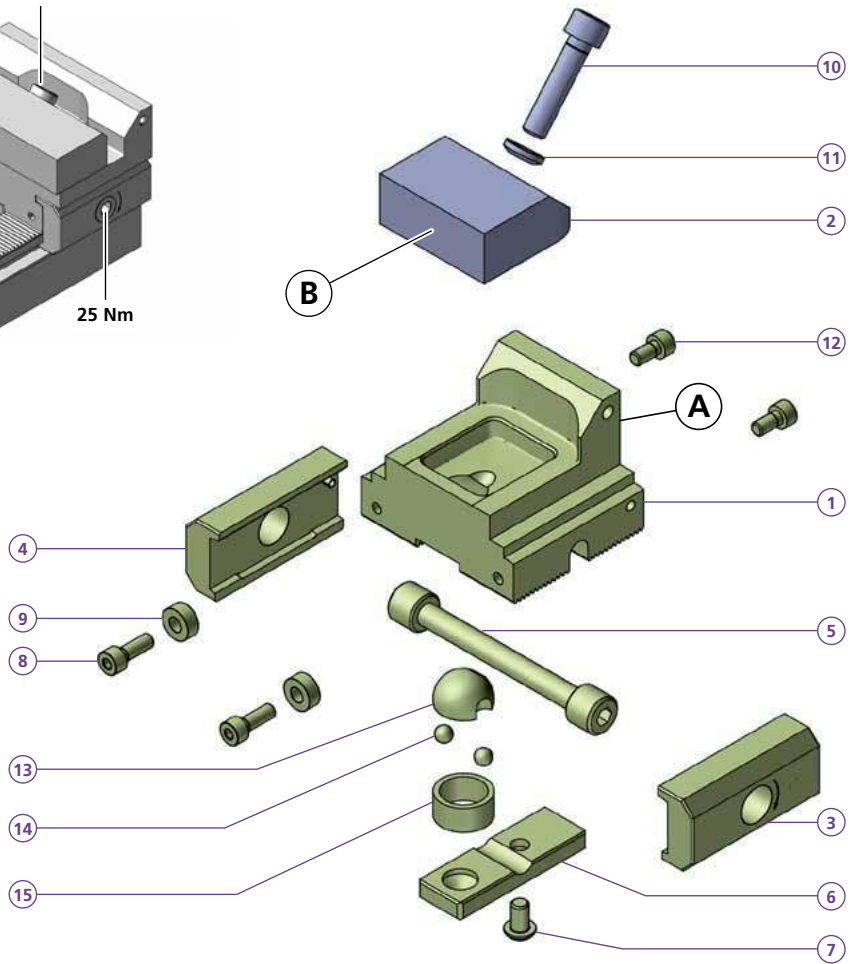
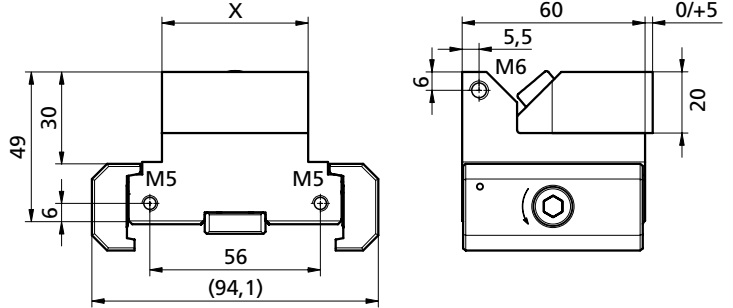
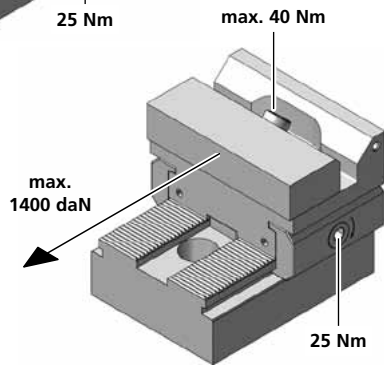
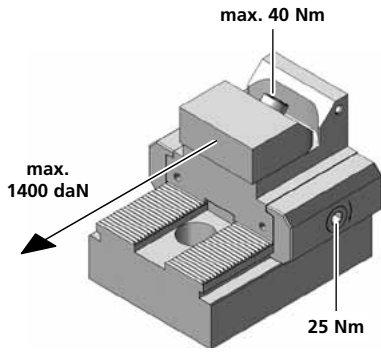
	PS1F94L49-105
1	1x TF140674
15	2x PCD20L15
	PS1R94L49-105
1	1x TF140675
15	2x PCD20L15
H	= 49
H1	= 30
kg	~1,7

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



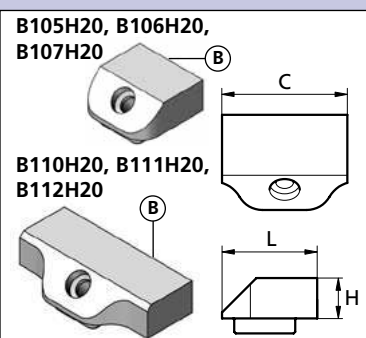
Zum Erstellen Ihrer individuellen Formbacke: *If a dedicated jaw is being machined:*
 Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe
Sectional drawing to determine the maximum machining depth



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 BN869d=6
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

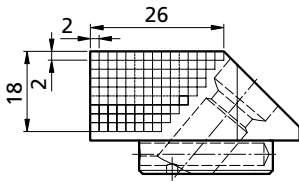


B105H20, B106H20, B107H20

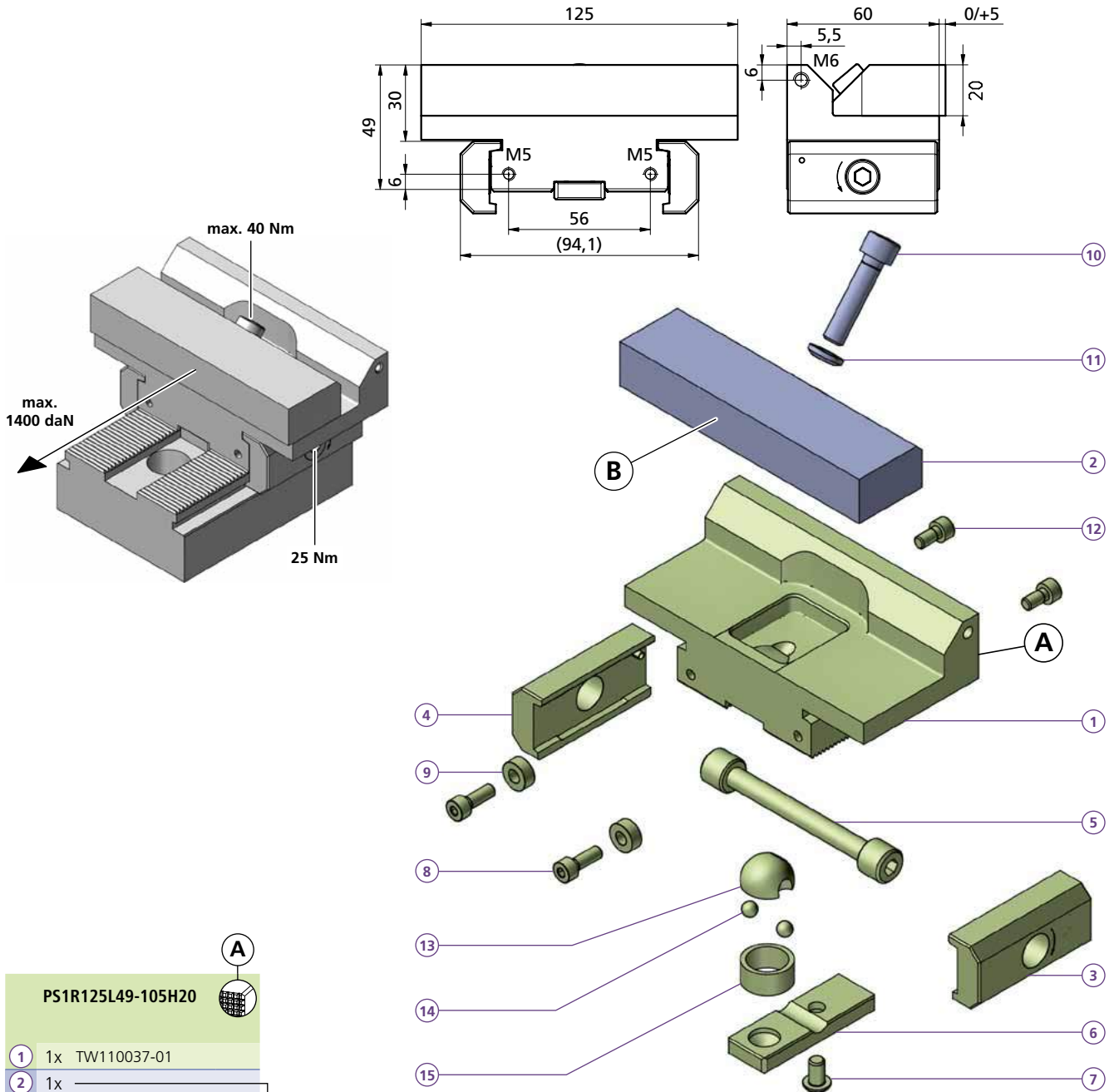
B110H20, B111H20, B112H20

Separat bestellen / Separate order

PS1R125L49-105H20






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



PS1R125L49-105H20 	
1	1x TW110037-01
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 BN869d=6
15	1x PCD20L095
kg	~1,7

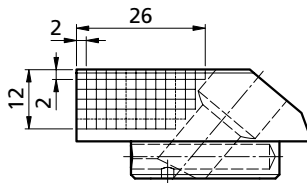
Bestellbeispiel / Ordering example: 1x PS1R125L49-105H20 & 1x B132H20P

	 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

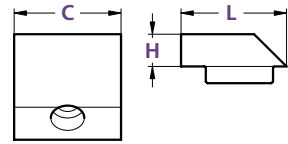
Separat bestellen / Separate order



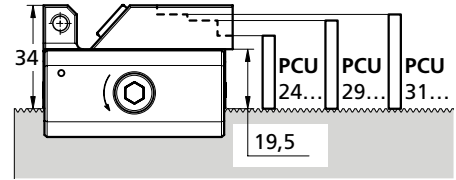
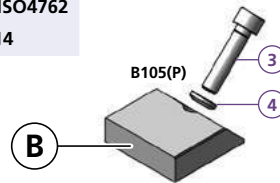
Zum Erstellen Ihrer individuellen Formbacke: *If a dedicated jaw is being machined:*
Schnittzeichnung zum Ermitteln der maximalen Bearbeitungsprofiltiefe *Sectional drawing to determine the maximum machining depth*

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

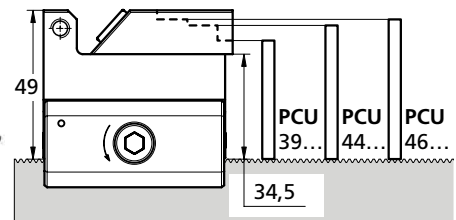
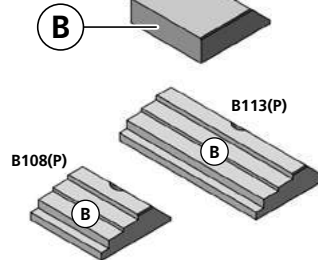
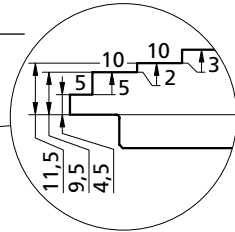
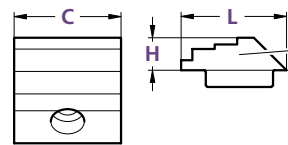
B105... , B106P, B107... , B110... , B111... , B112..., B140... , B141...



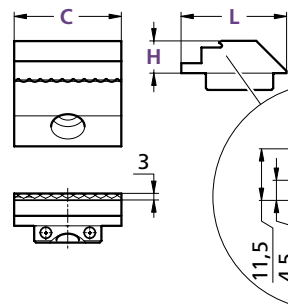
- 3 1x M8X30ISO4762
- 4 1x PCUSR14



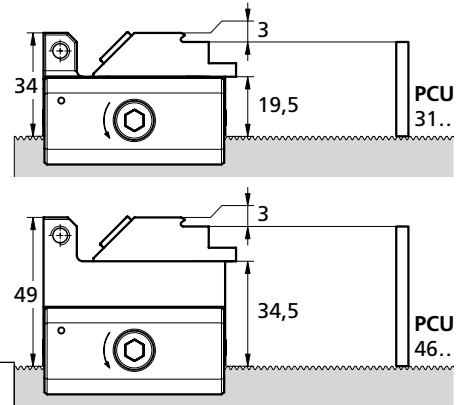
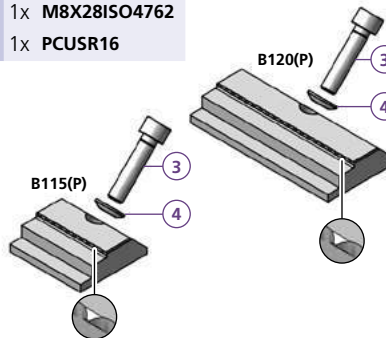
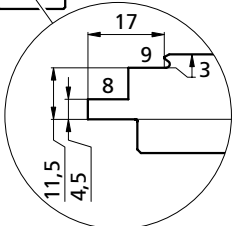
B108... , B113...



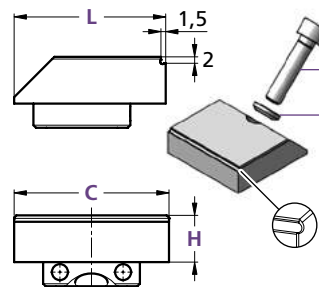
B115... , B120...



- 3 1x M8X28ISO4762
- 4 1x PCUSR16

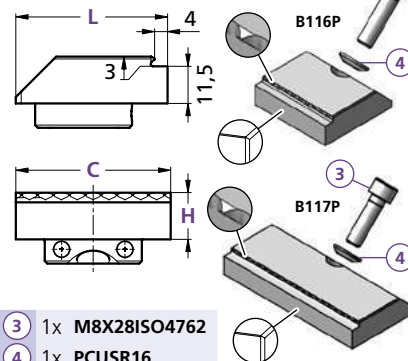


B105-15



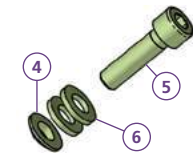
- 3 1x M8X30ISO4762
- 4 1x PCUSR14

B116P, B117P



- 3 1x M8X28ISO4762
- 4 1x PCUSR16

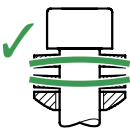
Krafterhaltung mit Nachfederung
Spring loaded mechanism to maintain clamping force



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

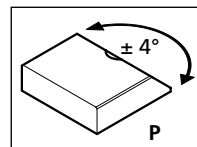
Tellerfedern gegenläufig montieren

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	HV700	HV700
	x0,2mm	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

Anschlagmodule End module

PAND19-49

PAND26-49

PAND34-49

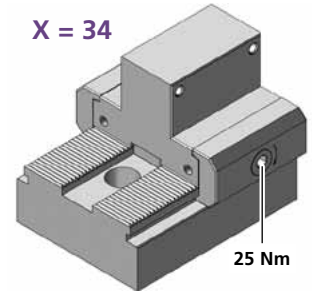
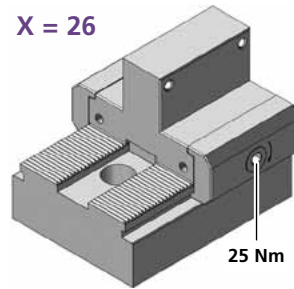
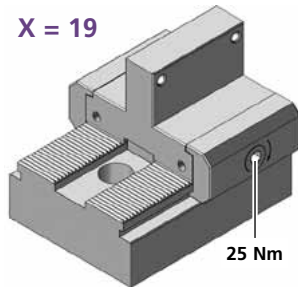
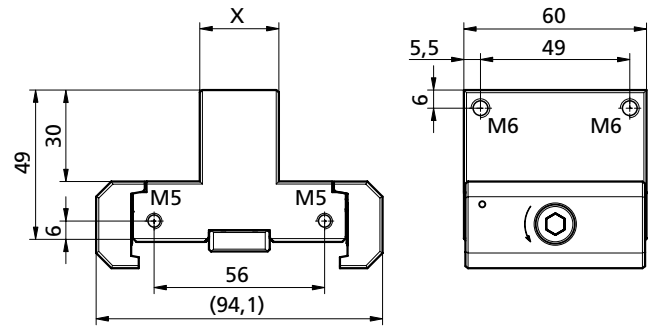
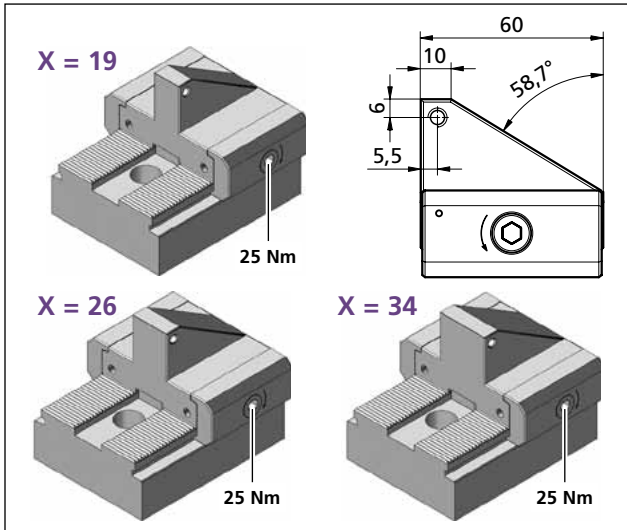
PA5X19-49R/F

PA5X26-49R/F

PA5X34-49R/F

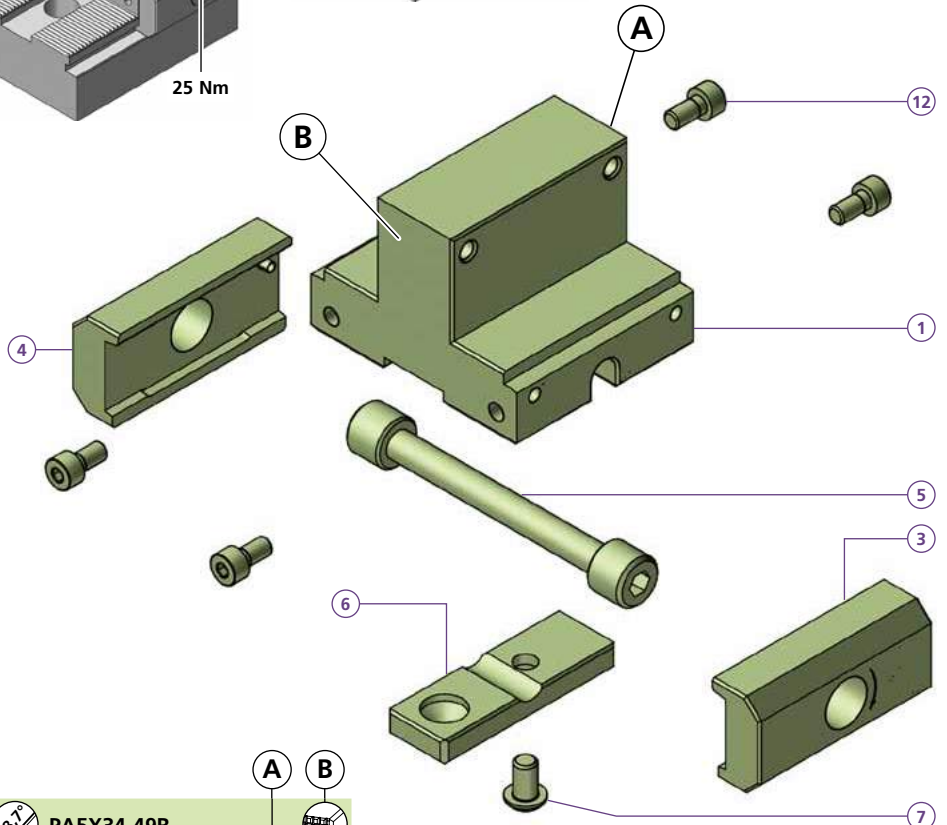


powerCLAMP

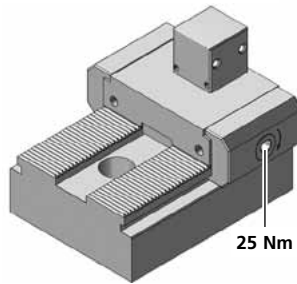
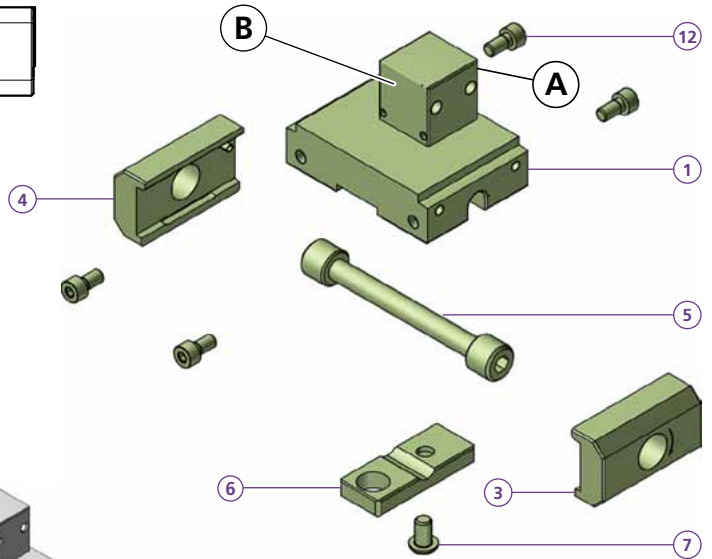
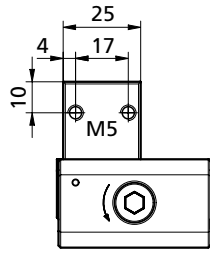
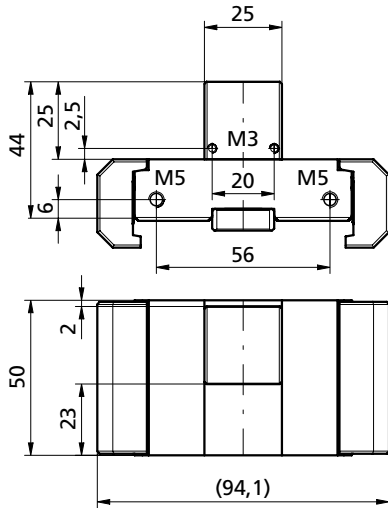


