

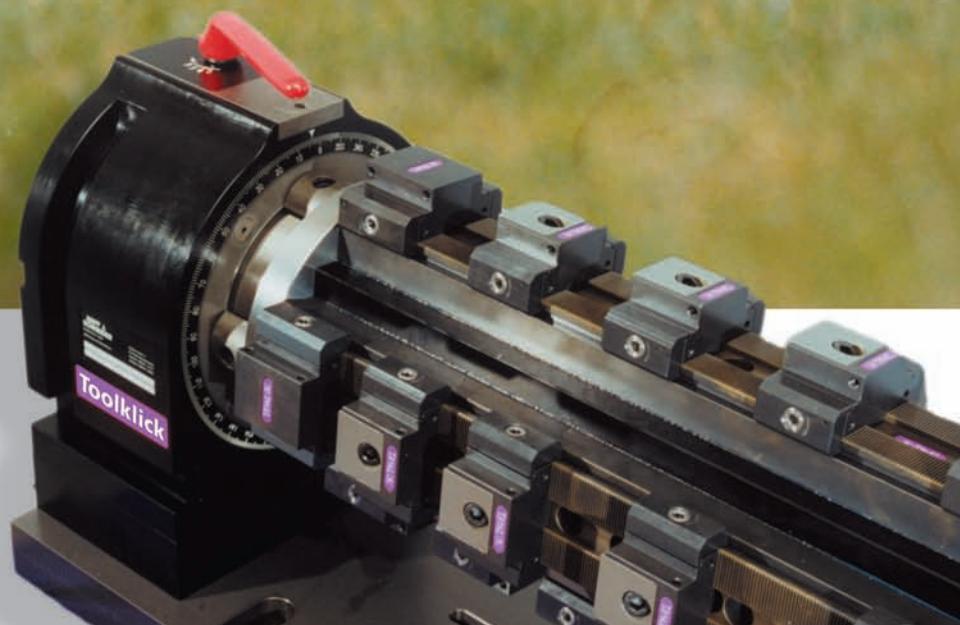
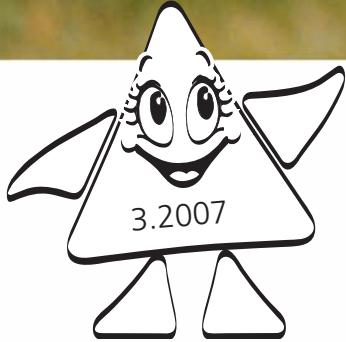
# powerCLAMP