	PA5X19-49R		
	1x TF140617		
	2x M5X10ISO4762		
	PA5X19-49F		
	1x TF140618		
	2x M5X10ISO4762		
kg	~1,1		
	PAND19-49		
	1x TF140619		
	1x PCSP60R		
	1x PCSP60L		
	1x PCS14		
	1x PCGU2049		
	1x M6X8ISO7380		
	4x M5X10ISO4762		
X	= 19		
kg	~1,2		
	PA5X26-49R		
	1x TF140621		
	2x M5X10ISO4762		
	PA5X26-49F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

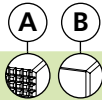
	PA5X34-49R		
	1x TF140024		
	2x M5X10ISO4762		
	PA5X34-49F		
	1x TF140023		
	2x M5X10ISO4762		
kg	~1,3		
	PAND34-49		
	1x TF140625		
X	= 34		
kg	~1,6		



Bestellbeispiel / Ordering example: PAND19-49

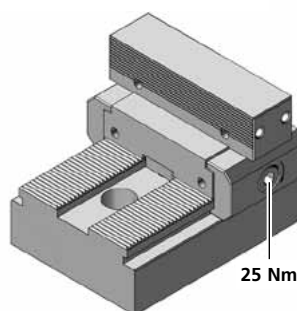
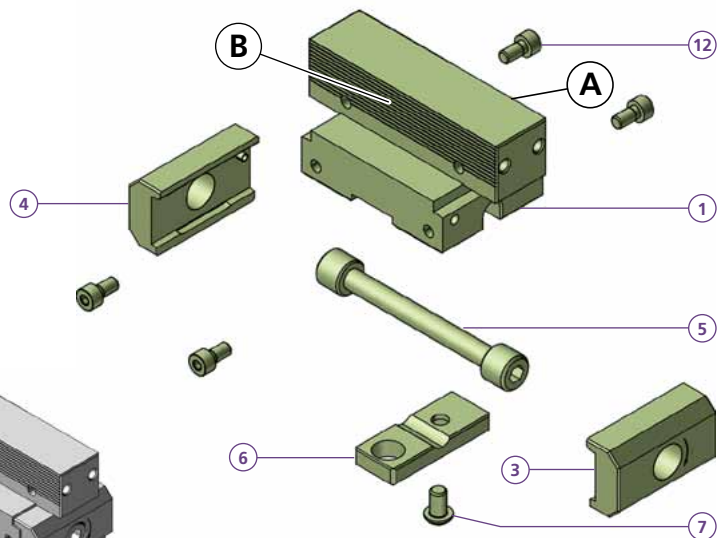
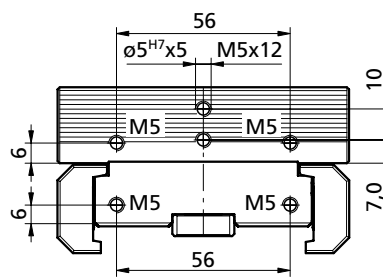
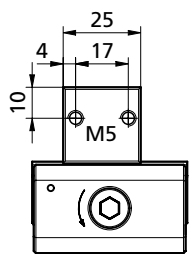
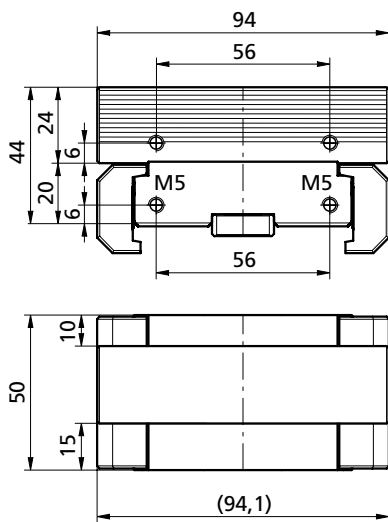


PAND25-44

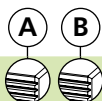


- ① 1x TF140626
 - ③ 1x PCSP50R
 - ④ 1x PCSP50L
 - ⑤ 1x PCS14
 - ⑥ 1x PCGU2049
 - ⑦ 1x M6X8ISO7380
 - ⑫ 4x M5X10ISO4762
- kg ~0,9

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

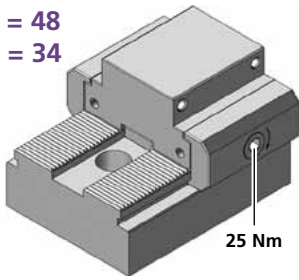
PAND58-49

PAND61-34



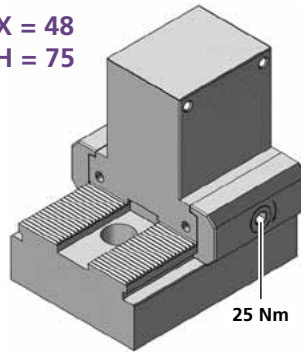
powerCLAMP

X = 48
H = 34

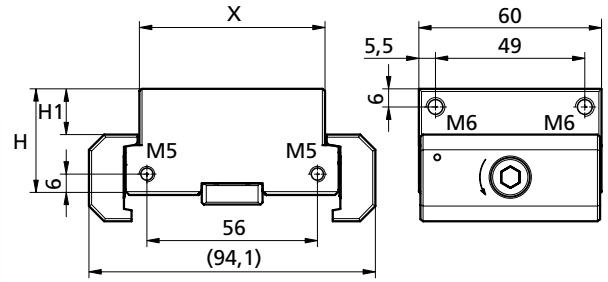


25 Nm

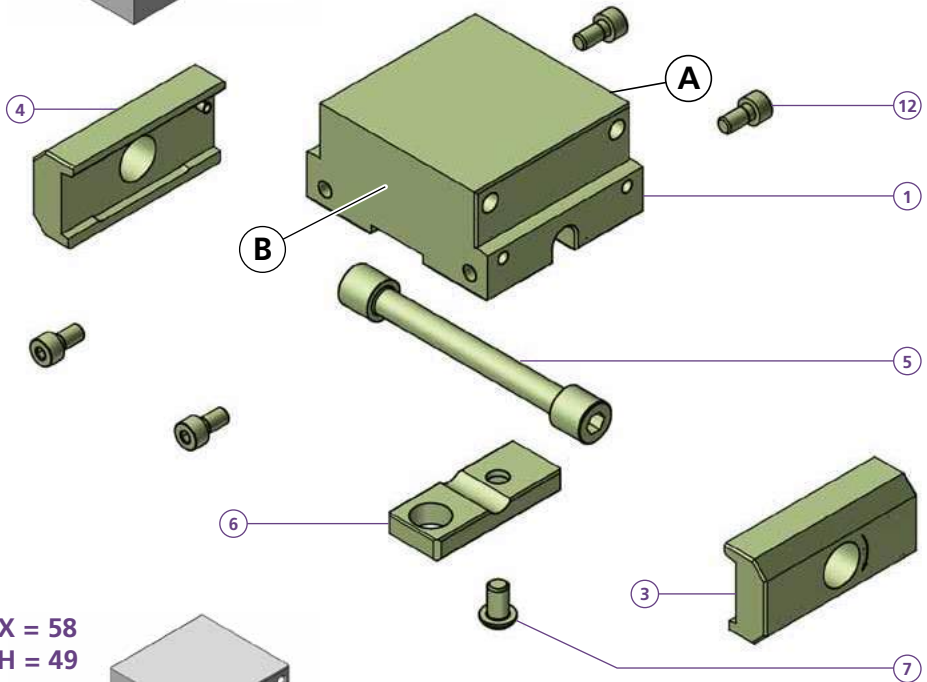
X = 48
H = 75



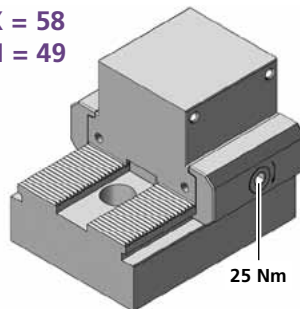
25 Nm



	A	B
PAND48-34		
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	
PAND48-75		
1	1x TK120053	
X	= 48	
H	= 75	
H1	= 56	
kg	~2,2	
PAND58-34		
1	1x TF140629	
X	= 58	
H	= 34	
H1	= 15	
kg	~1,4	
PAND58-49		
1	1x TK120130	
X	= 58	
H	= 49	
H1	= 30	
kg	~1,8	
PAND61-34		
1	1x TF140630	
X	= 61	
H	= 34	
H1	= 15	
kg	~1,4	

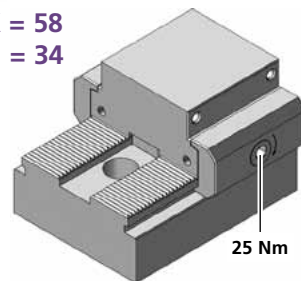


X = 58
H = 49



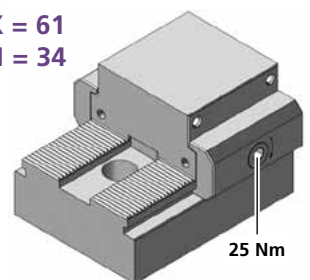
25 Nm

X = 58
H = 34



25 Nm

X = 61
H = 34

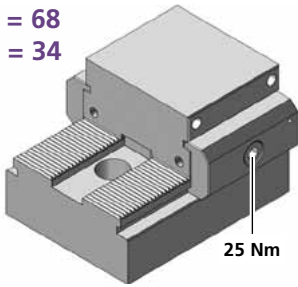


25 Nm

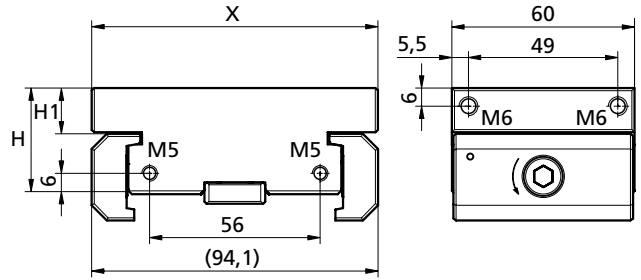
Bestellbeispiel / Ordering example: PAND61-34



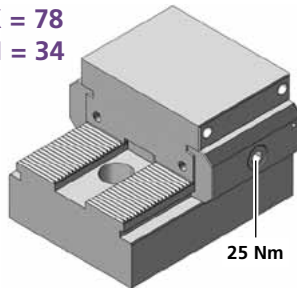
X = 68
H = 34



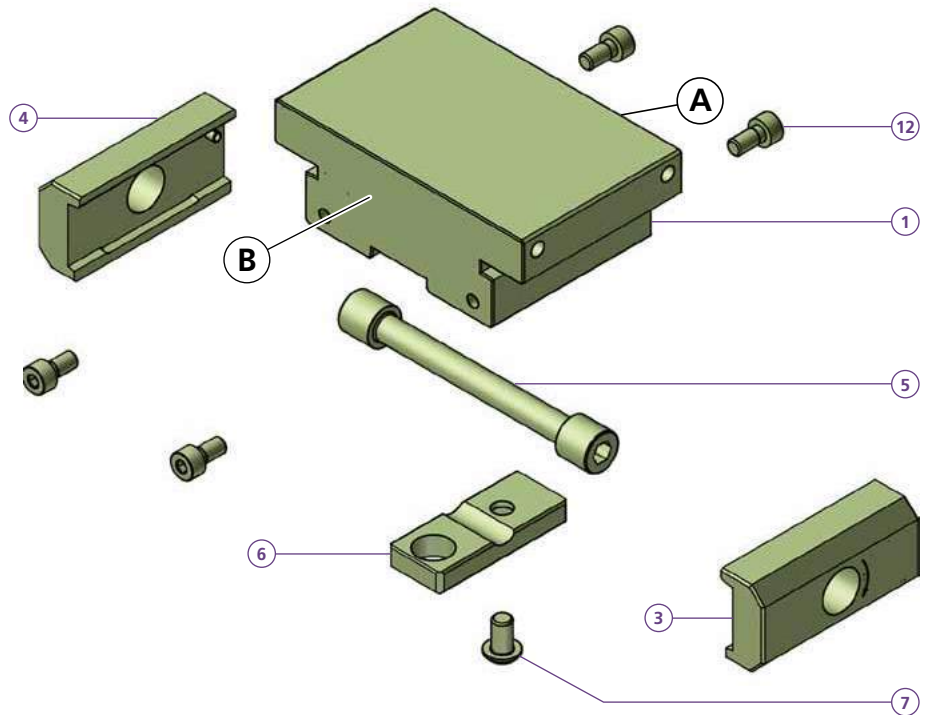
25 Nm



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

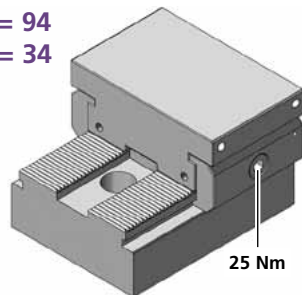
PAND94-34

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

PAND78-49

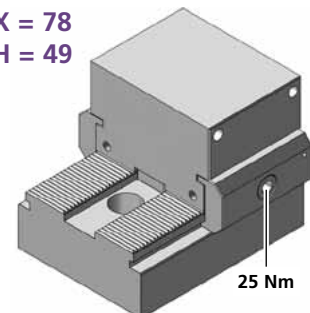
- 1 1x TF140634
- X = 78
- H = 49
- H1 = 30
- kg ~2,0

X = 94
H = 34



25 Nm

X = 78
H = 49



25 Nm

Bestellbeispiel / Ordering example: PAND94-34

PAND43-49

PAND125-49

PA5X94-49R/F

PAND48-49

PA5X43-49R/F

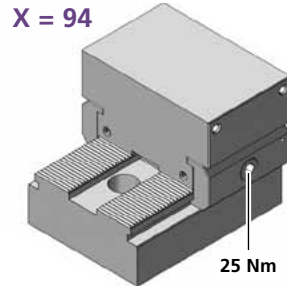
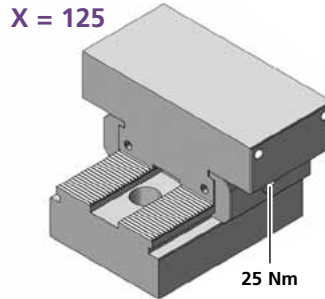
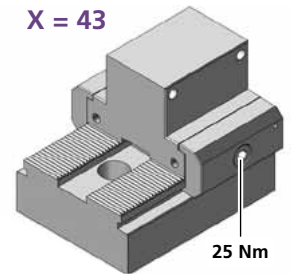
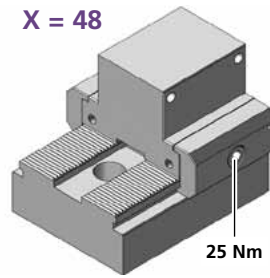
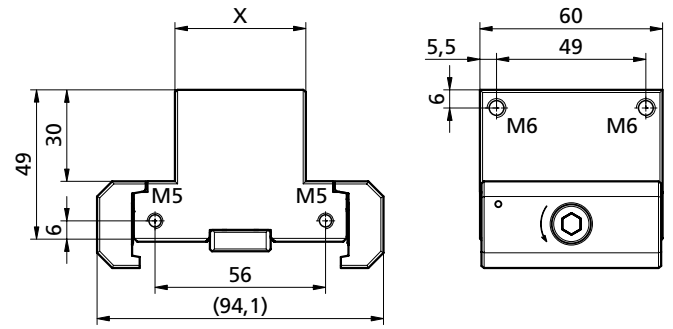
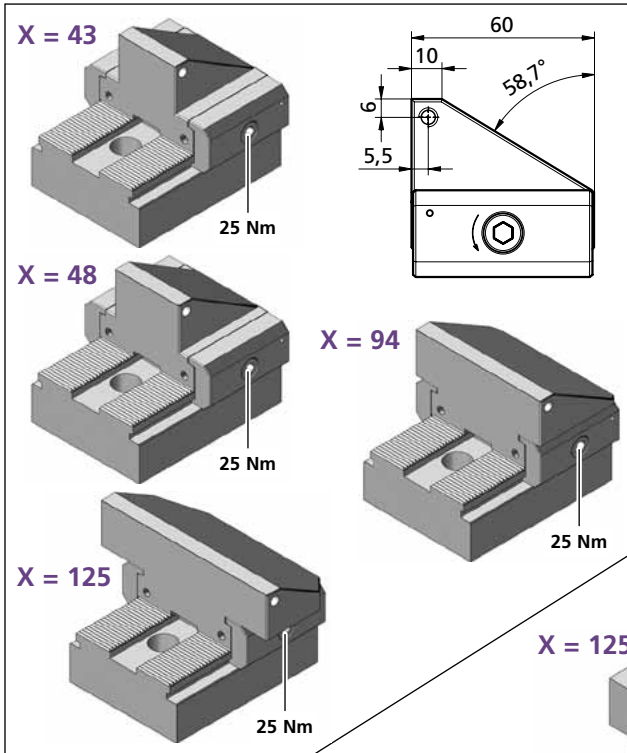
PA5X125-49R/F

PAND94-49

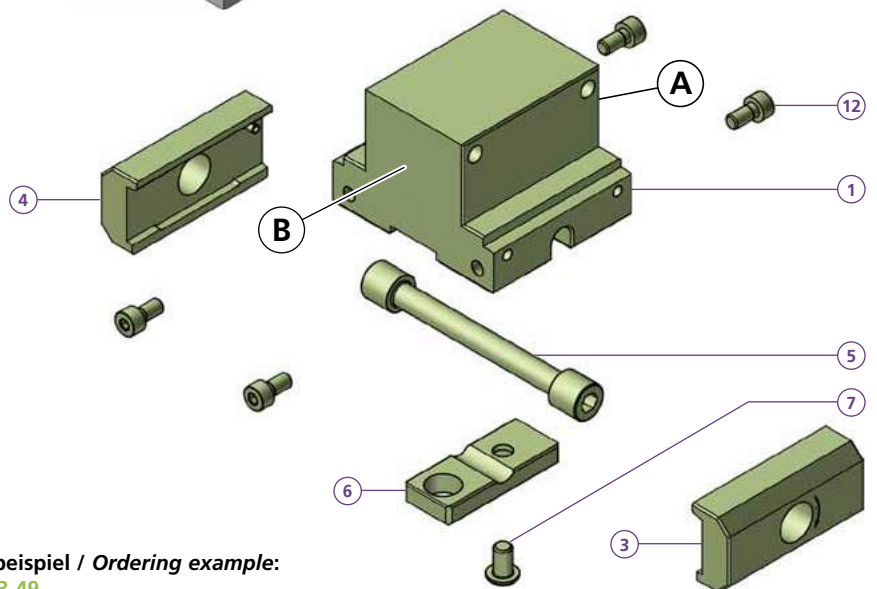
PA5X48-49R/F



powerCLAMP



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



Bestellbeispiel / Ordering example:
PAND43-49

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

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



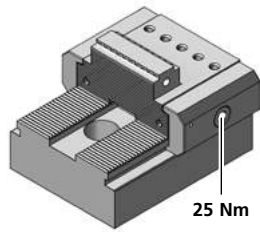
PAND48-34PRG-A1

1x TH120684

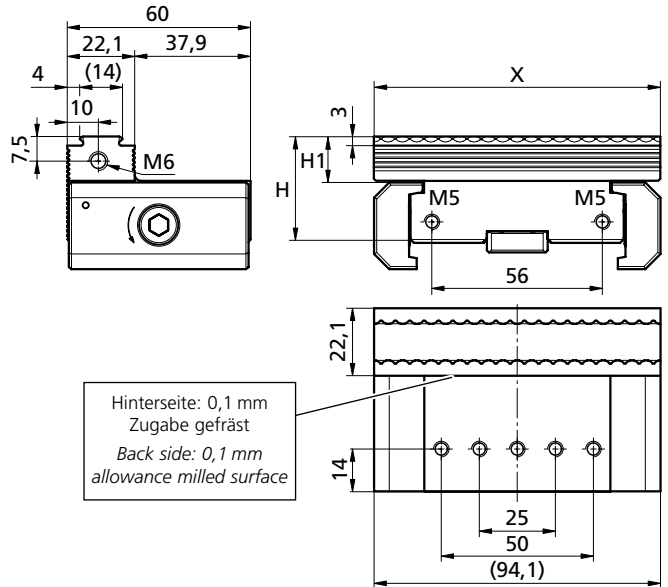
PAND48-34PRF-A1

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

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



25 Nm



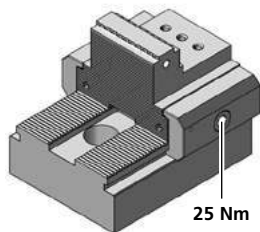
PAND48-49PRG-A1

1x TH120685

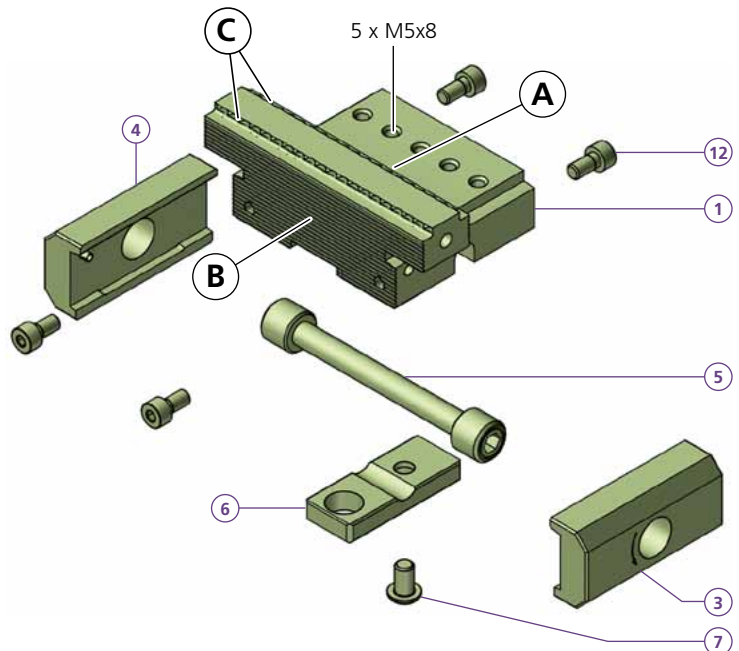
PAND48-49PRF-A1

1x TK140597

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



25 Nm



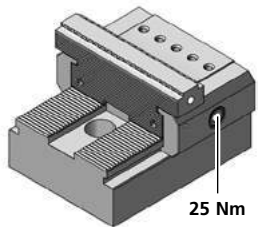
PAND94-34PRG-A1

1x TH120686

PAND94-34PRF-A1

1x TH140185

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



25 Nm

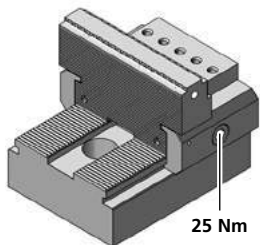
PAND94-49PRG-A1

1x TH120687

PAND94-49PRF-A1

1x TH130754

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

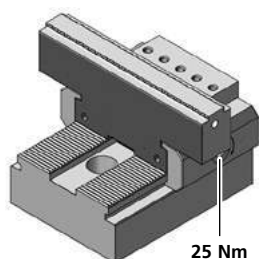


25 Nm

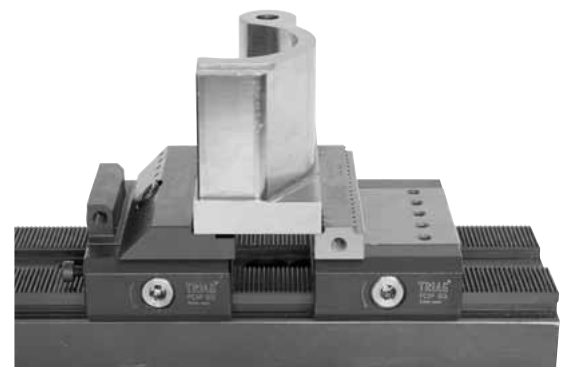
PAND125-49PRG-A1

1x TB160295

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



25 Nm



Bestellbeispiel / Ordering example: PAND94-34PRG-A1

PAND125-34PRG-A1

PAND150-34PRG-A1

PAND94-34PRGV

PAND94-49PRGV

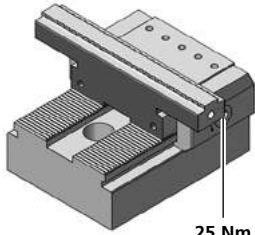


prägen
stamping

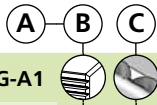


powerCLAMP

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

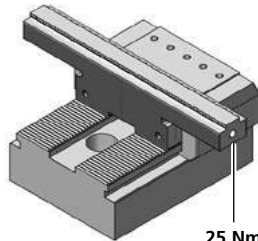
7 1x M6X8ISO7380

12 4x M5X10ISO4762

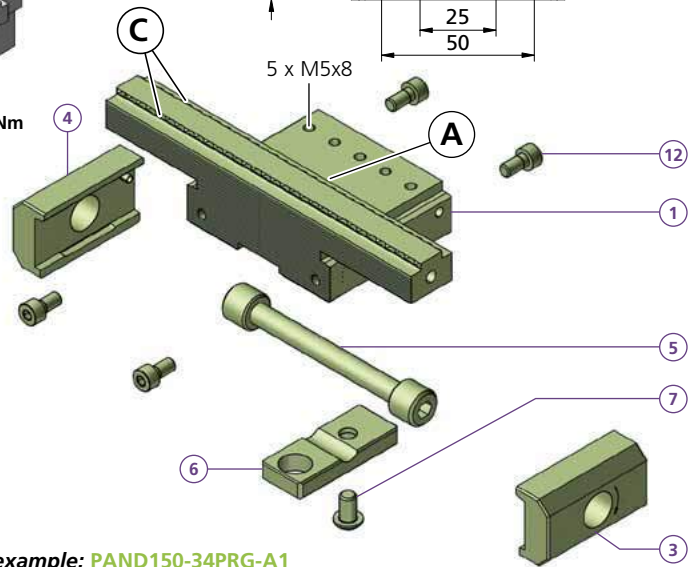
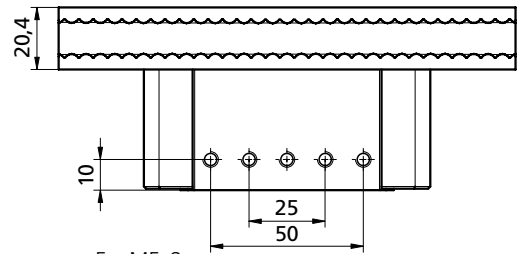
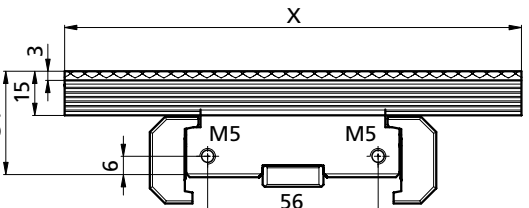
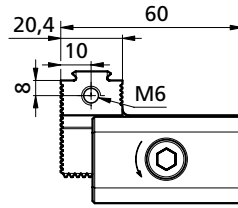
X = 150

kg ~1,2

X = 150

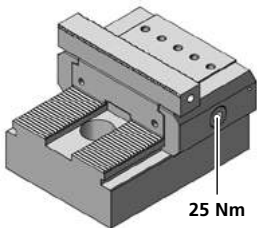


25 Nm



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

PAND94-49PRGV

1 1x TH171179

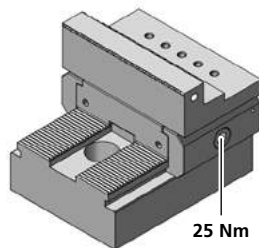
H = 49

H1 = 30

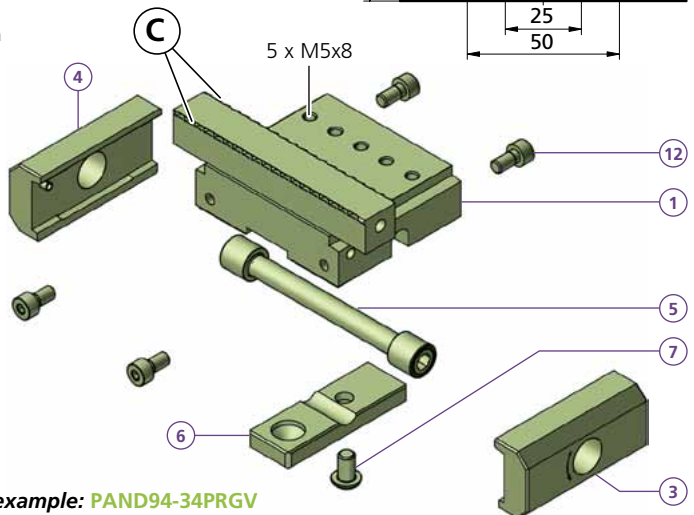
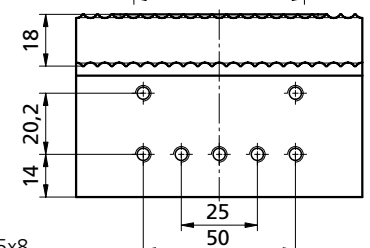
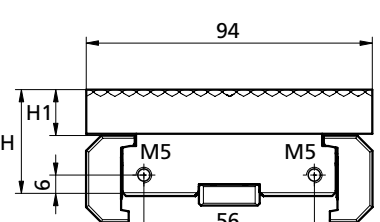
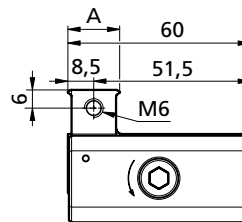
A = 17

kg ~1,6

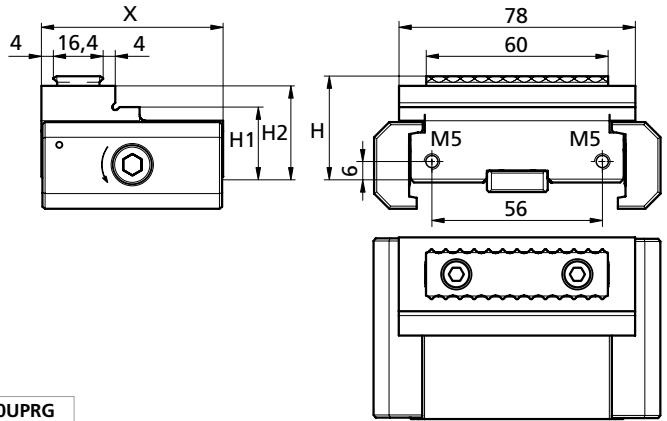
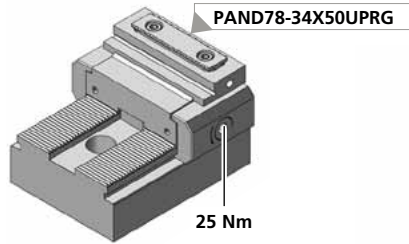
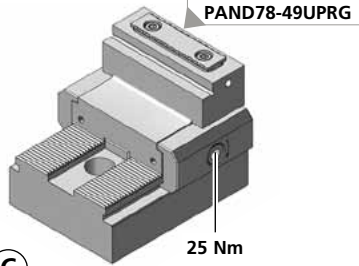
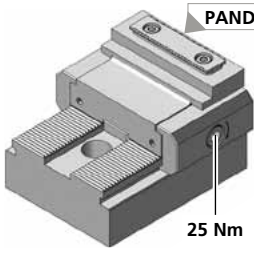
H = 49



25 Nm



Bestellbeispiel / Ordering example: PAND94-34PRGV



PAND78-34UPRG

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

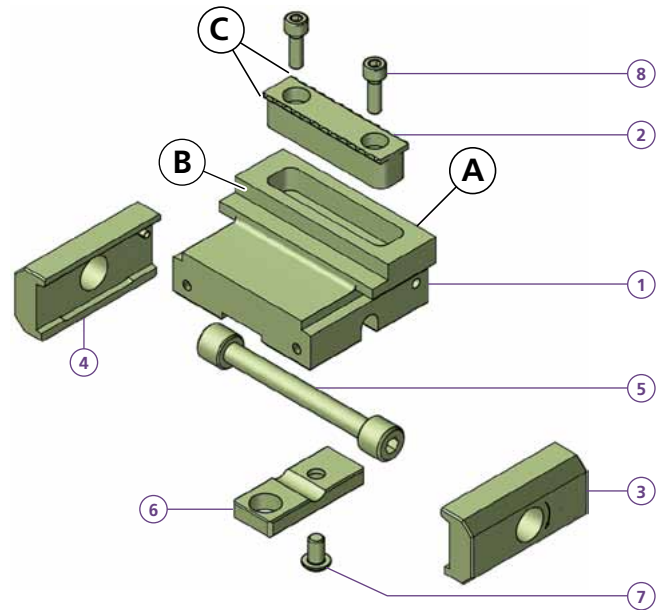
PAND78-49UPRG

① 1x TH140039
 H = 49
 H1 = 39
 H2 = 46
 X = 60
 kg ~1,5

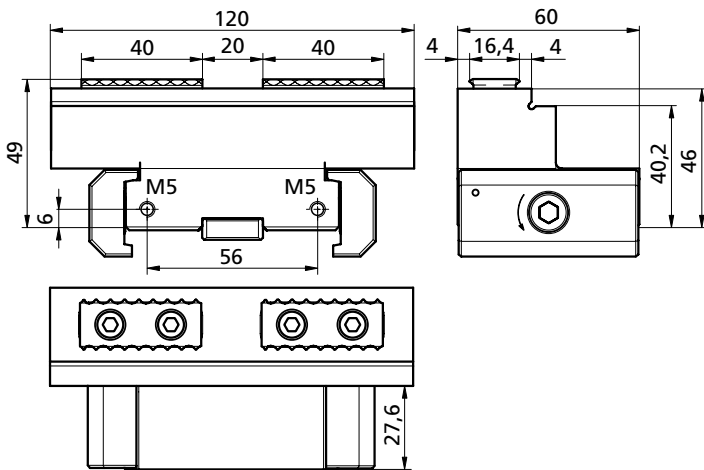
PAND78-34X50UPRG

① 1x TB161227
 ③ 1x PCSP50R
 ④ 1x PCSP50L

H = 34
 H1 = 24
 H2 = 31
 X = 50
 kg ~0,98



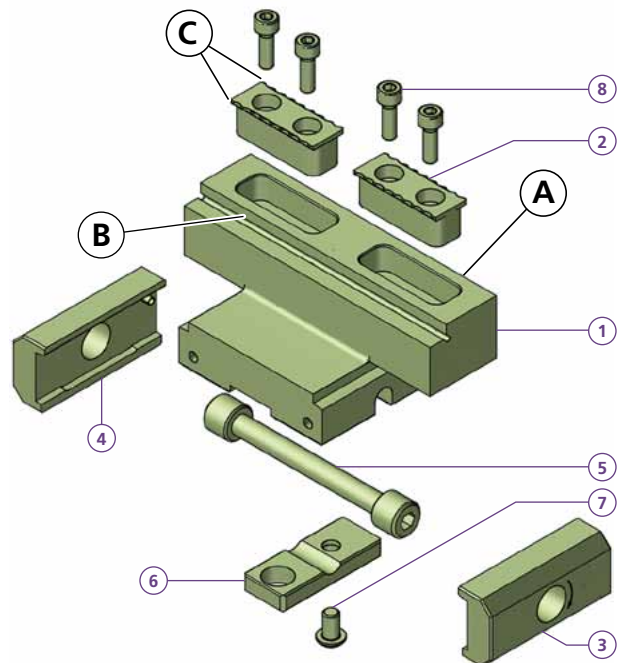
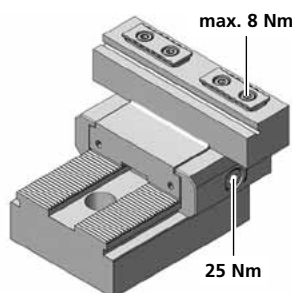
Bestellbeispiel / Ordering example: PAND78-34UPRG



PAND120-49UPRG

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



Bestellbeispiel / Ordering example: PAND120-49UPRG

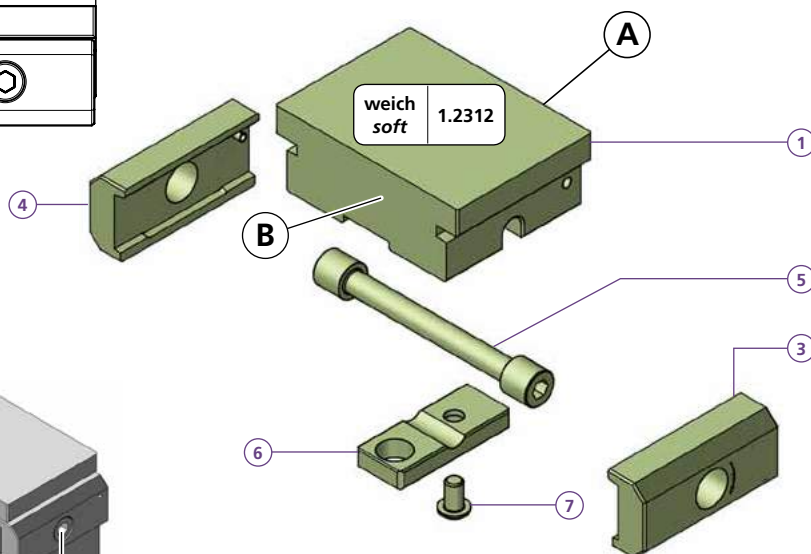
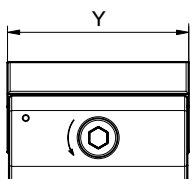
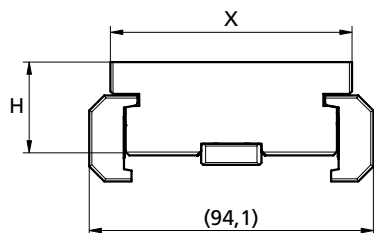
Rohlingsmodule
Blank module

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

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



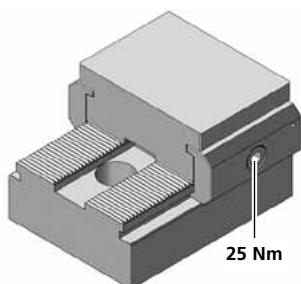
powerCLAMP



PT-F80-30X60

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

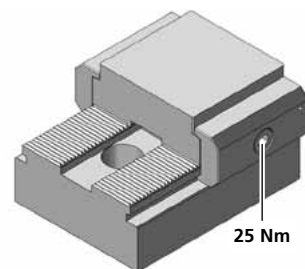
X = 80
H = 30
Y = 60
kg ~1,4



PT-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

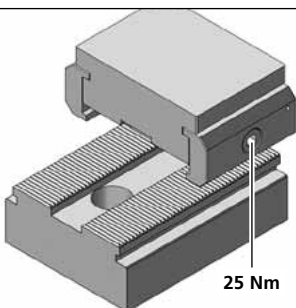


PT-F80-30X60NS

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

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

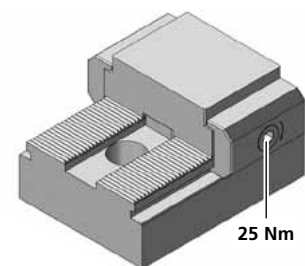
X = 80
H = 30
Y = 60
kg ~1,4



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

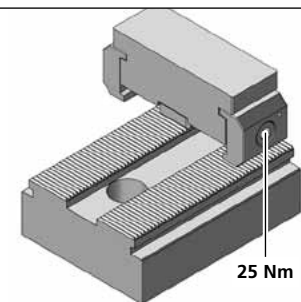


PT-F80-30X30NS

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

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

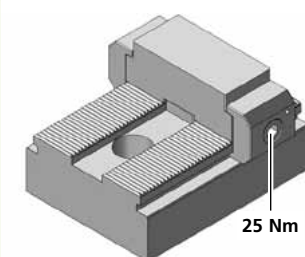
X = 80
H = 30
Y = 30
kg ~0,7



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



Bestellbeispiel / Ordering example: PT-F80-30X60

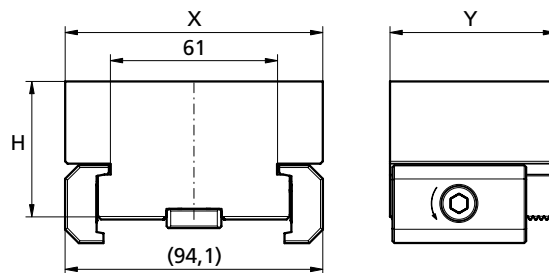
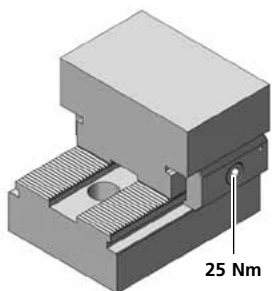


A B C

PR94-49SET

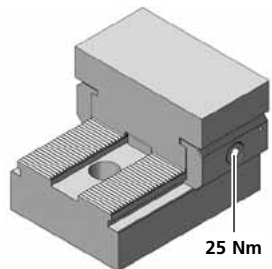
- 1 1x PR94-49
- 3 1x PCSP50R
- 4 1x PCSP50L
- 5 1x PCS14
- 6 1x PCGU2049
- 7 1x M6X8ISO7380