Modularspannsystem

**schnell und kraftvoll!**  
**fast and powerful!**  
**rapide et vigoureux!**

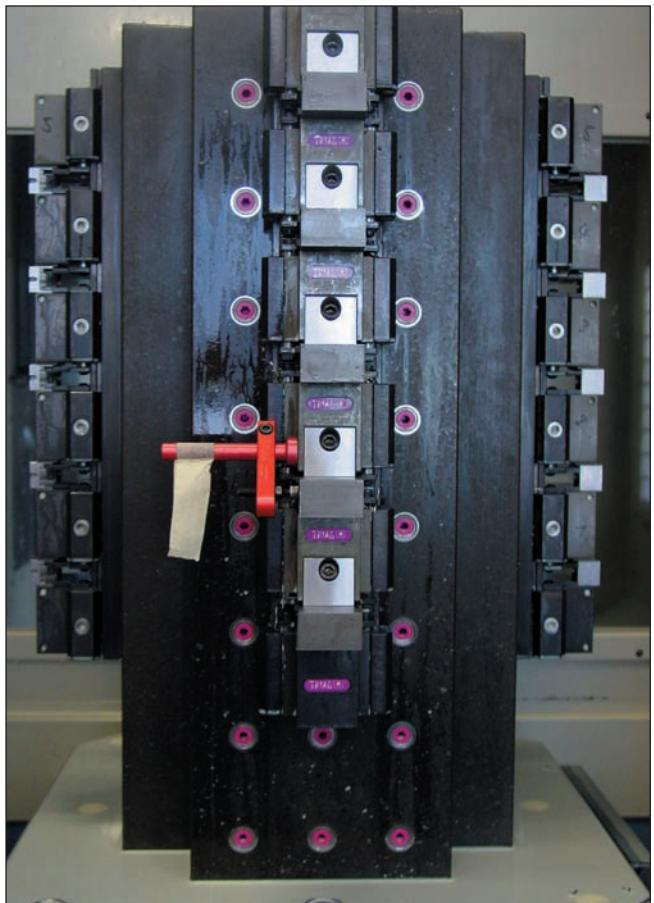
*Modular workholding system*

*Système de serrage modulaire*

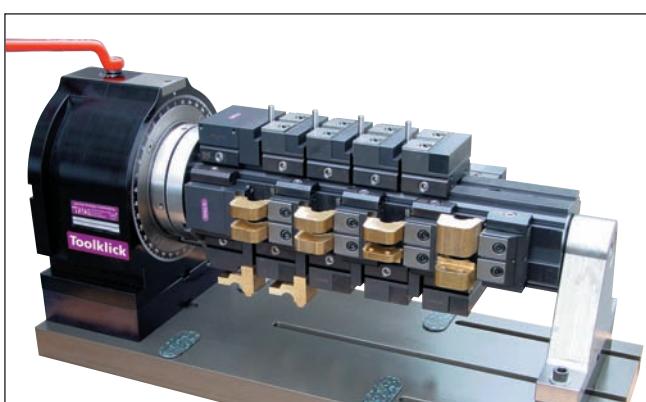




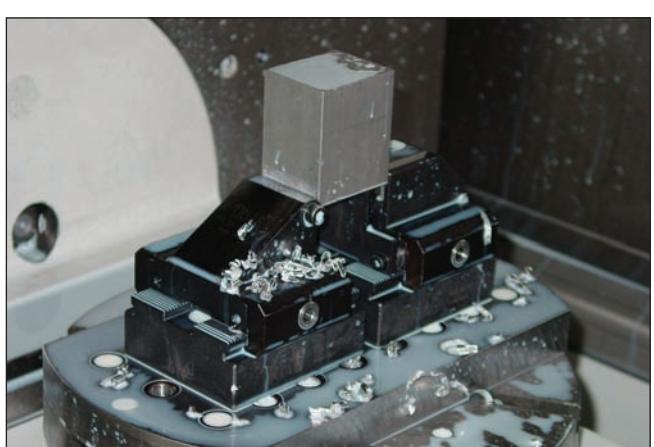
Dreiseitenbearbeitung ab 19mm  
Three-sided machining beginning at 19mm  
Usinage à trois côtés à départ de 19mm



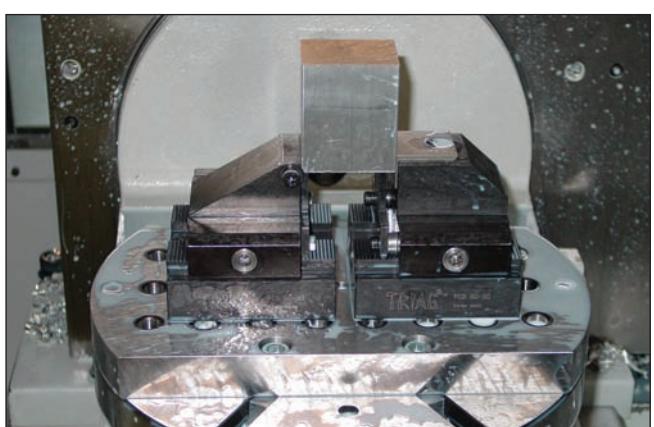
...im Einsatz als Mehrfachspannstock  
...in action as multiple machine vise  
...en action comme étau multiple



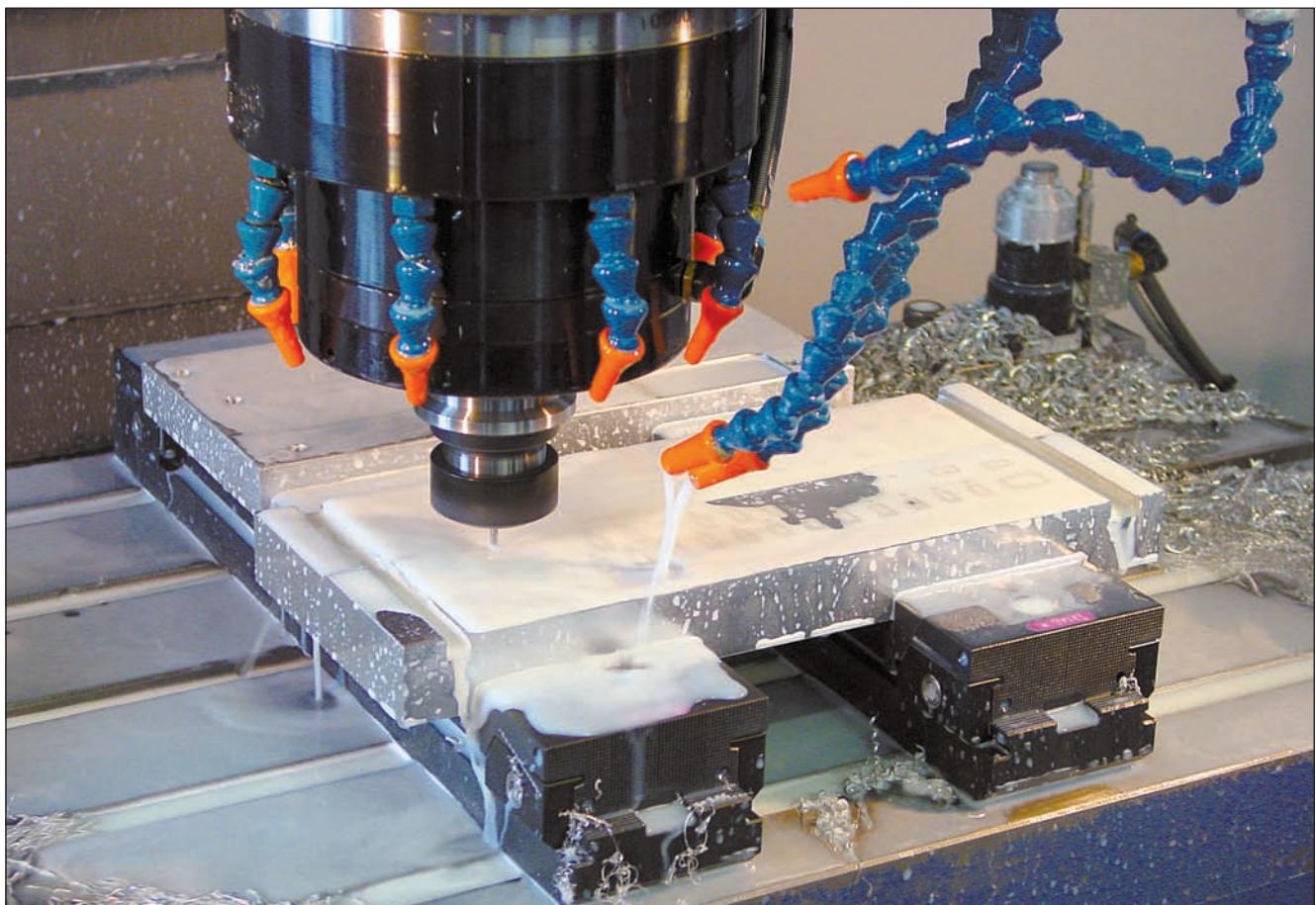
Toolclick mit Power Clamp  
Toolclick with Power Clamp  
Toolclick avec Power Clamp