X = 94
H = 49
Y = 60,4
kg ~2,3



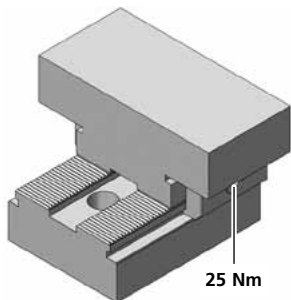
PR94-39-50SET

- 1 1x PR94-39-50
- X = 94
H = 39
Y = 50,4
kg ~1,6



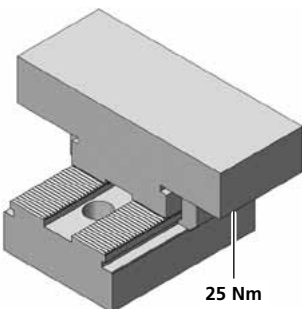
PR125-49SET

- 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



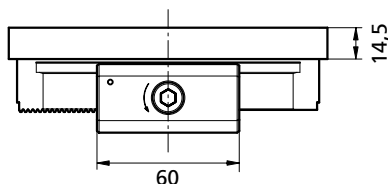
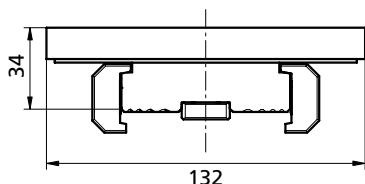
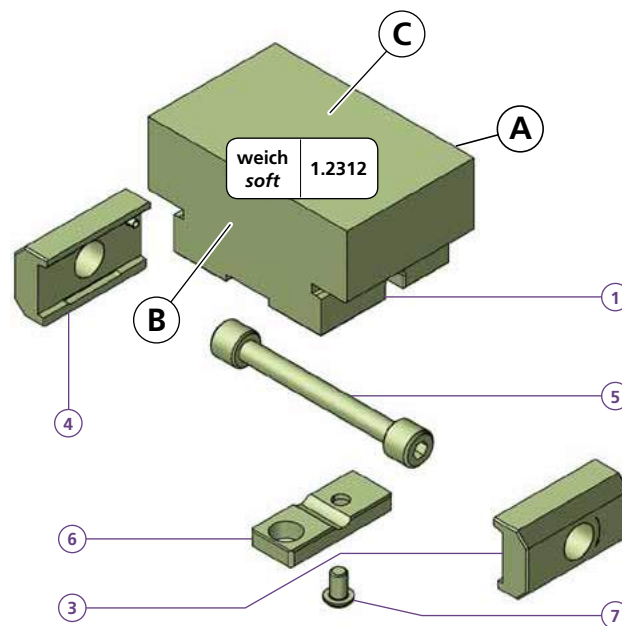
PR150-49SET

- 1 1x PR150-49
- X = 150
H = 49
Y = 60,4
kg ~3,1



* ALU = ENAW-7022

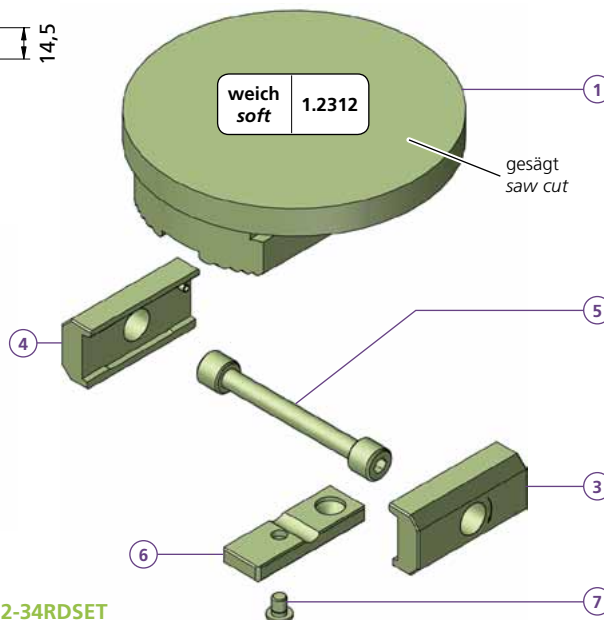
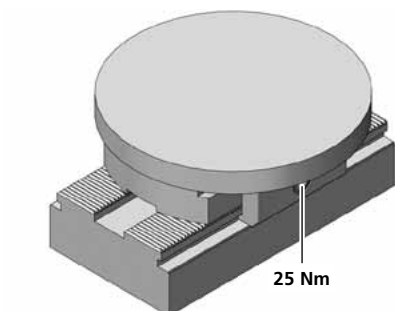
Bestellbeispiel / Ordering example: PR94-49SET



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



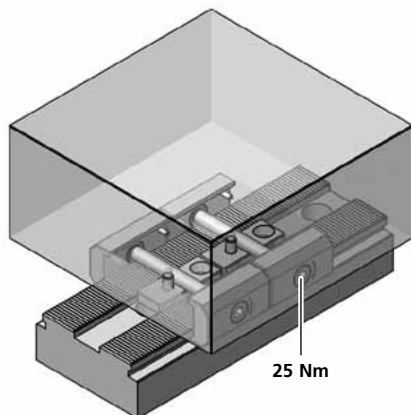
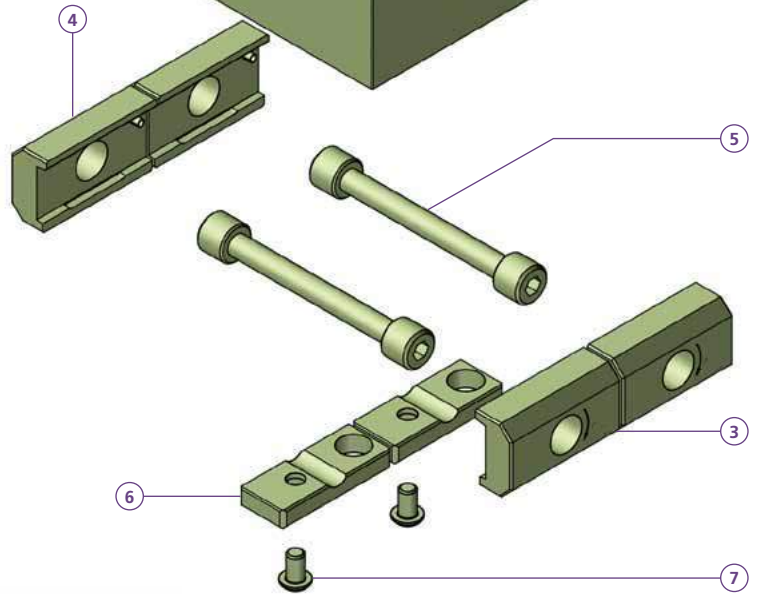
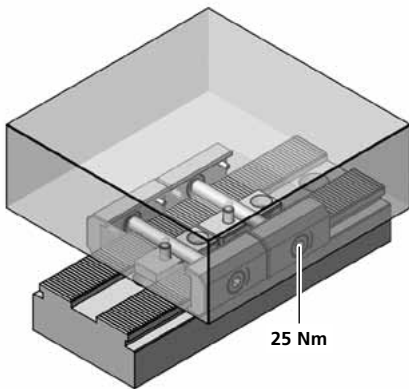
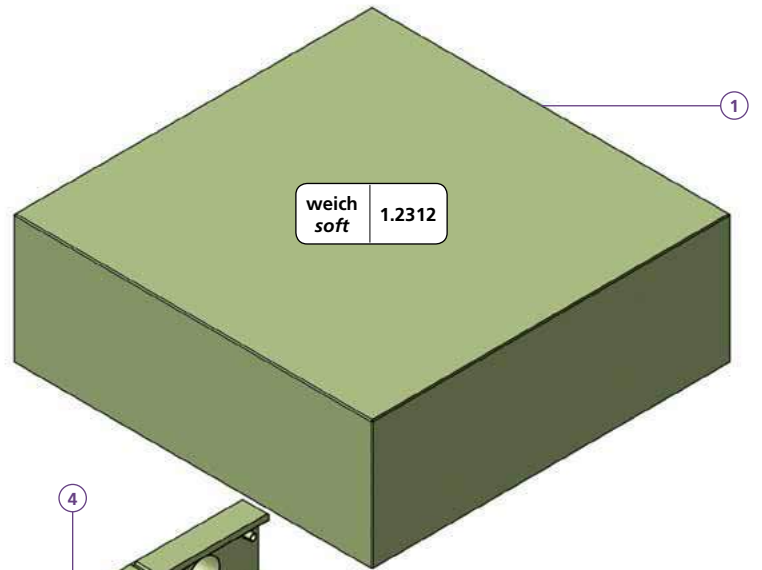
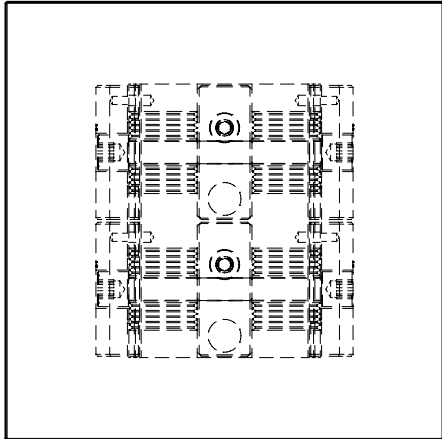
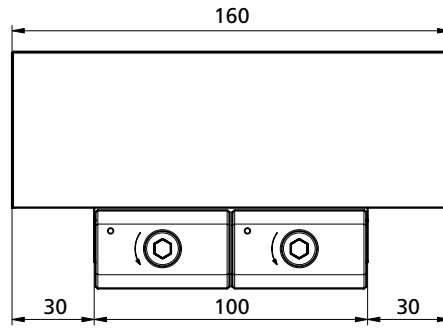
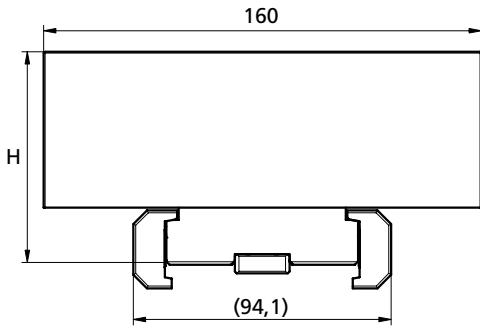
Bestellbeispiel / Ordering example: PT-F132-34RDSET



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

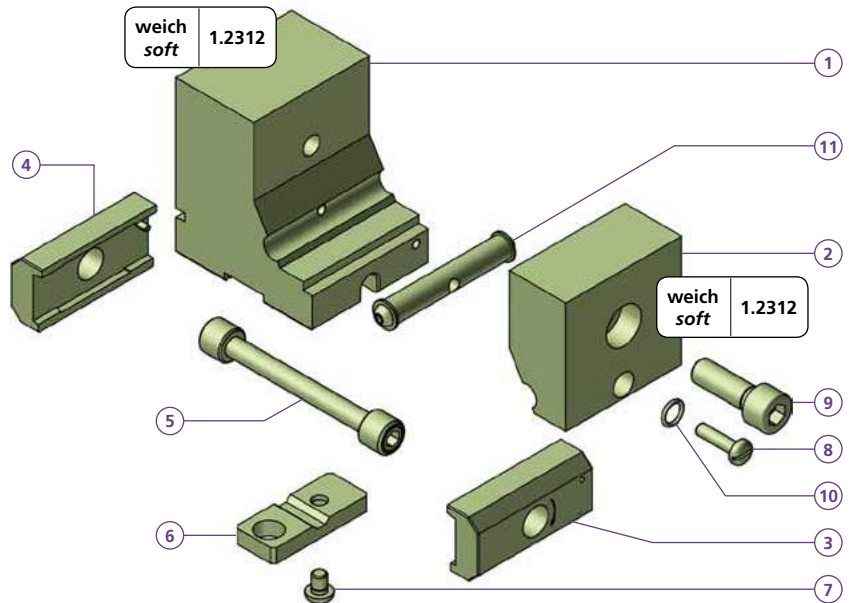
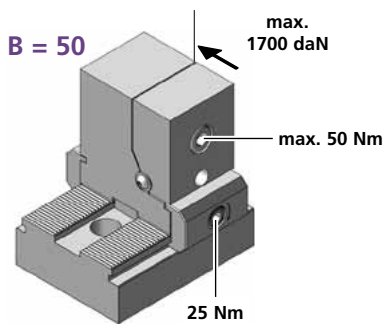
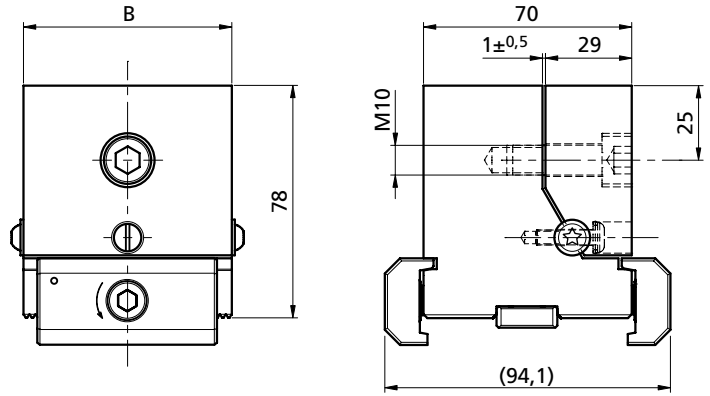
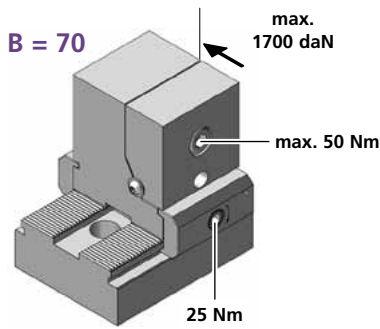
PTX160-77S

- ① 1x TH130723

H = 77

kg ~13

Bestellbeispiel / Ordering example: **PTX160-57S**

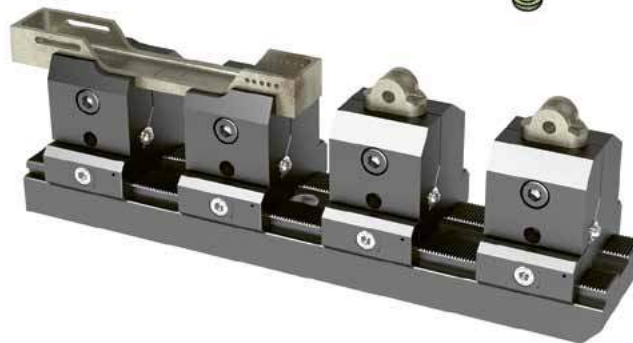


- PS1X70L78ST**
- ① 1x PRS7078AST
 - ② 1x PRS7078SST
 - ③ 1x PCSP60R
 - ④ 1x PCSP60L
 - ⑤ 1x PCS14
 - ⑥ 1x PCGU2049
 - ⑦ 1x M6X8ISO7380
 - ⑧ 1x M5X20BN1362
 - ⑨ 1x M10X30ISO4762
 - ⑩ 1x OR Ø 8x1,5
 - ⑪ 1x PRS7078G
- B** = 70
kg ~3,2

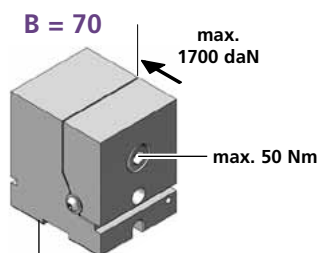
- PS1X50L78ST**
- ① 1x PRS5078AST
 - ② 1x PRS5078SST
 - ③ 1x PCSP50R
 - ④ 1x PCSP50L
 - ⑪ 1x PRS5078G
- B** = 50
kg ~2,3

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

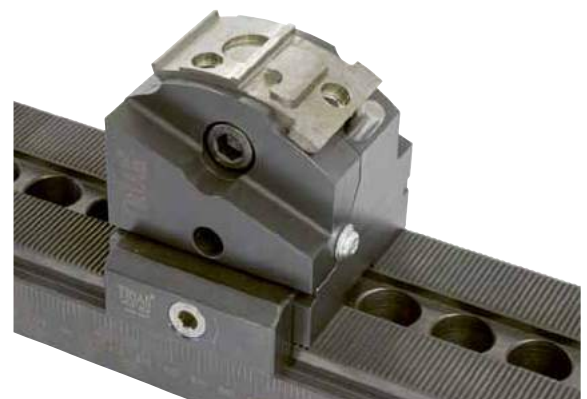
- PRS50L78ST**
- ① 1x PRS5078AST
 - ② 1x PRS5078SST
 - ⑪ 1x PRS5078G
- B** = 50
kg ~2,0



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

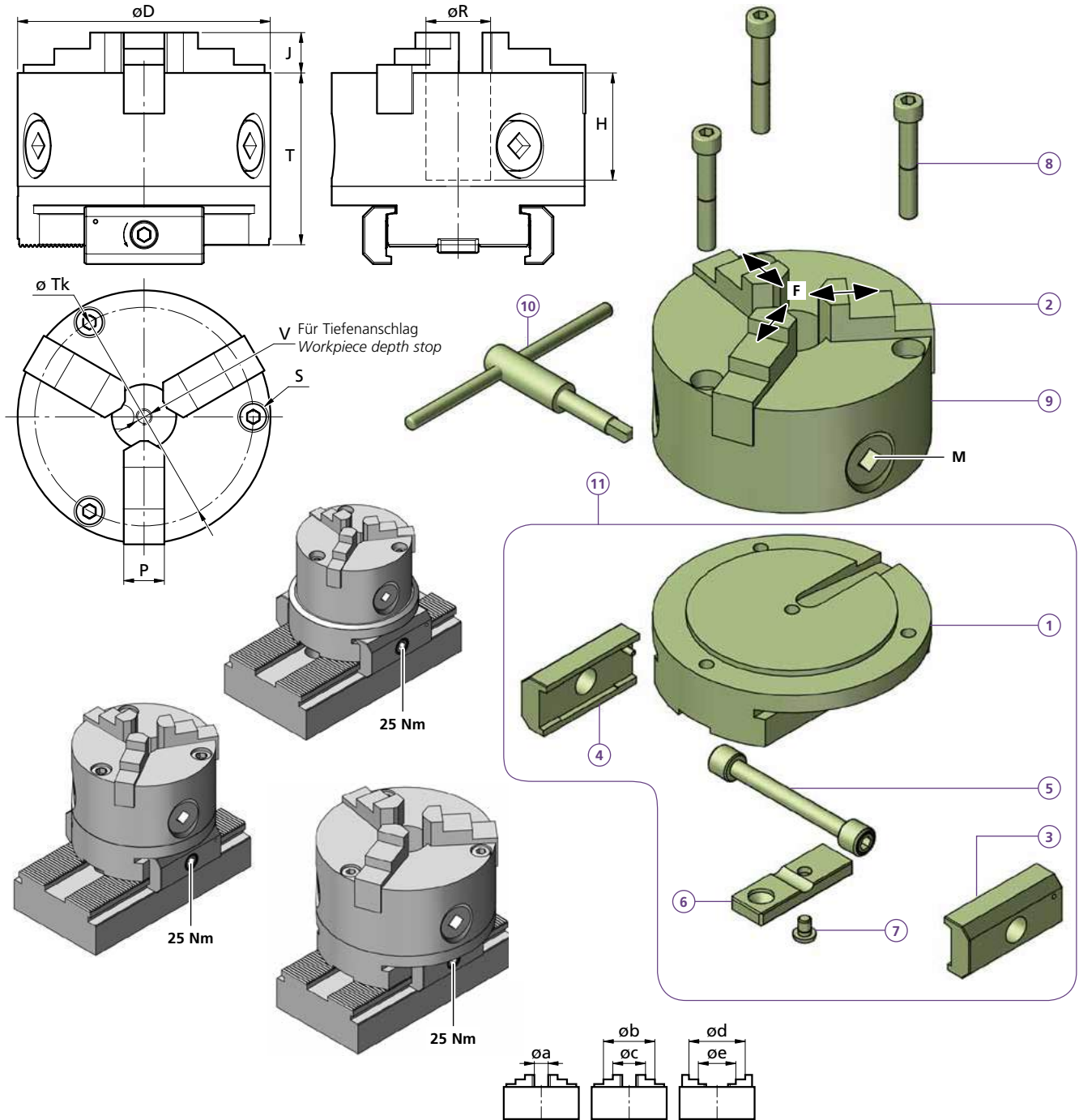
Bestellbeispiel / Ordering example: **PS1X70L78ST**

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
PS3X80L75BSET	80	13	75	15	42,5	10	M6	3...27	48...73	23...48	52...76	27...51	28 Nm	1300 daN	67	M6
PS3X100L82BSET	100	17	82	20	49,5	14	M8	3...39	58...94	24...60	64...100	30...66	38 Nm	1600 daN	83	M8
PS3X125L87BSET	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

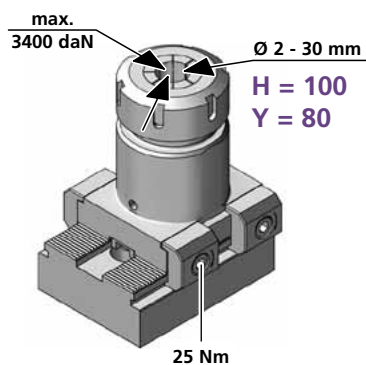
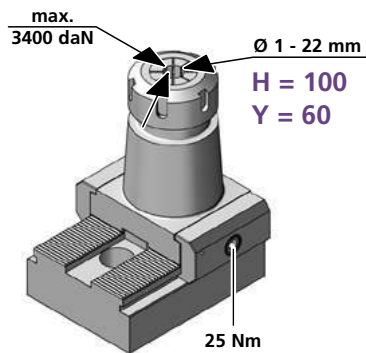
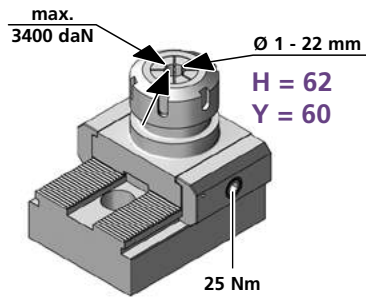
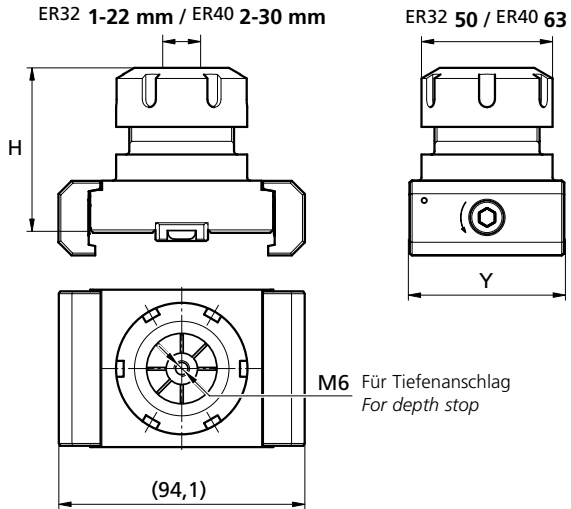
Ø 1 - 22 mm

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

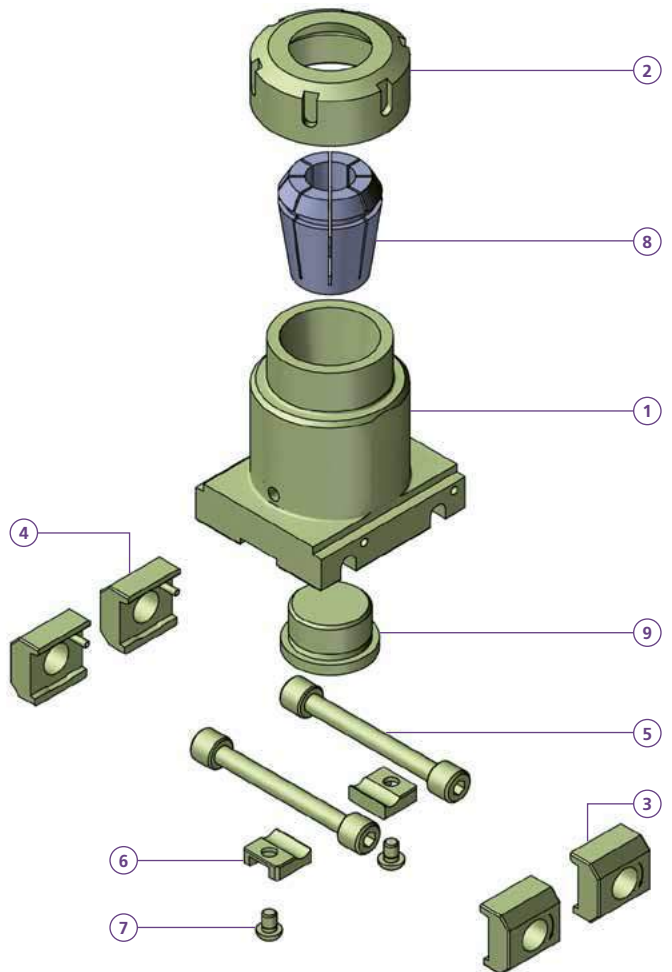
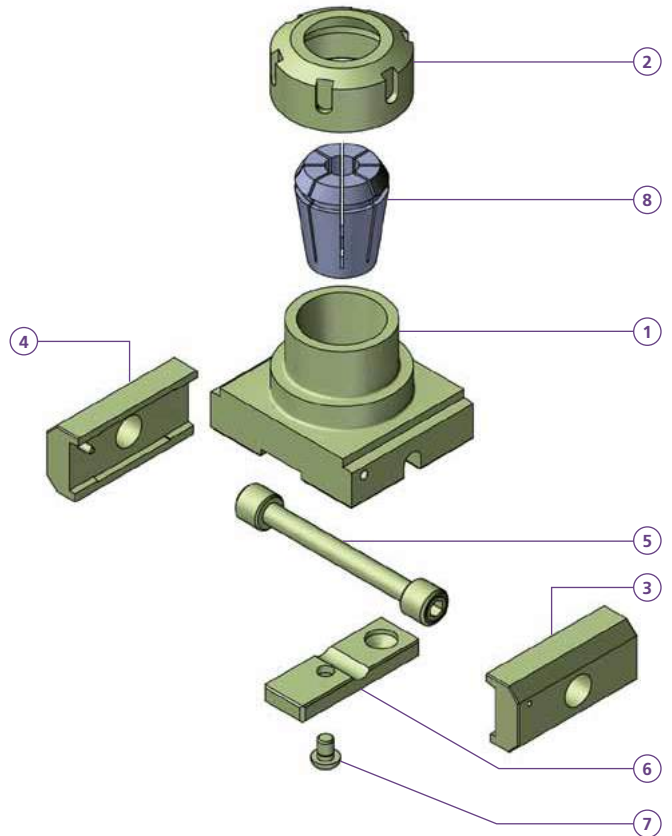
1	1x TW090047-01
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H = 100
Y = 60
kg ~2,2

PS1X63N100-ER40

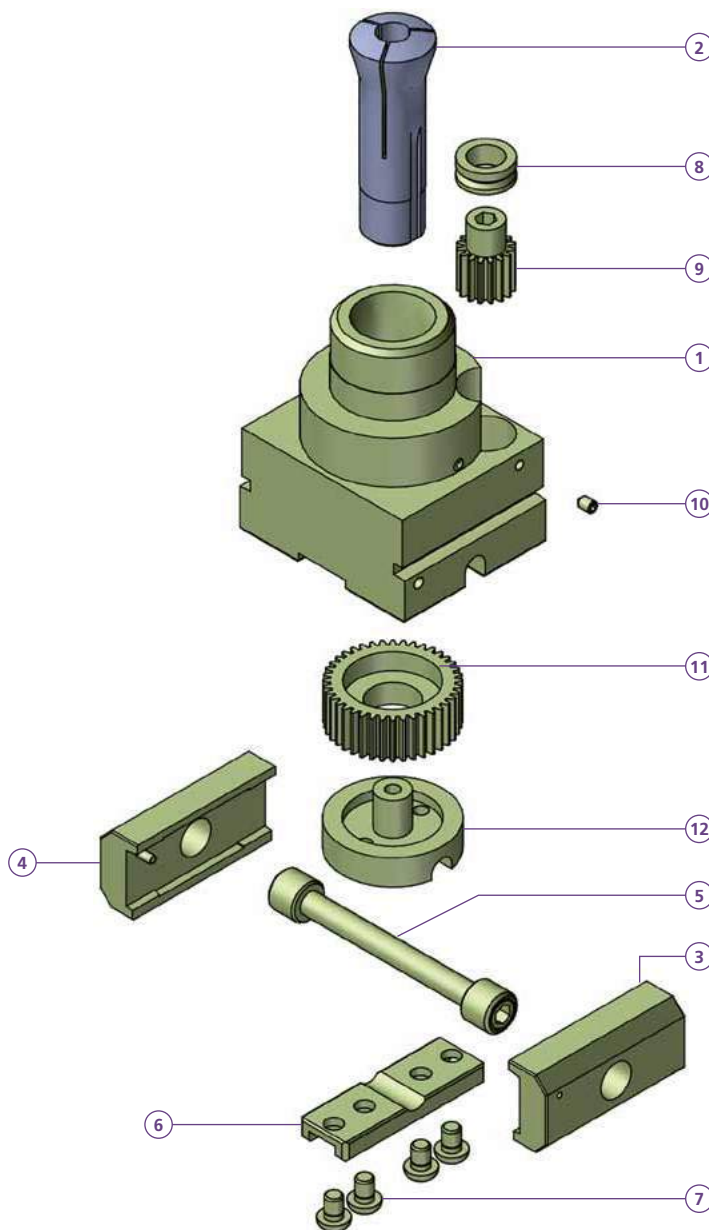
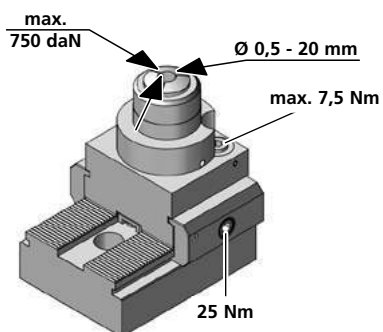
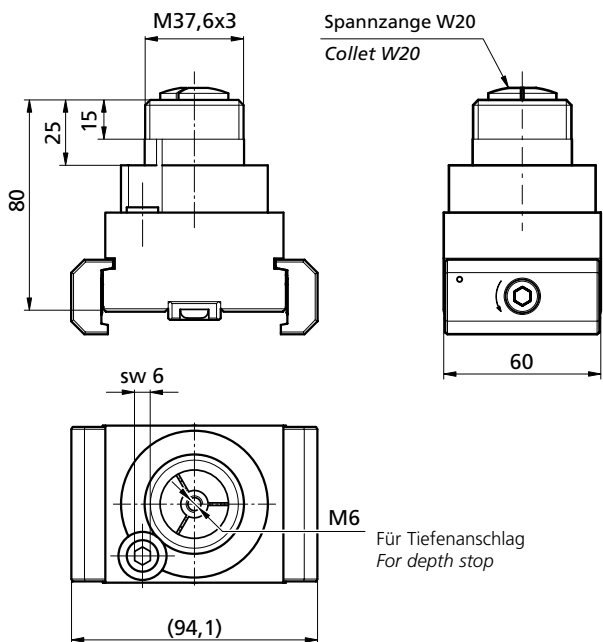
1	1x TW110026-01
2	1x ER40
3	2x PCSP30R
4	2x PCSP30L
5	2x PCS14
6	2x PCGU2020
7	2x M6X8ISO7380
8	1x ER/ESX40
9	1x M33x2 DIN908

H = 100
Y = 80
kg ~2,3

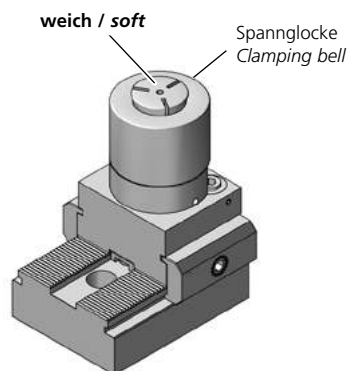


Bestellbeispiel / Ordering example: 1x PS1X 50N62 -ER32 & 1x ER32

Separat bestellen / Separate order



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

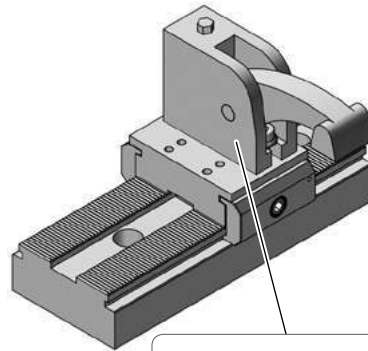
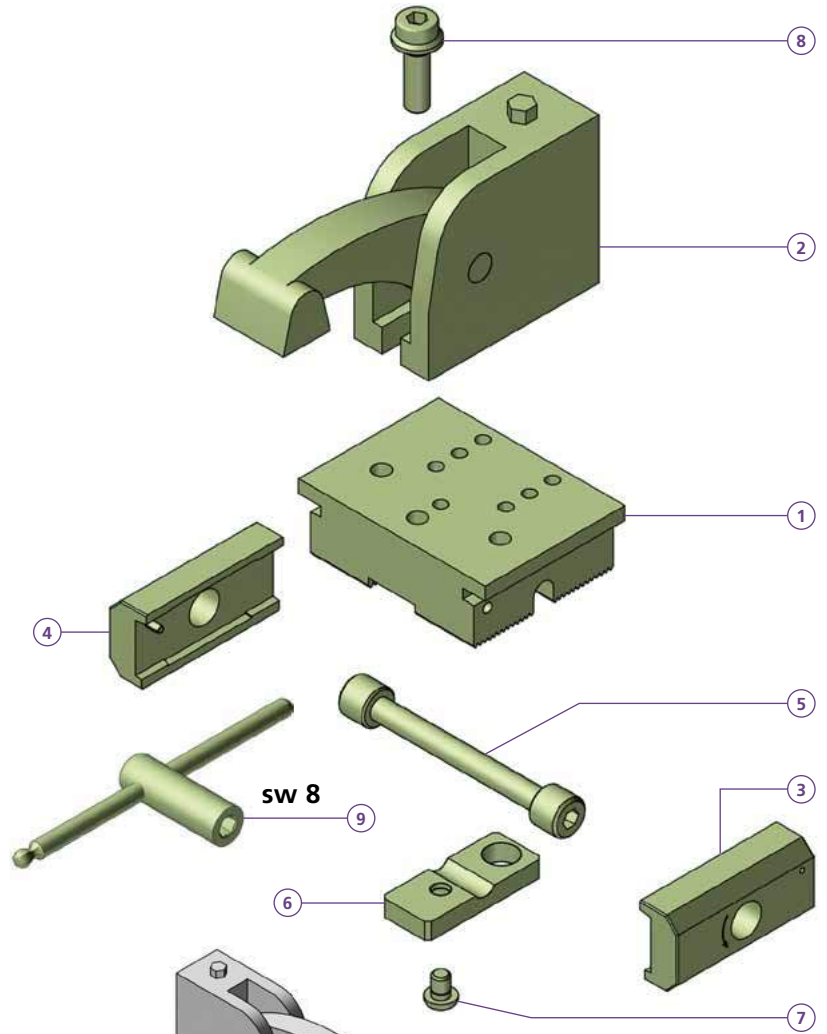
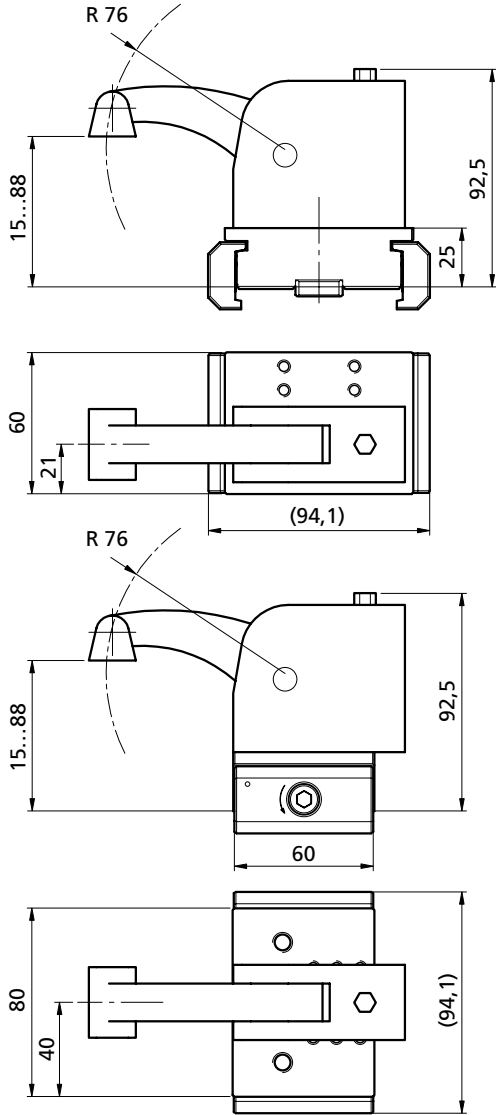


Bestellbeispiel / Ordering example: 1x PS1X68N80-W20 & 1x W20

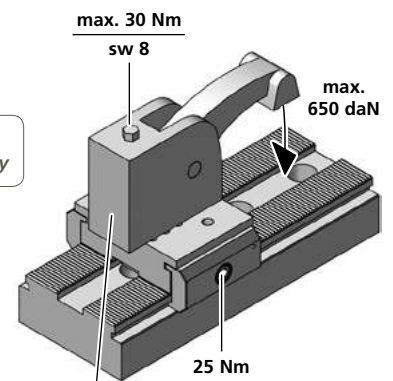


PS1F-KLD1
PS1F-KLD1NS

powerCLAMP



Spanner quer montiert
Clamp mounted transversely



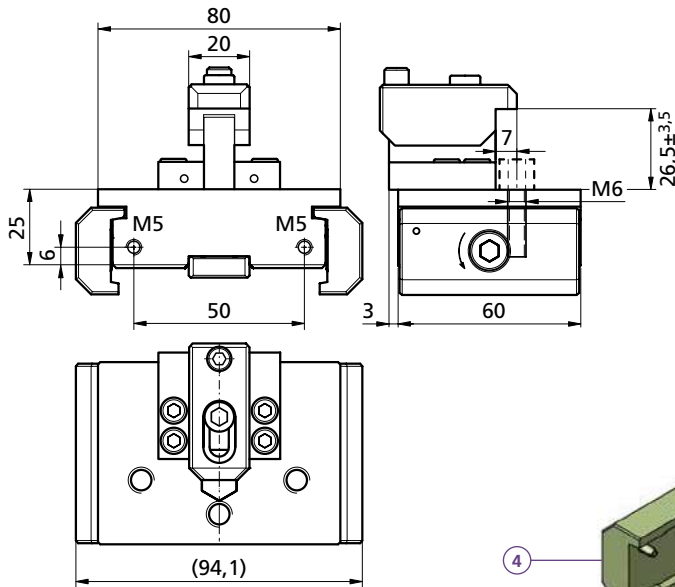
Spanner längs montiert
Clamp mounted longitudinally



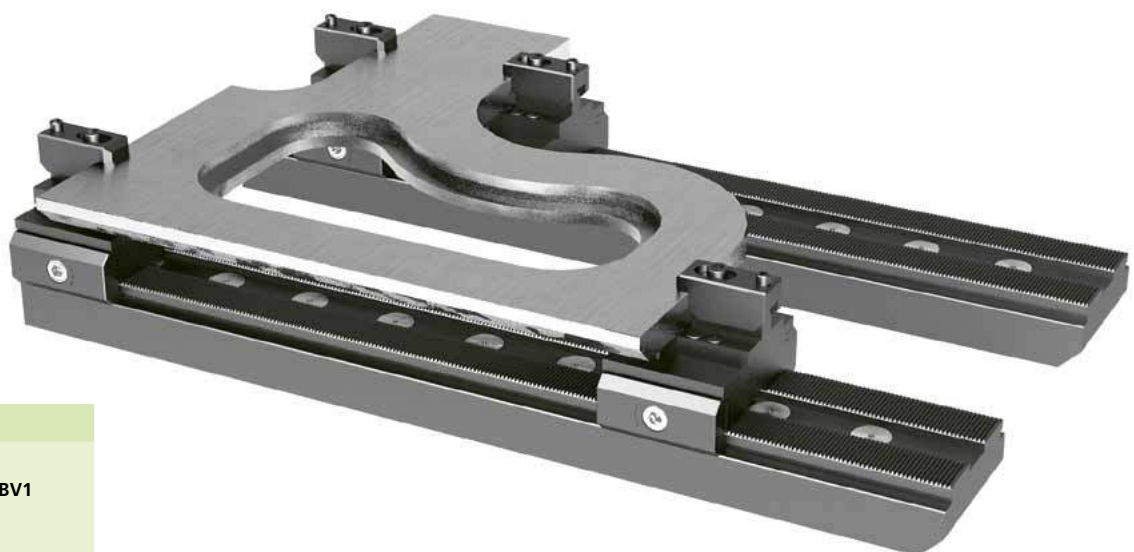
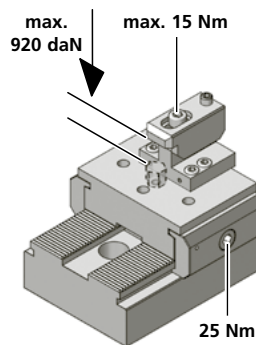
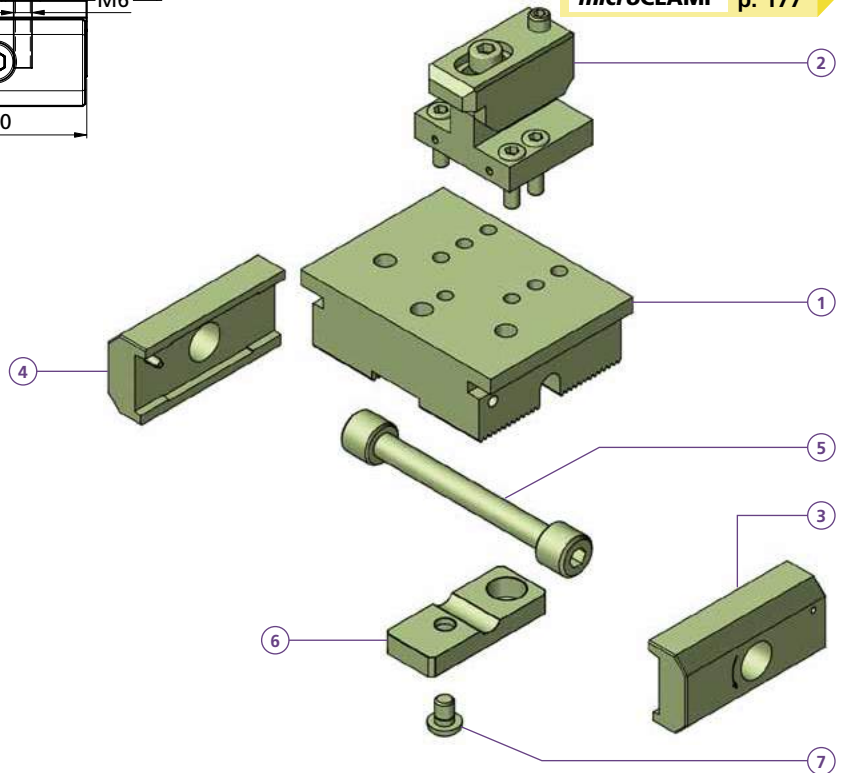
NS = Trägermodul freie Positionierung ohne Verzahnung
Carrier module without positioning serration for free positioning