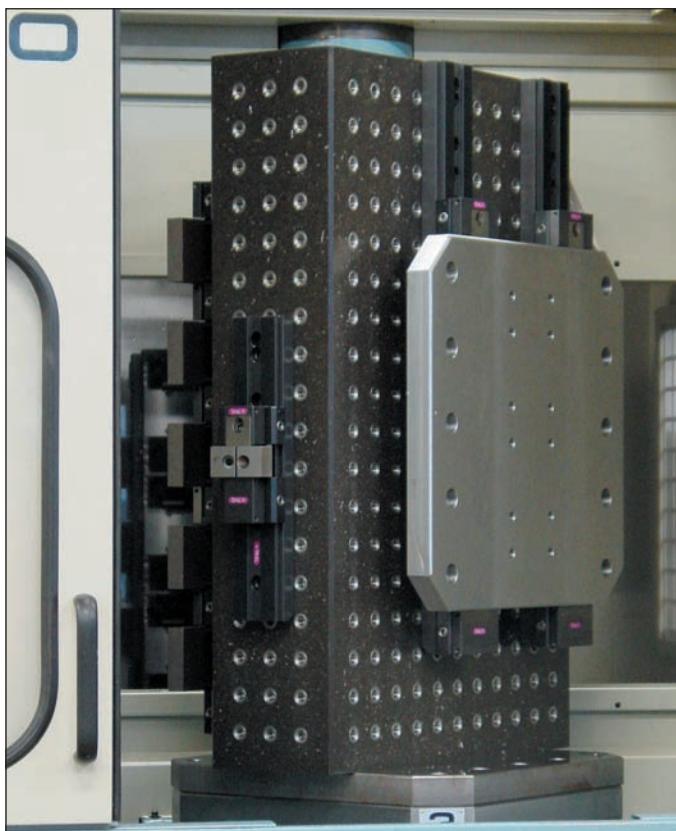
...im Einsatz auf der 4. Achse  
...in action on the 4th axis  
...en action à l'axe 4ème



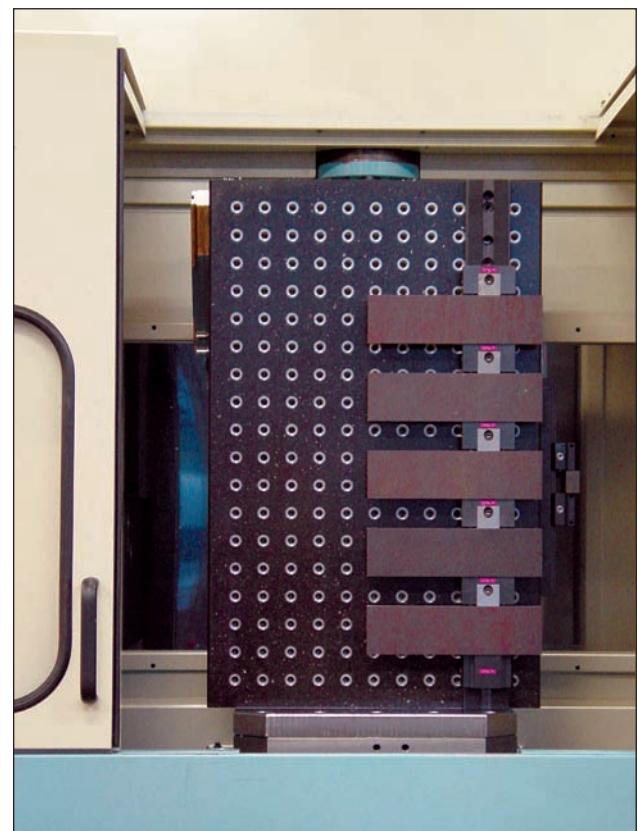
...im Einsatz auf der 5 Achsenmaschine  
...in action on a 5 axis machine  
...en action à l'axe 5ème