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**



microCLAMP p. 177



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

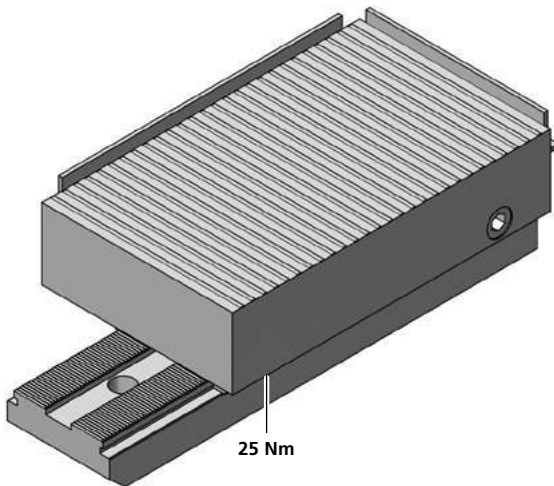
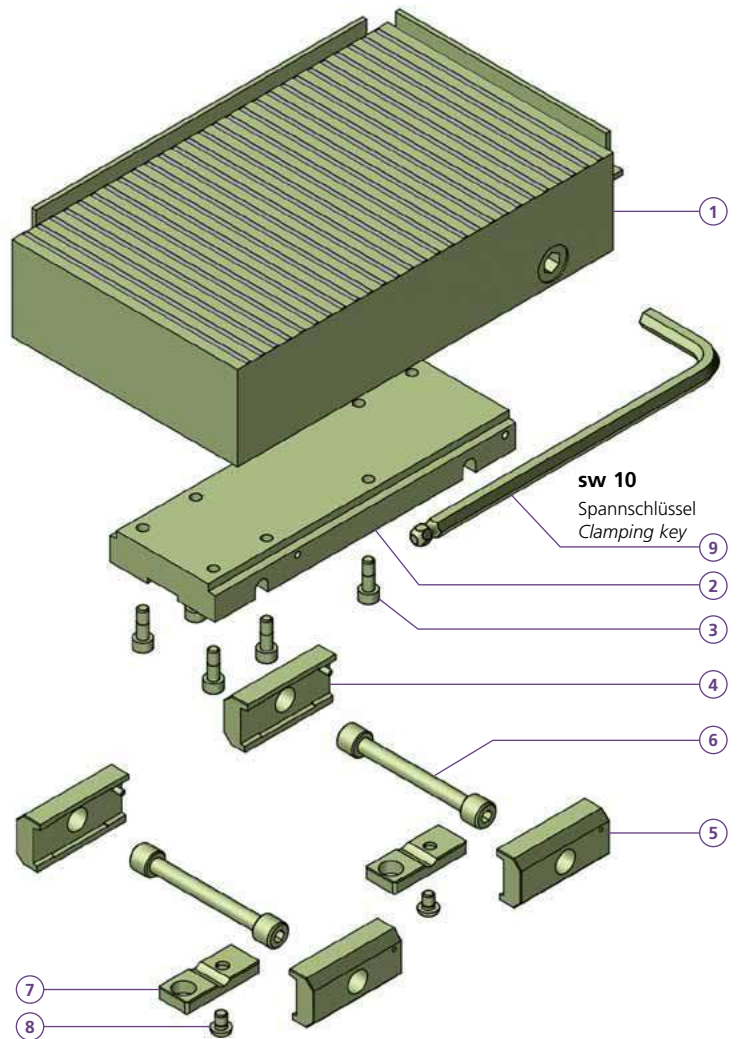
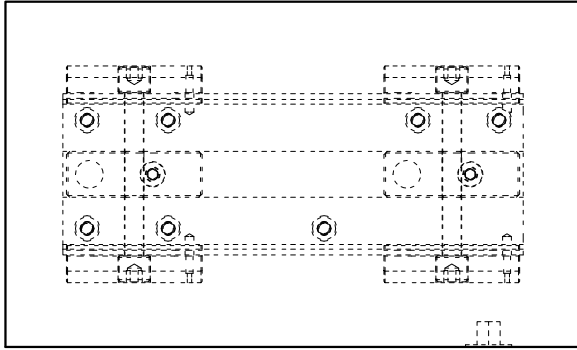
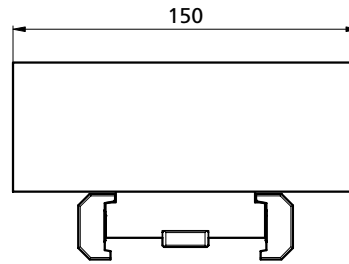
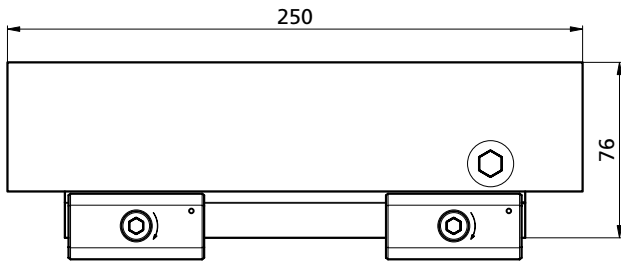


Magnetspannplatte

Magnetic chuck

PS1X150L60-250MAG11

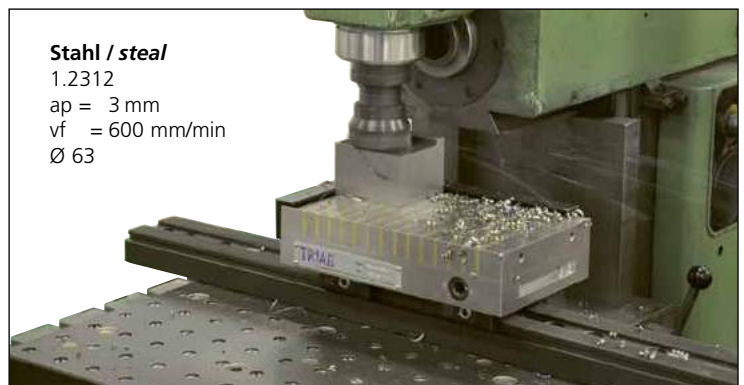
powerCLAMP



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 M6X8ISO7380
- ⑨ 1x ISL10 DIN 911L

kg ~19,5



Stahl / steel

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

max. Haltekraft / max. holding force = 120 N/cm²

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

Bestellbeispiel / Ordering example: PS1X150L60-250MAG11

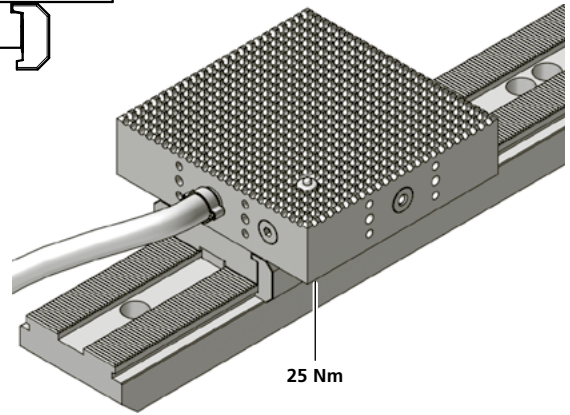
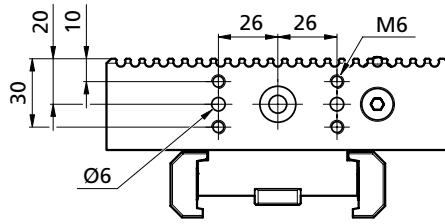
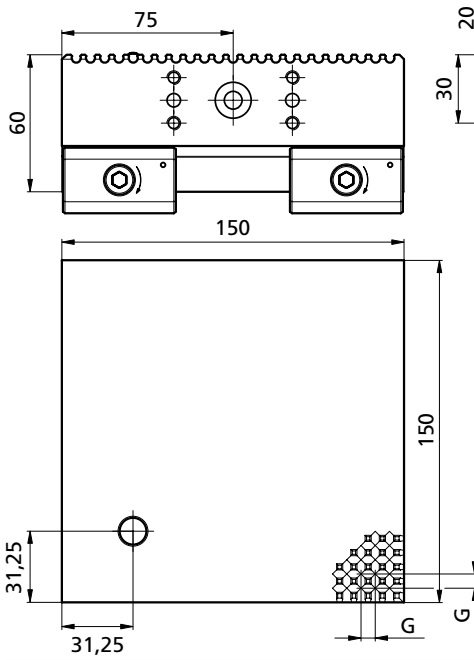


Vakuum-Modul

Vacuum module

PS1X150L60-VAC

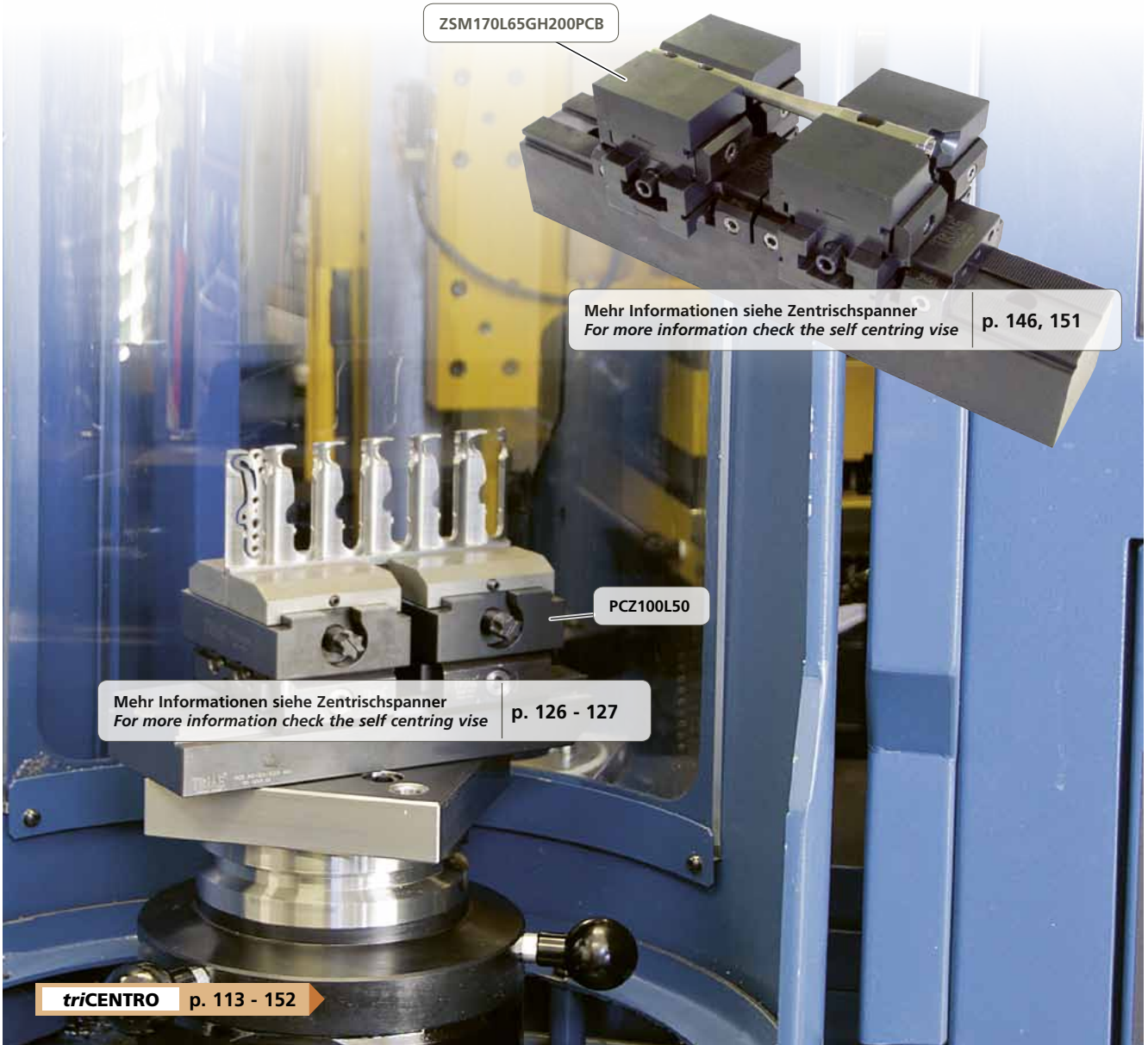
powerCLAMP



trivaCLAMP p. 318

Mehr Informationen siehe Vacuum
For more information check the vacuum workholding

Bestellbeispiel / Ordering example: PS1X150L60-VAC



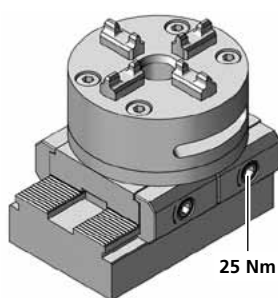
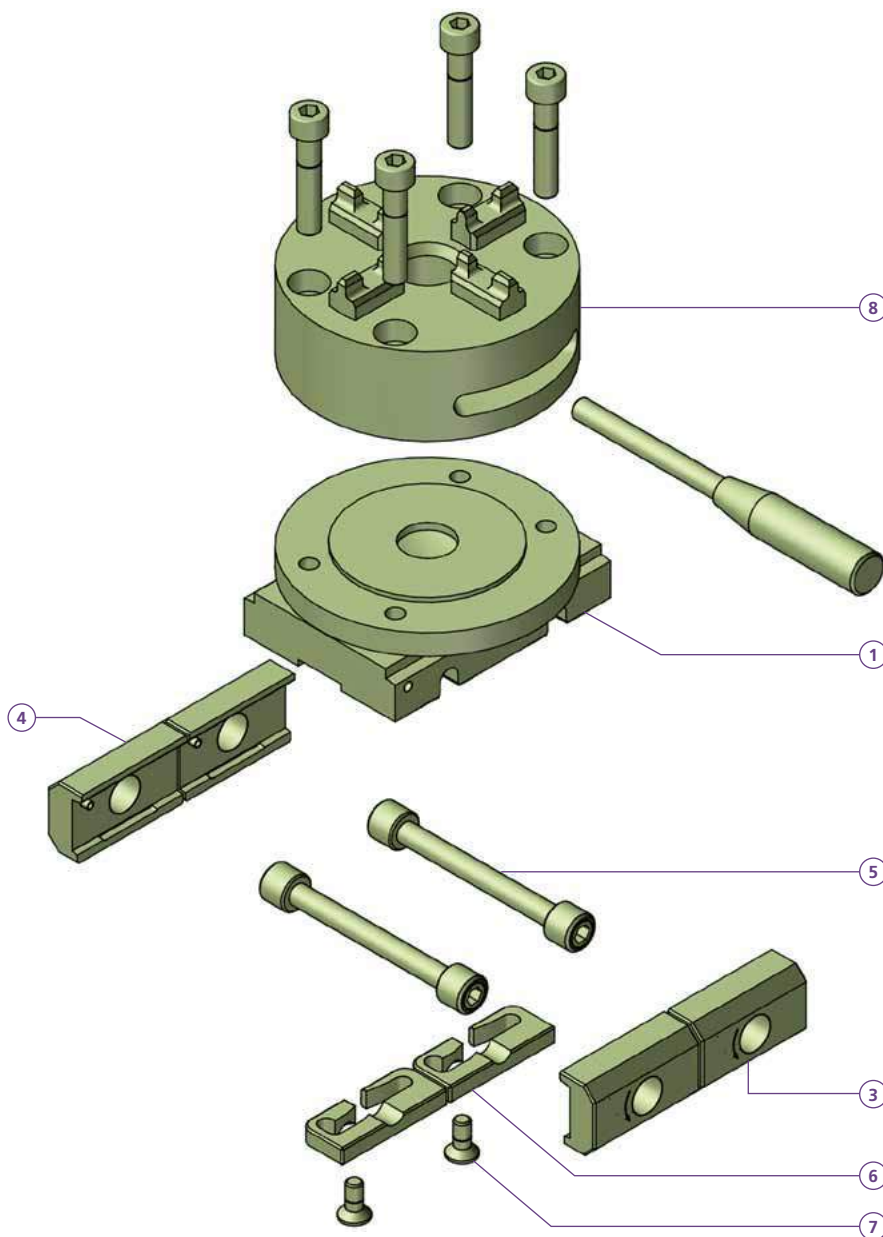
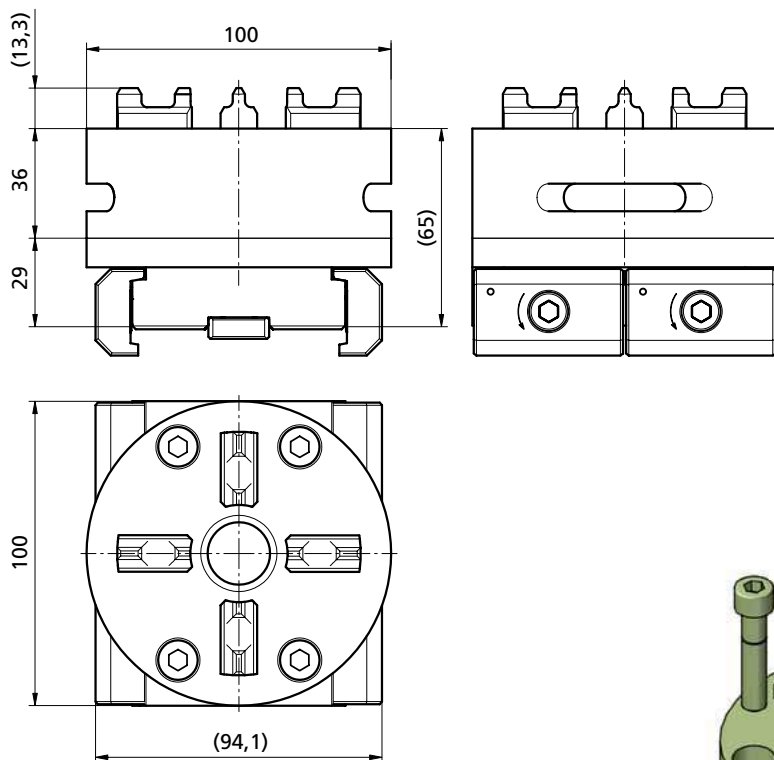
ZSM170L65GH200PCB

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

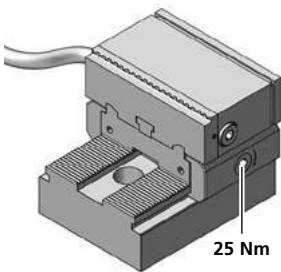
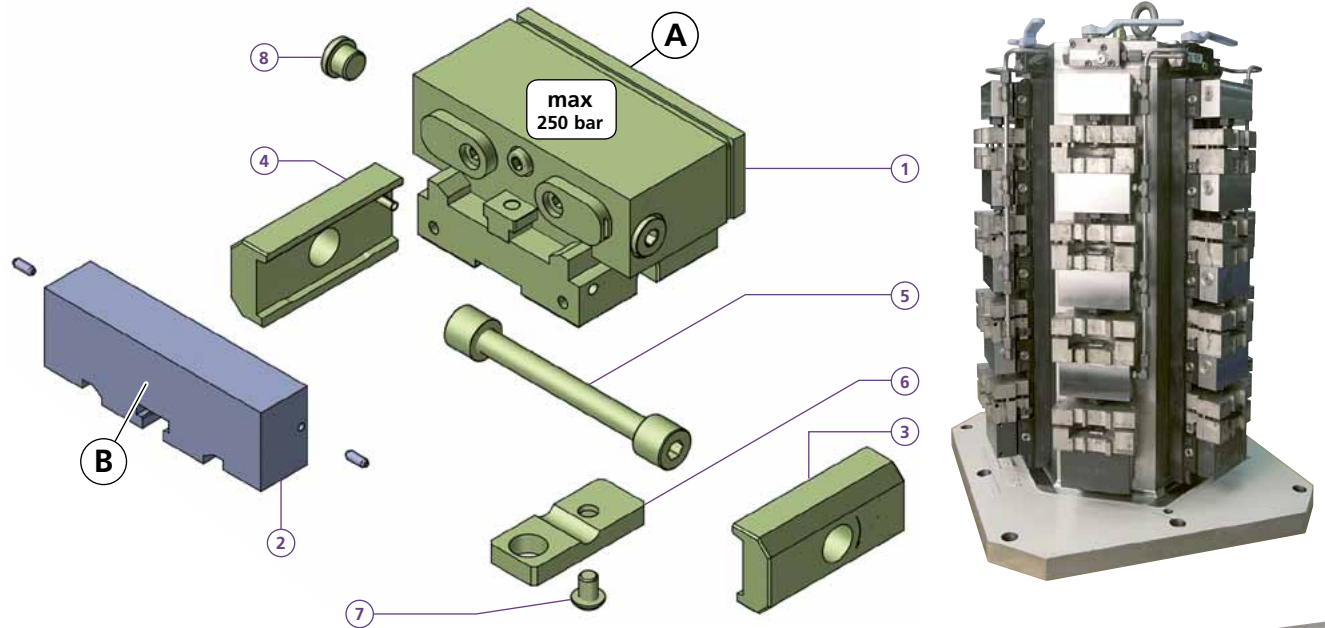
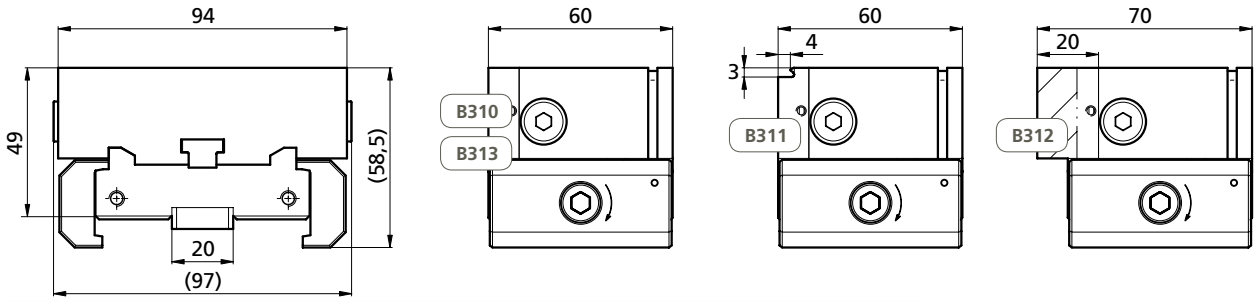
- 1 1x PTX100-29
 - 3 2x PCSP50L
 - 4 2x PCSP50R
 - 5 2x PCS14
 - 6 2x PCGU2049F
 - 7 2x M6X14ISO10642
 - 8 1x ER-036345
- kg ~4,0



Hydraulisches Spannmodul Hydraulic clamping module

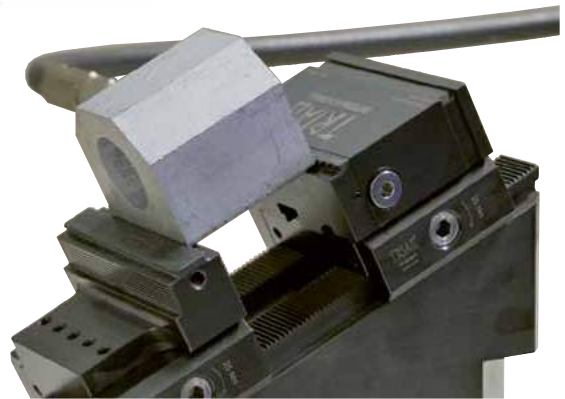
PSH1X94L49-310

powerCLAMP



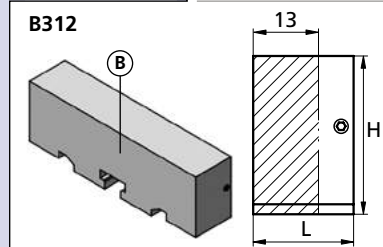
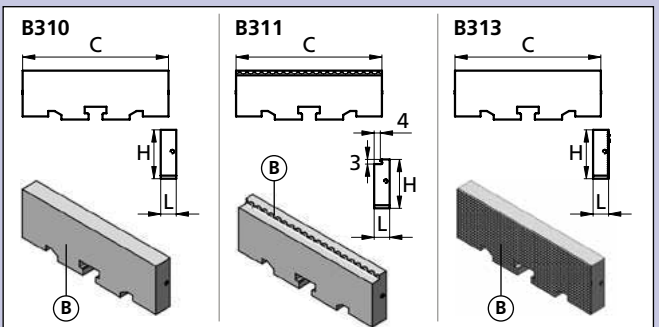
Ölvolumen / Oil volume	
Spannen / Clamping	
8 cm ³	

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

C	94	94	94	94
H	31,5	31,5	31,5	31,5
L	10	10	20	10
i	HV700 x0,2mm	57HRC *	*	HV700 x0,2mm
kg	~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

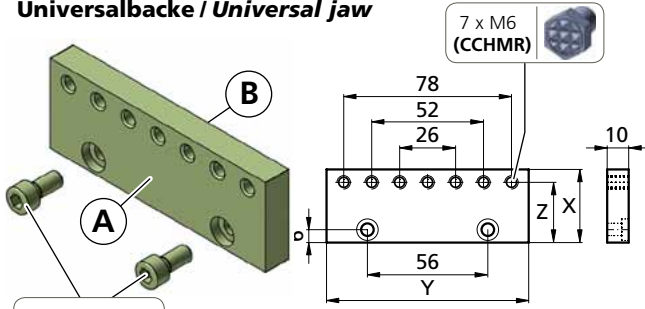
- 1 1x ZF191349
 - 2 1x _____
 - 3 1x PCSP60R
 - 4 1x PCSP60L
 - 5 1x PCS14
 - 6 1x PCGU2049
 - 7 1x M6X815O7380
 - 8 2x TN100014
- kg** ~1,94

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

Separat bestellen / Separate order

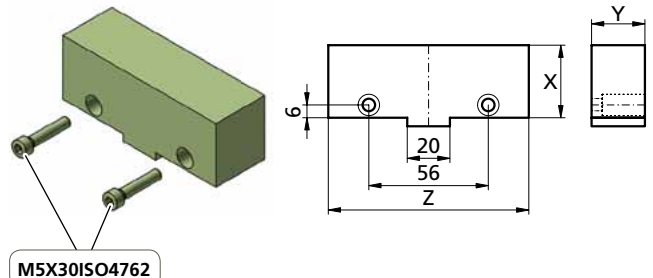


Universalbacke / Universal jaw

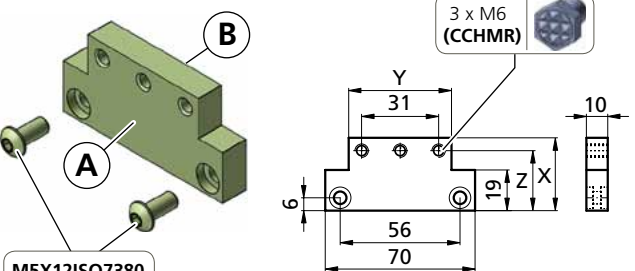


	A	B	x	Y	Z	i	kg
PC9434			34	94	28	HV700 x 0,2mm	~0,23
PC12549			49	123,8	43		~0,46

weiche Backe / soft jaw

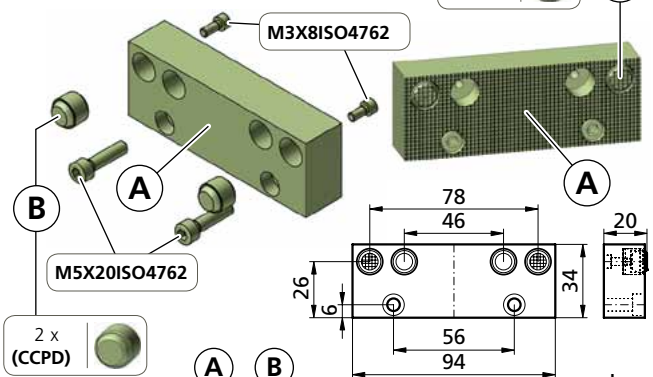


	A	B	x	Y	Z	i	kg
*PC943425W			34	25	94		~0,64
*PC943430W			34	30	94	1.0570	~0,77
*PC944930W			49	30	94		~1,10
*PC1254930W			49	30	125		~1,46



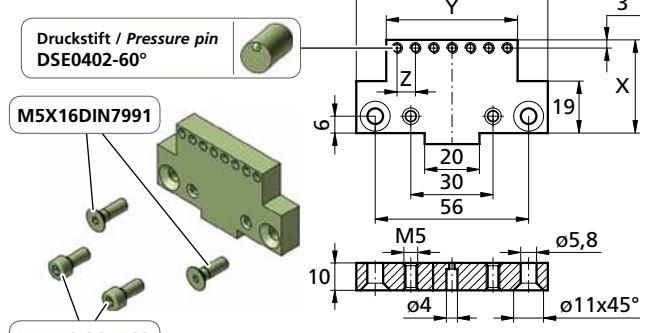
	A	B	x	Y	Z	i	kg
PC4349			49	43	43	HV700 x 0,2mm	~0,21
PC4834			34	48	28		~0,17

**Backe mit 2 Pendeldruckstücken
Jaw with 2 swiveling balls**

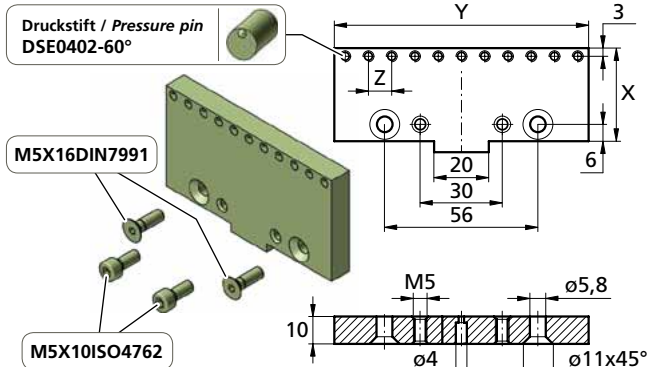


	A	B	x	Y	Z	i	kg
PC9460							~0,45
PC9460R							~0,45

Prägebacke / Stamping jaw

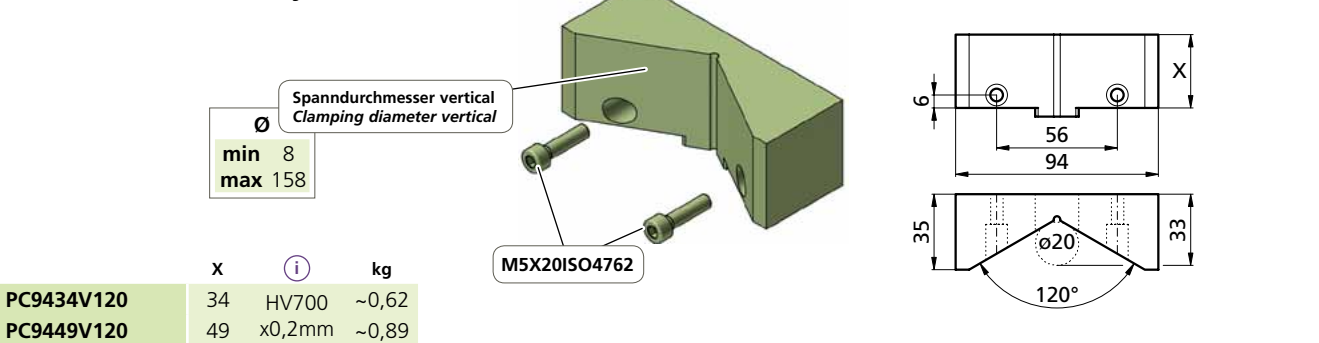


	x	Y	Z	i	kg
PC4834DS	34	48	6 x 6,7 = 40,2		~0,17
PC4349DS	49	43	6 x 5,83 = 35	HV700 x 0,2mm	~0,22
PC4849DS	49	48	6 x 6,7 = 40,2		~0,23



	x	Y	Z	i	kg
PC9434DS	34	94	10 x 8,5 = 85		~0,27
PC9449DS	49	94	10 x 8,5 = 85	HV700 x 0,2mm	~0,38
PC12549DS	49	124	13 x 8,5 = 110,5		~0,49

Prismbacke / Prismatic jaw



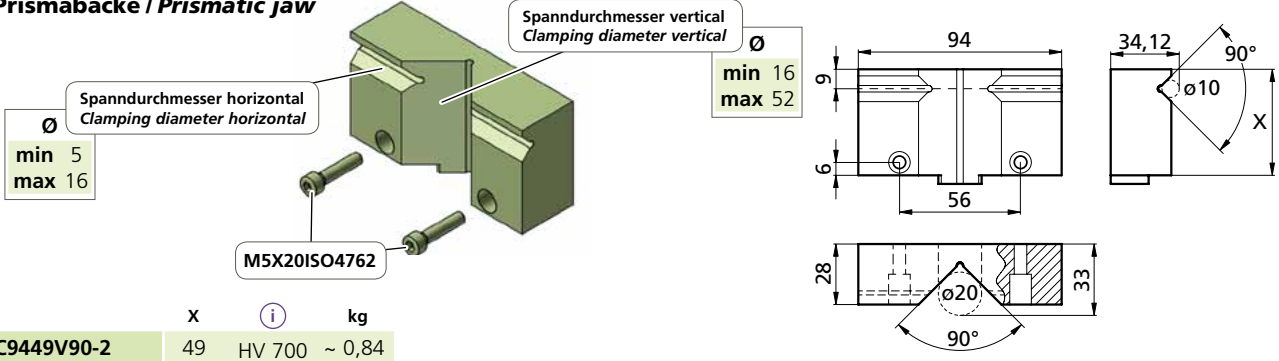
	x	i	kg
PC9434V120	34	HV700	~0,62
PC9449V120	49	x0,2mm	~0,89

* = weicher Stahl / soft steel

Bestellbeispiel / Ordering example: PC9434

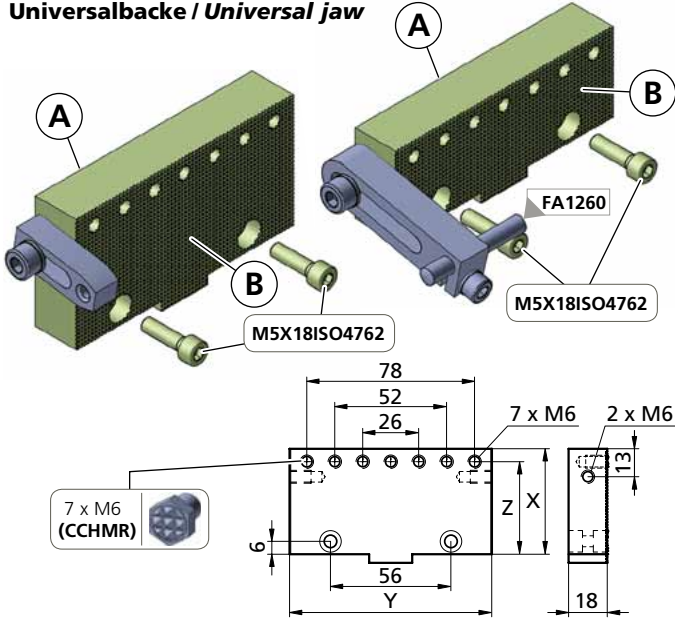


Prismabacke / Prismatic jaw

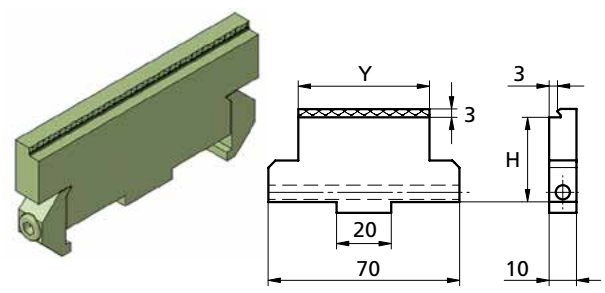


	x	i	kg
PC9449V90-2	49	HV 700	~ 0,84
PC9434V90-2	34	x0,2mm	~ 0,58

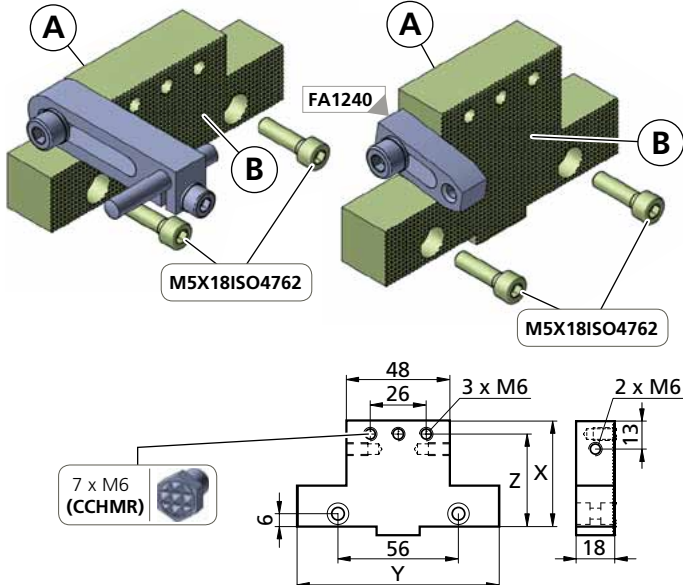
Universalbacke / Universal jaw



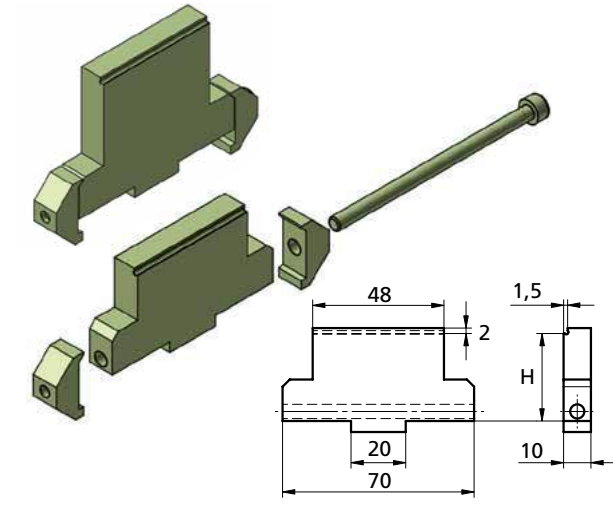
	A	B	x	Y	Z	i	kg
PC9434RF			34	94	28	HV 700	~0,24
PC9449RF			49	94	43	x 0,2mm	~0,35



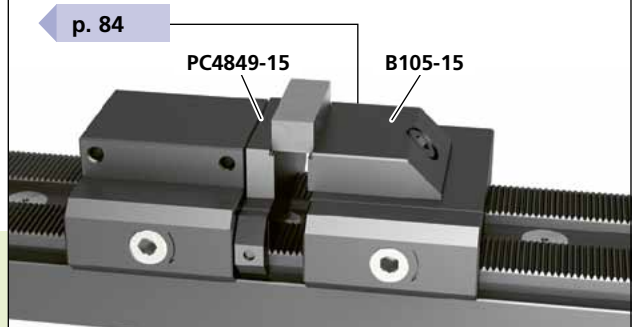
	Y	H	i	kg
PC48-34PRG	48	31	57HRC	~ 0,19
PC48-49PRG	48	46		~ 0,25
PC94-34PRG	94	31		~ 0,36
PC94-49PRG	94	46		~ 0,48



	A	B	x	Y	Z	i	kg
PC4834RF			34	94	28	HV 700	~0,33
PC4849RF			49	94	43	x 0,2mm	~0,43



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

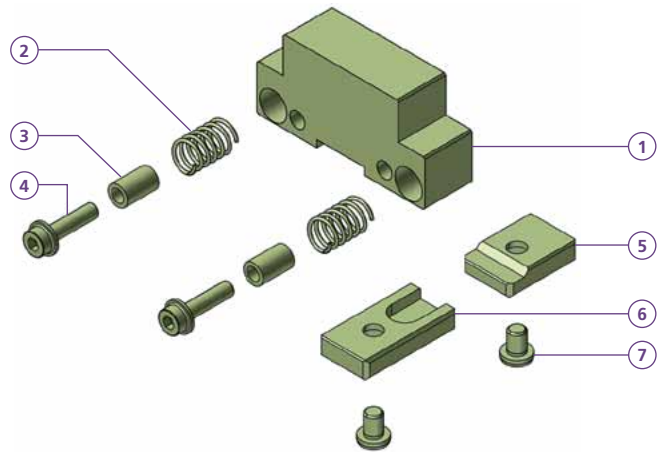
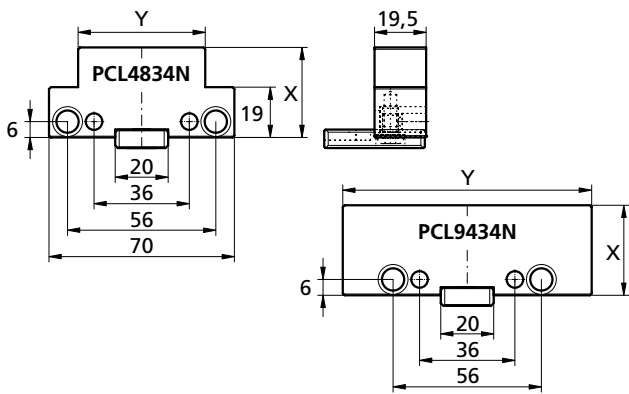


Bestellbeispiel / Ordering example: PC 9434 RF & 1 x FA1240

Separat bestellen / Separate order



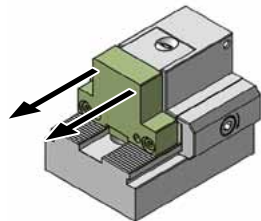
Von Niederzug zu Linear!
From pull down jaws to linear stroke!