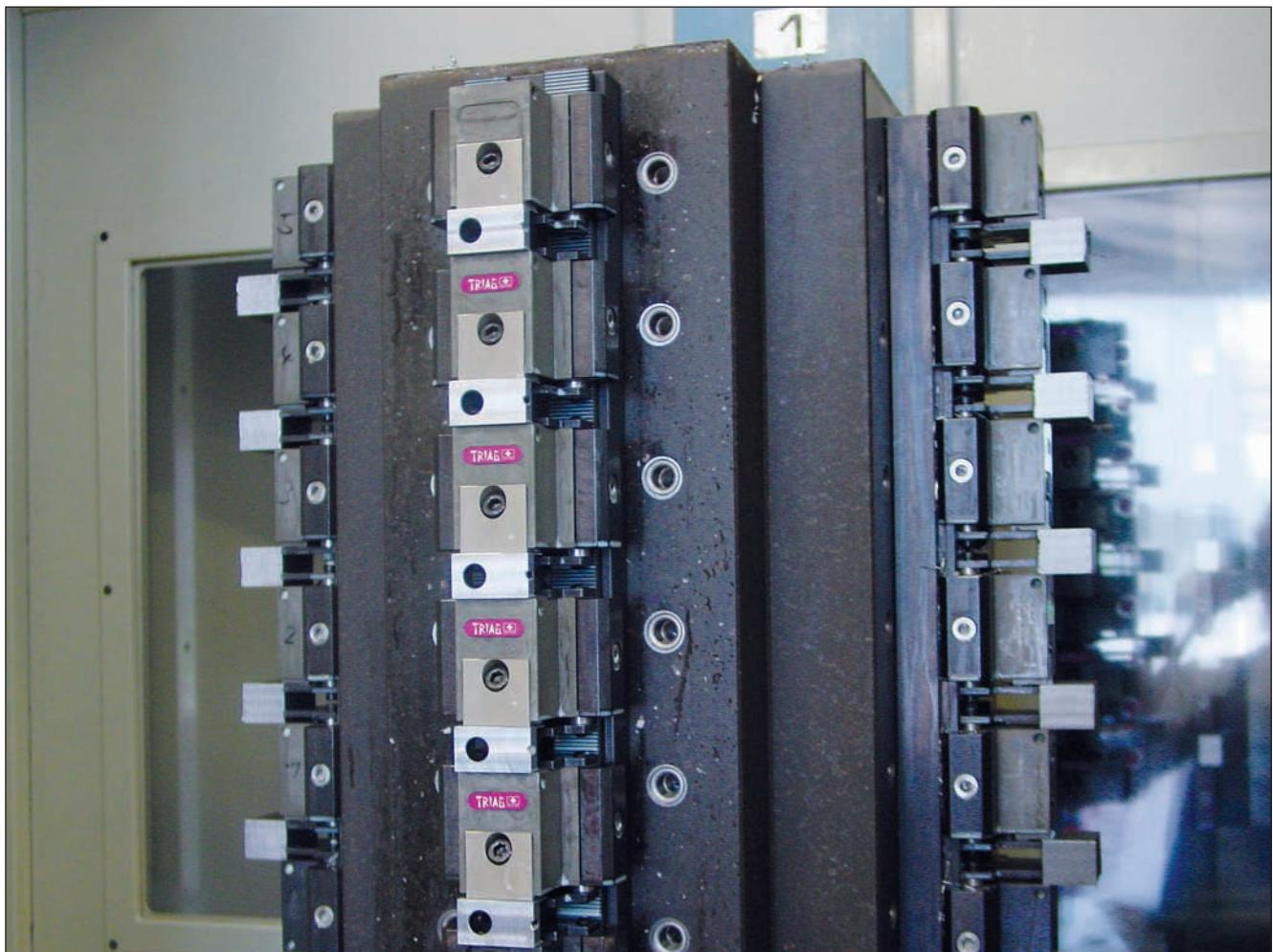
Einzelspannung von Platten; Schraubstockähnliche Spannung (Bearbeitung einseitig)  
Single set up of plates; Workholding similar to vise (workable area one-sided)  
Serrage simple des plaquettes; Serrage comme étau (usinage d'un seul côté)



Einzelspannung einer grossen Platte auf „Tripoxy“ Mineralgussturm  
Single set up of a large plate on tombstone made of composite concrete  
Serrage simple d'une plaquette grande sur une tourelle à minérale coulée



Aufspannung mit Power Clamp auf einem „Tripoxy“ Mineralgussturm  
Set up with Power Clamp on a tombstone made of composite concrete  
Serrage Power Clamp sur une tourelle à minérale coulée



#### Der Spannstock und die Idee des Mehrfachspannens

Für viele Arbeiten ist auch heute noch der „Schraubstock“ das Spannmittel der Wahl. Bei einer einfachen Konfiguration können die Triag Mehrfachspannsysteme auch als Spannstock eingesetzt werden (Bild). Ein solcher Spannstock kann nachher zu einem Mehrfachspannungsystem erweitert werden. Alle Teile der Grundkonfiguration können weiterverwendet werden. Allfällige defekte Teile können problemlos ersetzt werden.



#### The machine vise and the idea of multiple workholding

*For many machining tasks the conventional vise is still the favorite choice. If the batch has only a few parts the TRIAG multiple workholding systems can also be used as a simple machine vise (note picture). Should the need for a multiple workholding device arise at a later time, as a larger batch has to be machined for example, it is a matter of adding a few extra vise modules to do the job. All the components of the starter set may be used for the multiple layout. Consequently for future vice acquisitions only TRIAG multiple starter sets should be considered.*



#### L'étau et l'idée des serrages multiples

Pour beaucoup de travaux l'étau est encore aujourd'hui le choix pour la fixation. Pour une configuration simple le système de serrage multiple de Triag peut aussi être utilisé comme étau (voir photo de droite) Un étau de ce genre peut- être rapidement agrandi en système de serrage multiple. Toutes les pièces de la configuration peuvent être utilisées par la suite. Les pièces usées peuvent être remplacées facilement.

#### powerCLAMP

Beim Power Clamp ermöglicht eine Verzahnung mit 2mm-Teilung auf der Basisschiene ein schnelles und trotzdem genaues Positionieren der Spann- und Anschlagmodule. Im Gegensatz zum Compact Clamp und vielen anderen Spannsystemen auf dem Markt, werden nicht vier Befestigungsschrauben pro Modul verwendet, sondern eine quer eingebaute Spindel. Diese, mit einem Rechts- und einem Linksgewinde versehen, zieht zwei mit schießen Ebenen versehene Pratzen zusammen. Mit dem Anziehen und Lösen dieser Spindel kann das Modul problemlos umplaziert werden. Da die Spindel von beiden Seiten her zugänglich ist, können die Spannsysteme dicht beieinander platziert werden. Die Module werden von beiden Seiten her mit einer Kraft von 150'000 N auf die Basisschiene hinuntergezogen.



1.

eine Schraube öffnen  
open one screw  
ouvrir une vis



2.

abheben und neu plazieren  
lift and change position  
enlever et repositionner le module



3.

eine Schraube anziehen  
fasten one screw  
serrer une vis

*On the Power Clamp, teeth serrations (2mm spacing) on the base rail allow exact positioning of the vise and end modules. In contrast to the compactCLAMP and many other clamping systems on the market, in which four hold down screws are necessary for each module, one transverse spindle is used. This central spindle, which has a right-handed and a left-handed thread, pulls two plates with angled faces together. These plates then lock the vise modules onto the base rail with a force of 150kN on either side creating a solid bond between the two components. This feature allows very fast repositioning of the vise modules. Therefore setting up powerCLAMP is accomplished within seconds particularly if the magnetic scale is being used.*

*The spindle is accessible from both sides, so that the modules can easily be repositioned, even though adjacent clamping systems are very close. Here again, as with the compactCLAMP, the vise and end modules are available in a variety of standard widths (34, 48, 62, 94 and 125mm). Thus, easy access for machining from three sides on workpieces of various width.*

Avec le Power Clamp vous avez à disposition une denture sur le rail de base avec un pas de positionnement de 2 mm qui vous permet rapidement et avec précision de positionner le module de serrage et d'appui sur le rail de base. Au contraire du Compact Clamp ou d'autres systèmes de serrage sur le marché ou vous avez quatre vis à serrer par module, le système Power Clamp est muni d'une seule vis transversale avec un filetage gauche et droit et deux pièces d'ancrages qui fixe le module sur le rail de base. En serrant ou desserrant cette vis vous avez rapidement déplacer votre module. Etant donné que vous pouvez atteindre cette vis des deux côtés vous pouvez placer vos deux étaux tout près l'un de l'autre et de ce fait vous économiser beaucoup de place. Les deux modules sont tirés vers le bas des deux côtés avec une force de 150'000 N sur le rail de base.

System System / Système	
P	Power Clamp
C	Compact Clamp
M	Micro Clamp
V	Vorrichtungsbaumodule <i>workholding modules for dedicated fixtures</i> module de serrage pour gabarits individuels

**P** **S**

Modultyp <i>type of module / type de module</i>	
A	Anschlagmodul <i>end module</i> module d'appui
S	Spannmodul <i>vice module</i> module de serrage
T	Trägermodul <i>supporting module</i> module support
R	Rohling <i>blank</i> ébauche

bei Anschlagmodulen <i>for end module / pour module d'appui</i>	
N	nitriergehärtet <i>nitrated</i> nitruré
D	durchgehärtet <i>through hardened</i> trempé

bei Spannmodulen <i>for vice modules / pour module de serrage</i>	
1	Anzahl Spannbacken <i>number of jaws</i> nombre de mors
2	
4	
-	keine Spannbacke <i>no clamping jaw</i> sans mors de serrage

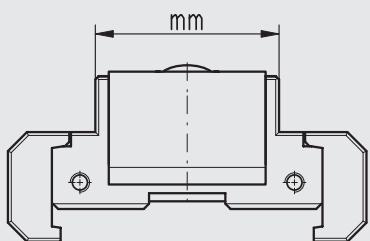
**1** **R**

Anschlagfläche der Module <i>datum face / surface d'appui</i>	
F	Anschlagfläche glatt <i>datum face flat</i> face d'appui lisse
R	Anschlagfläche geriffelt <i>datum face double serrated</i> face d'appui striée en croix
D	eine Seite glatt, eine Seite geriffelt <i>one face flat, one face double serrated</i> une face lisse, une face striée en croix
G	Anschlagfläche gerillt <i>datum face serrated</i> face d'appui strié
X	spezielle Ausführung <i>special execution</i> exécution spéciale

## Modulnutzbreite

module clamping width / largeur utile du module

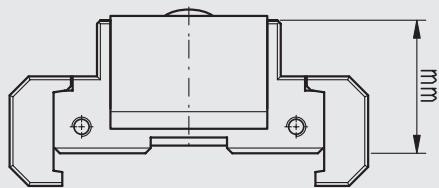
19  
25  
26  
34  
43  
48  
58  
61  
68  
78  
94  
125



## Modulnutzhöhe

module clamping height / hauteur utile du module

34  
44  
49



**48**

**N**

**34**

**B80**

## Backenhub

stroke of clamping jaw / cours du mors de serrage

N	Niederzug <i>pull down</i> abaiissant
L	linear parallel <i>linear parallel</i> linéaire parallèle
-	ohne Spannbacke <i>no clamping jaw</i> sans mors de serrage

## Spannbackentyp

type of clamping jaw / type du mors de serrage

B01 - B99	Spannbacke <i>clamping jaw</i> mors de serrage
-01 - -99	Modul ohne Zubehör <i>module without accessories</i> module sans accessoires
X30 X50 X60	Trägermodullänge <i>supporting module length</i> longeur du module support