PCL4349N

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

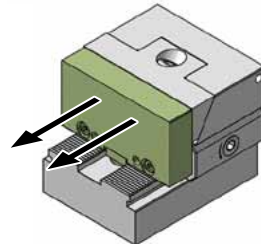
X = 49
Y = 43
kg ~0,43



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

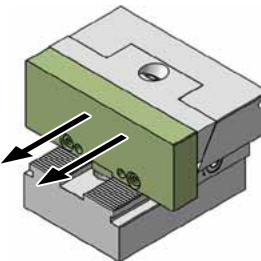
X = 48
Y = 48
kg ~0,35



PCL9449N

- 1 1x TF140700

X = 49
Y = 94
kg ~0,74



PCL12549N

- 1 1x T00317

X = 49
Y = 125
kg ~0,97

PCL9434N

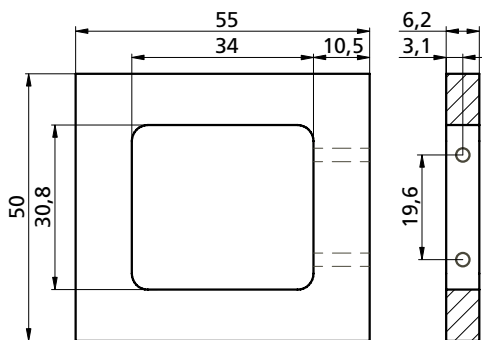
- 1 1x TF140699

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



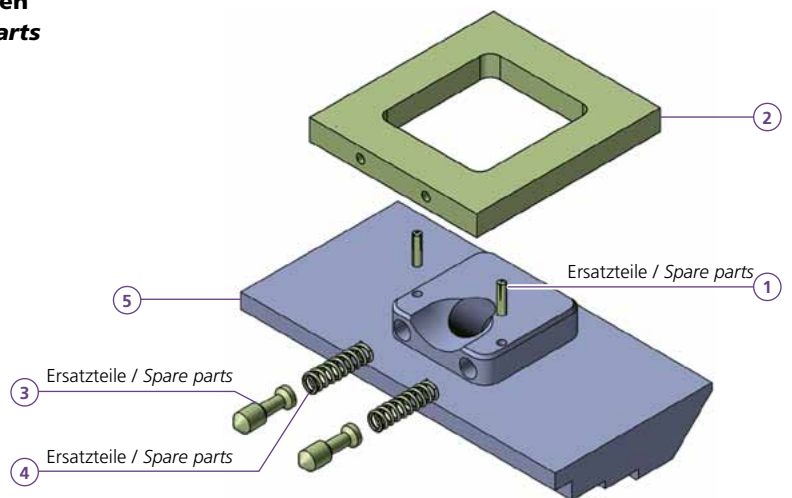
BL-SET

- 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





Click-Flex

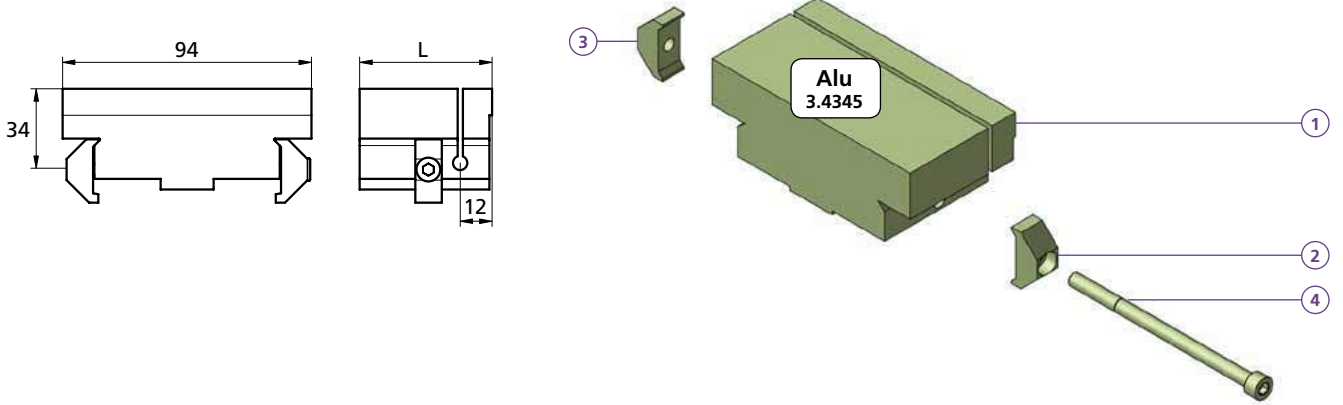
PCFX30

PCFX50

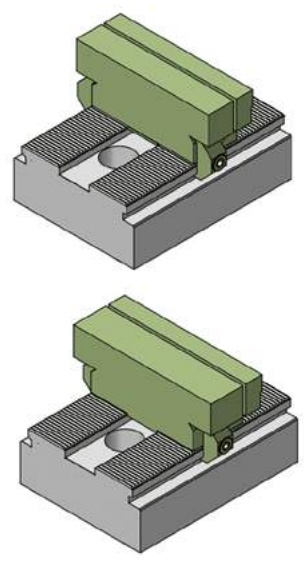
PCFX35

PCFX70

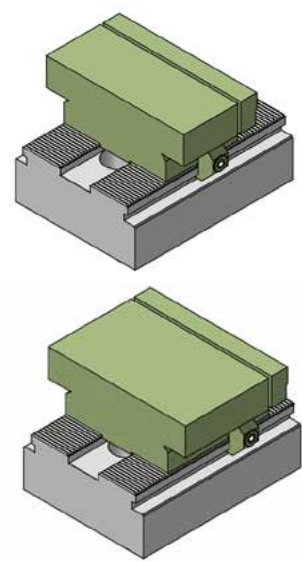
powerCLAMP



- 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

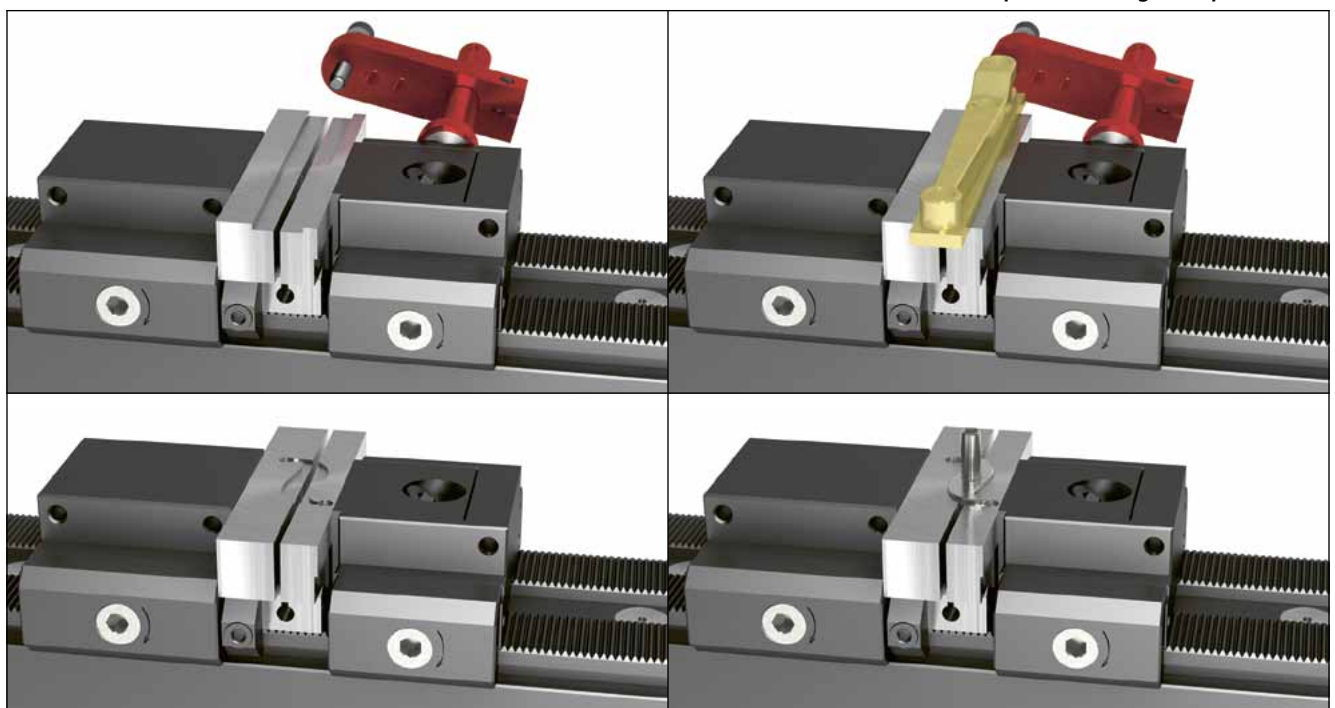


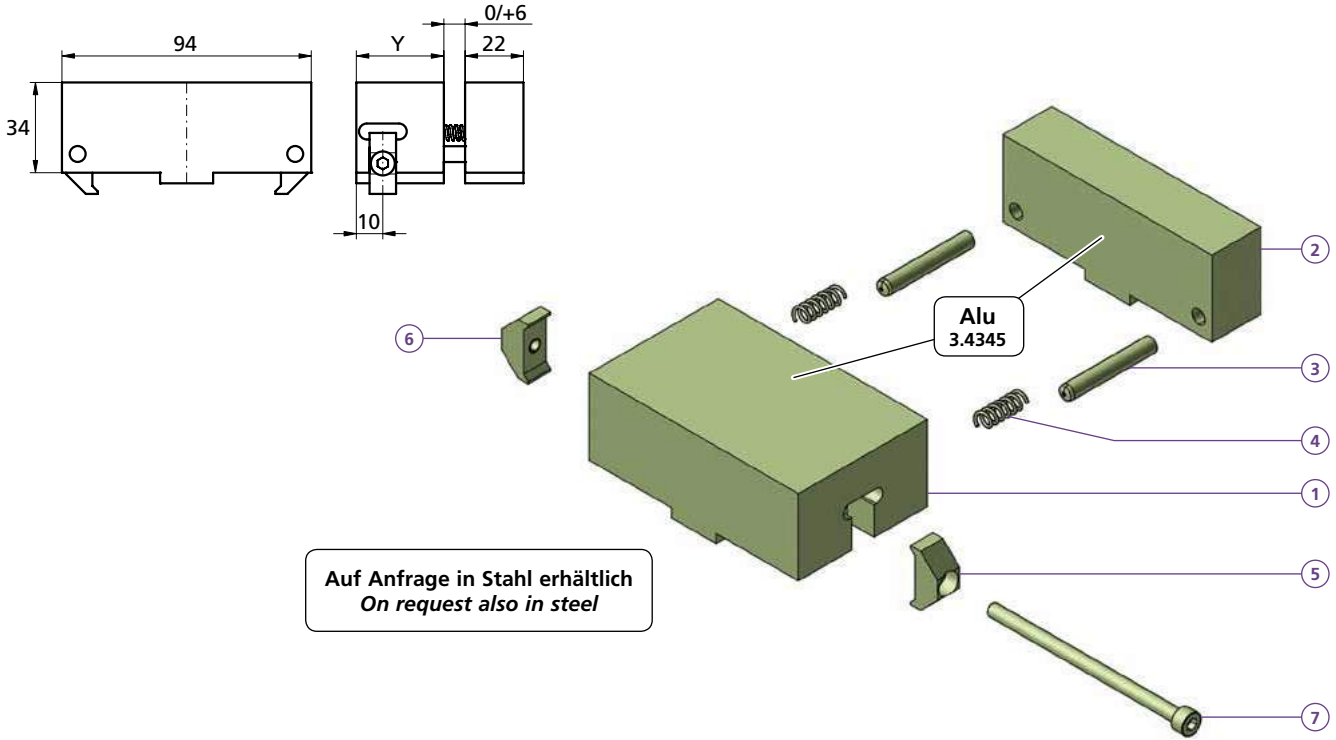
- PCFX50**
- ① 1x TF140704
 - ② 1x PCSP10B
 - ③ 1x PCSP10G
 - ④ 1x M5X85ISO4762
- L = 50
kg ~0,45
-
- PCFX70**
- ① 1x TF140705
- L = 70
kg ~0,62



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

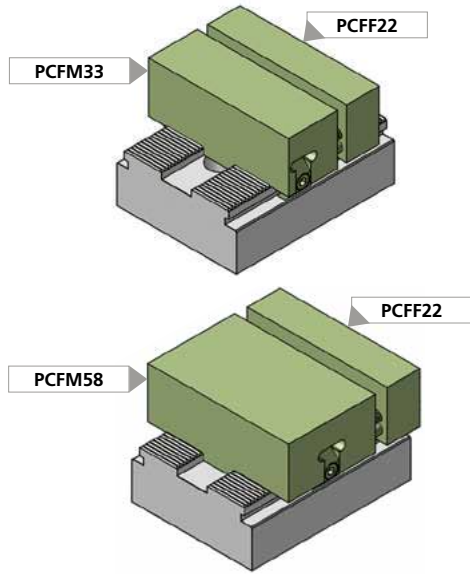
- 1 1x PCFM33
- 2 1x PCFF22
- 3 2x CCBO0801
- 4 2x FED0618
- 5 1x PCSP10B
- 6 1x PCSP10G
- 7 1x M5X85ISO4762

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

HM
Hartmetallbeschichtet
Carbide coated

ohne PCU / without PCU

mit PCU / with PCU

PCU20093 p. 112

Anschlagmodul
End module

beidseitiger Niederzug
Double sided
pull-down modules

Spannmodul
Clamping module

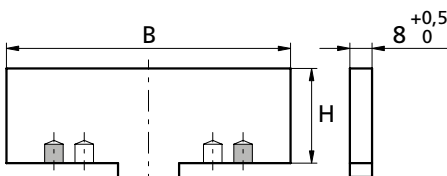
PC4834N			
1	1x	PC4834NSL	
2	1x	PC4834NB1	
3	2x	M5X8ISO4762	
4	2x	PCD008	
5	2x	M5X20ISO4762	
X	=	48	
kg		~0,17	

PC9434N			
1	1x	PC9434NSL	
2	1x	PC9434NB1	
X	=	94	
kg		~0,2	

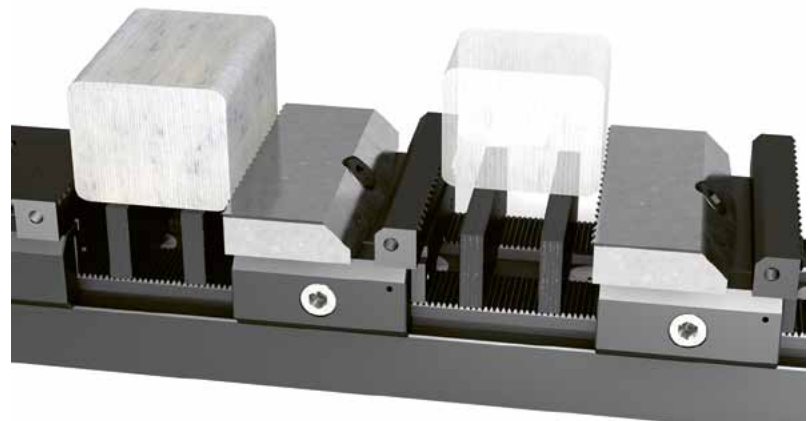
Bestellbeispiel / Ordering example: PC4834N

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

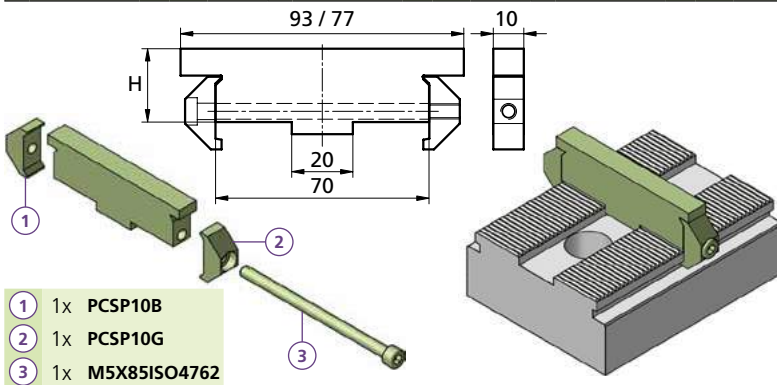
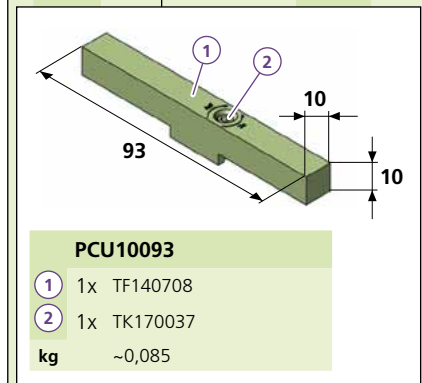
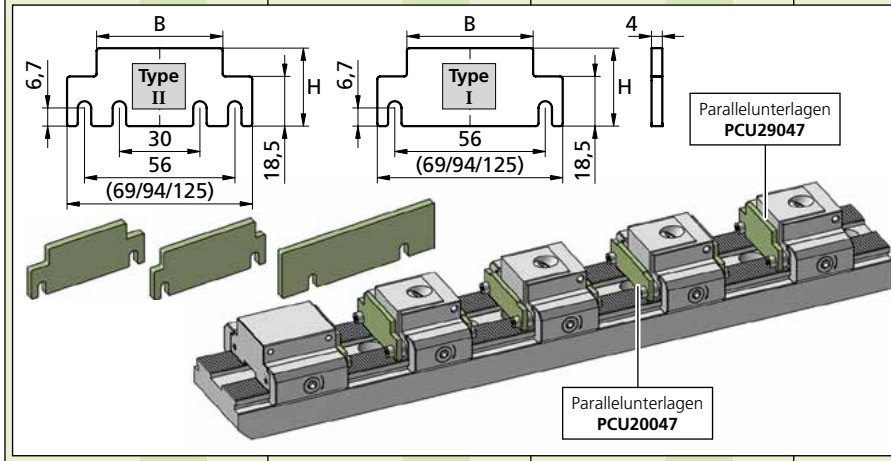


Bestellbeispiel / Ordering example: PCUM1409308

Separat bestellen / Separate order

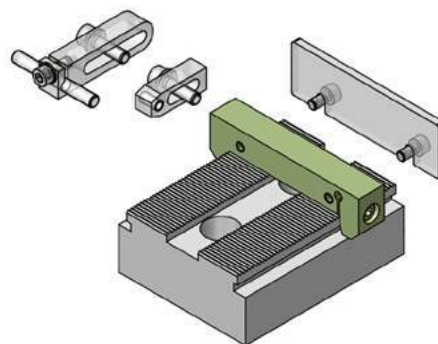
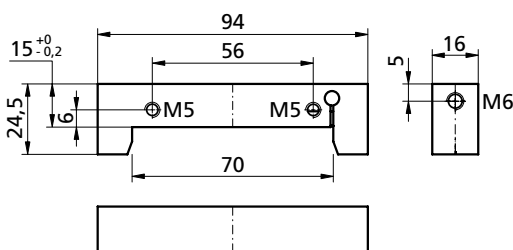


Type	19mm	B	H	kg	Type	34mm	B	H	kg	Type	48mm	B	H	kg	Type	61mm	B	H	kg	Type	94mm	B	H	kg		
I	PCU20018	18	20	~0,04	I	PCU20033	33	20	~0,04	I	PCU20047	47	20	~0,04	I	PCU20060	60	20	~0,04	I	PCU14093	93	14	~0,04		
I	PCU24018	18	24	~0,04	I	PCU24033	33	24	~0,05	I	PCU24047	47	24	~0,05	I	PCU24060	60	24	~0,05	I	PCU20093	93	20	~0,06		
I	PCU29018	18	29	~0,05	I	PCU29033	33	29	~0,05	I	PCU29047	47	29	~0,05	I	PCU29060	60	29	~0,06	I	PCU24093	93	24	~0,07		
I	PCU31018	18	31	~0,05	I	PCU31033	33	31	~0,05	II	PCU31047	47	31	~0,05	I	PCU31060	60	31	~0,06	I	PCU29093	93	29	~0,09		
I	PCU34018	18	34	~0,05	I	PCU34033	33	34	~0,06	I	PCU34047	47	34	~0,07						I	PCU31093	93	31	~0,09		
I	PCU39018	18	39	~0,05	I	PCU39033	33	39	~0,06	I	PCU39047	47	39	~0,07	68mm	B	H	kg	I	PCU34093	93	34	~0,10			
I	PCU44018	18	44	~0,05	I	PCU44033	33	44	~0,07	I	PCU44047	47	44	~0,08	I	PCU20067	67	20	~0,04	I	PCU39093	93	39	~0,11		
I	PCU46518	18	46,5	~0,06	II	PCU46033	33	46	~0,06	I	PCU46047	47	46	~0,08	I	PCU24067	67	24	~0,05	I	PCU44093	93	44	~0,12		
					I	PCU46533	33	46,5	~0,07						I	PCU29067	67	29	~0,06	I	PCU46093	93	46	~0,14		
															I	PCU31067	67	31	~0,07	I	PCU47093	93	47	~0,14		
	26mm	B	H	kg		43mm	B	H	kg		58mm	B	H	kg												
I	PCU20025	25	20	~0,04	I	PCU20042	42	20	~0,04	I	PCU20057	57	20	~0,04												
I	PCU24025	25	24	~0,05	I	PCU24042	42	24	~0,05	I	PCU24057	57	24	~0,05	78mm	B	H	kg								
I	PCU29025	25	29	~0,05	I	PCU29042	42	29	~0,05	I	PCU29057	57	29	~0,06	I	PCU20077	77	20	~0,05	I	PCU20124	124	20	~0,08		
I	PCU31025	25	31	~0,05	I	PCU31042	42	31	~0,06	I	PCU31057	57	31	~0,06	I	PCU24077	77	24	~0,06	I	PCU24124	124	24	~0,09		
I	PCU34025	25	34	~0,05	I	PCU34042	42	34	~0,06					I	PCU29077	77	29	~0,07	I	PCU29124	124	29	~0,11			
I	PCU39025	25	39	~0,06	I	PCU39042	42	39	~0,07					I	PCU31077	77	31	~0,08	I	PCU31124	124	31	~0,12			
I	PCU44025	25	44	~0,06	I	PCU44042	42	44	~0,07					I	PCU34077	77	34	~0,08	I	PCU34124	124	34	~0,13			
I	PCU46525	25	46,5	~0,06	I	PCU46042	42	46	~0,08					I	PCU39077	77	39	~0,09	I	PCU39124	124	39	~0,15			
					I	PCU47042	42	47	~0,08					I	PCU44077	77	44	~0,11	I	PCU44124	124	44	~0,17			
																				II	PCU46124	124	46	~0,18		

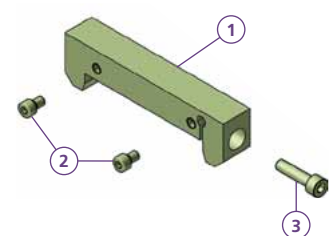


weich / soft	1.7225	hart / hardened	HV700 x0,2mm		
H= +0,15 +0,25	H	H	H		
PCU20077B10-W	20	~0,15	PCU20077B10	20	~0,15
PCU24093B10-W	24	~0,19	PCU24093B10	24	~0,19
PCU39093B10-W	39	~0,29	PCU29093B10	29	~0,23
PCU44093B10-W	44	~0,33	PCU31093B10	31	~0,24
PCU46093B10-W	46	~0,34	PCU34093B10	34	~0,27
			PCU39093B10	39	~0,29
			PCU44093B10	44	~0,33
			PCU46093B10	46	~0,34

Unterlagen- und Fräsanschlaghalter Holder for parallels and workpiece stop



PCUH2594	
1	1x TF140706
2	2x M5X8ISO4762
3	1x M5X22ISO4762
kg	~0,19



Bestellbeispiel / Ordering example: **PCUH2594**