# Spannkraft und Drehmoment / Inhaltsverzeichnis

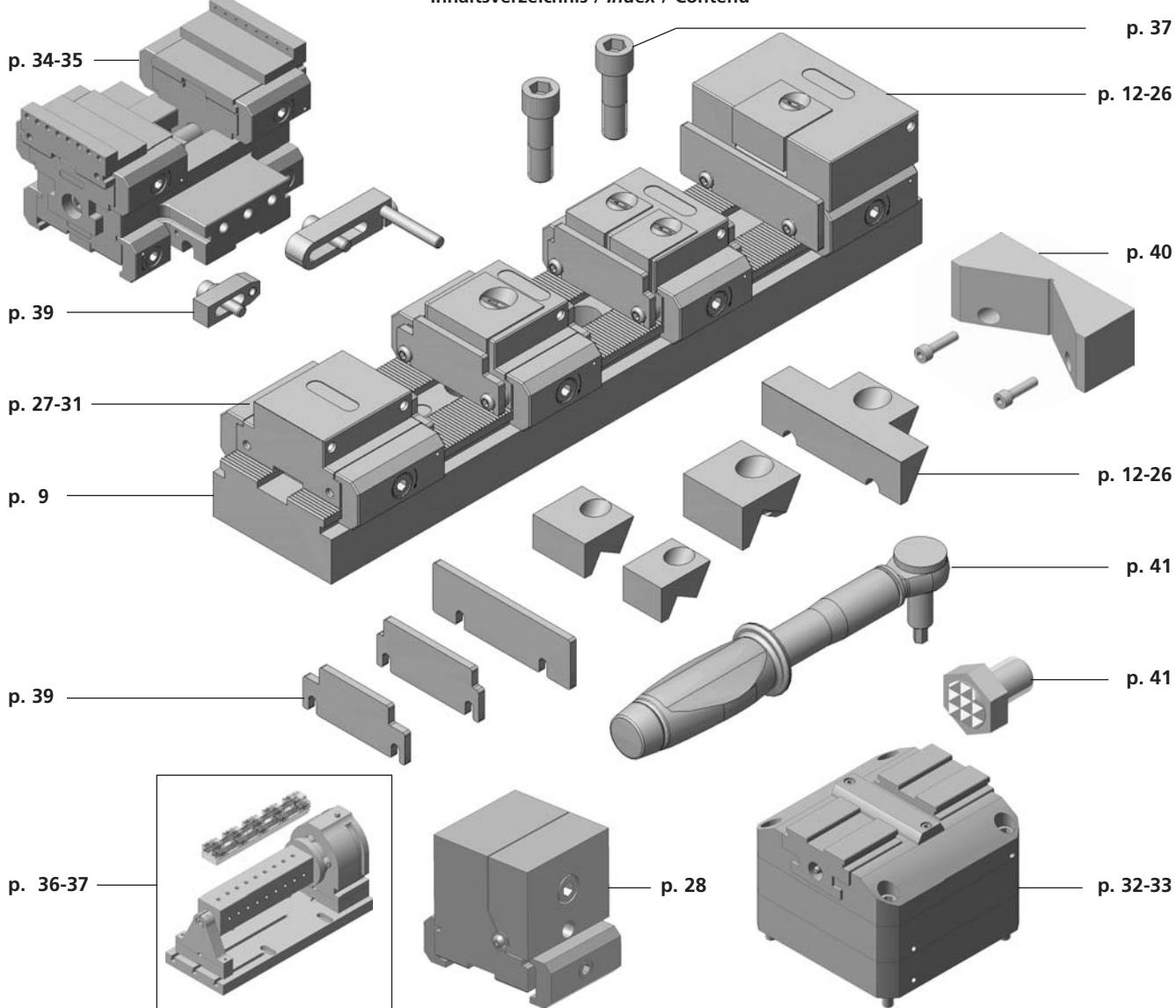
## Workholding force and Torque / Index

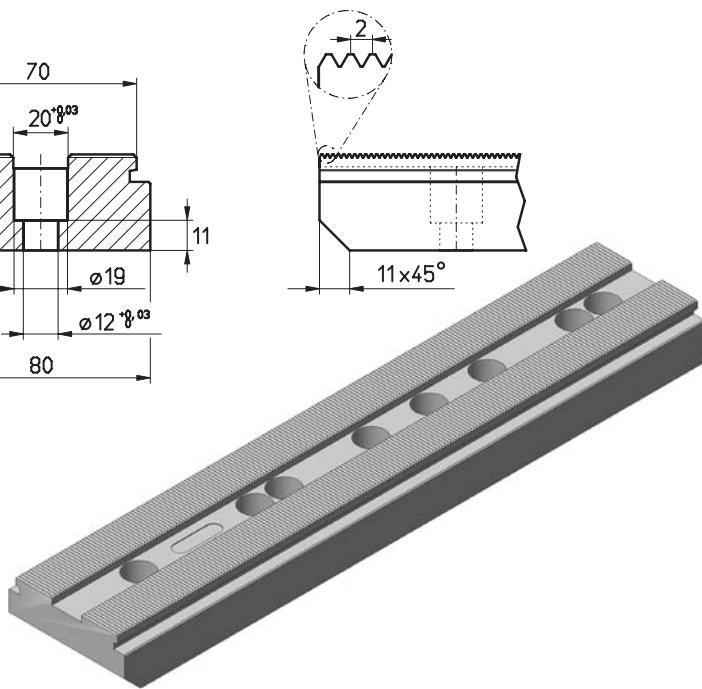
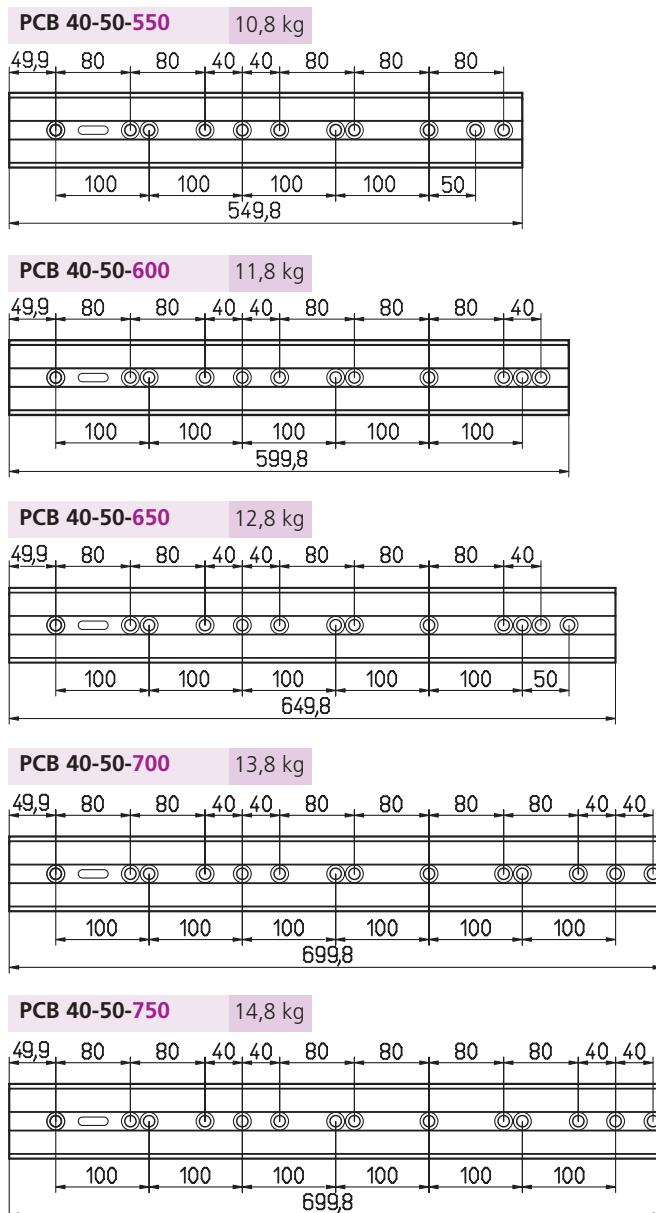
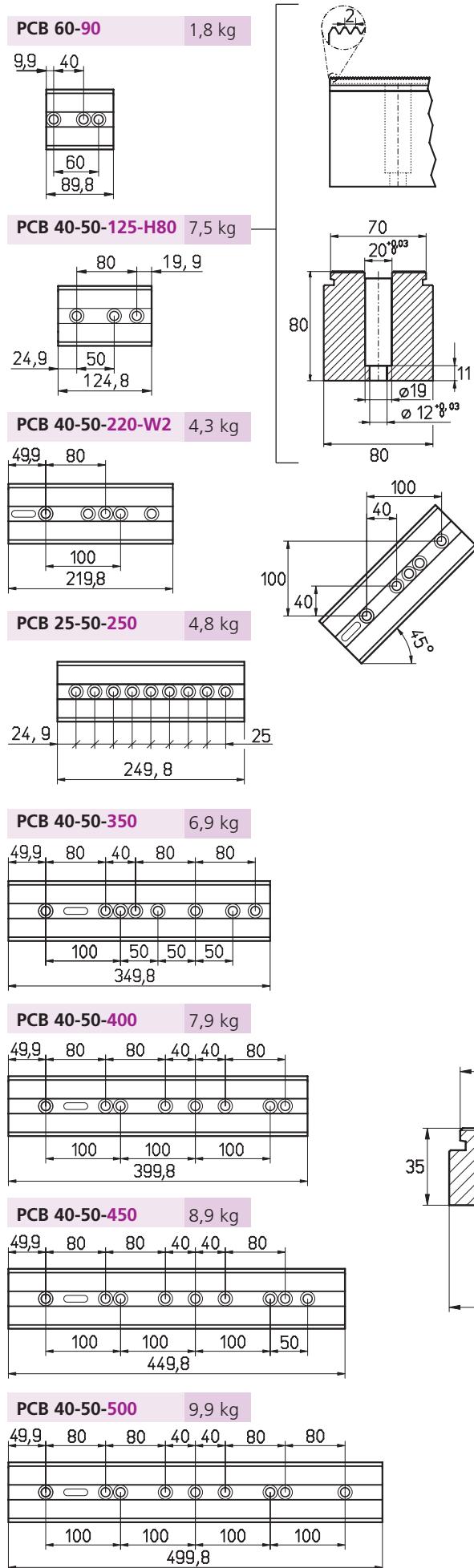
### Force de serrage et couple de torsion / Contenu **powerCLAMP**

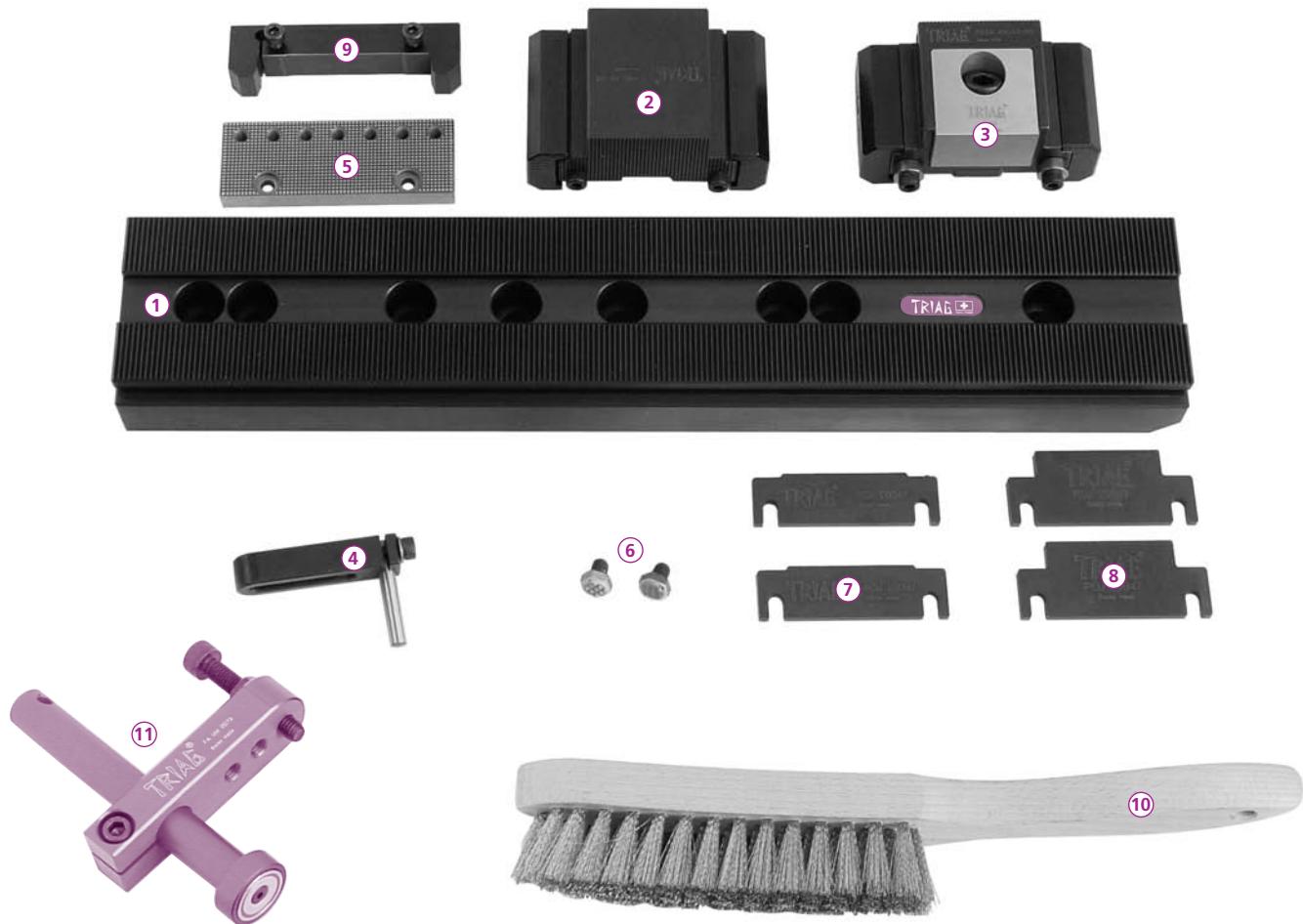
Spannkraft / Workholding force / Force de serrage      Drehmoment / Torque / Couple de torsion

	daN	(lb)	t	Nm	(lb/ft)
<b>M5 + M6</b>	500	1100	0,50	4	3
	580	1300	5,58	5	3,7
	690	1500	0,69	6	4,4
	780	1700	0,78	7	5,2
	880	1930	0,88	8	5,9
	980	2150	0,98	9	6,6
	1020	2240	1,02	10	7,4
<b>M6</b>	1220	2680	1,22	12	8,9
	1450	3200	1,45	14	10,4
	1520	3340	1,52	15	11,1
<b>M8</b>	410	900	0,41	4	3
	490	1080	0,49	5	3,7
	560	1200	0,56	6	4,4
	660	1450	0,66	7	5,2
	730	1600	0,73	8	5,9
	810	1790	0,81	9	6,6
	900	1980	0,90	10	7,4
	1370	3020	1,37	15	11,1
	1810	4000	1,81	20	14,8
	2100	4600	2,10	25	18,4
	400	890	0,40	10	7,4
<b>M10</b>	1400	3080	1,40	20	14,8
	2000	4400	2,00	30	22,1
	2800	6150	2,80	40	29,5

Inhaltsverzeichnis / Index / Contenu







Länge der Basisschiene  
length of base rail  
longeur de rail de base

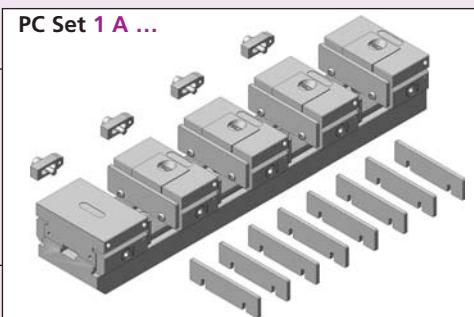
Anzahl Spannstellen  
number of clamping stations  
quantité des stations de serrage

	L	N	1	2	3	4	5	6	7	8	9	10	11
			PCB4050 ...	PAND 48-34	PS1R 48N34	B80	PC 9434	CCHMR	PCU 20047	PCU 29047	PCUH 2594	PCMB 4	FAUM 2070
400 PC-SET 48 AJ-1	400mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
400 PC-SET 48 AJ-2	400mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
400 PC-SET 48 AJ-3	400mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x
450 PC-SET 48 AJ-1	450mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
450 PC-SET 48 AJ-2	450mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
450 PC-SET 48 AJ-3	450mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x
500 PC-SET 48 AJ-1	500mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
500 PC-SET 48 AJ-2	500mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
500 PC-SET 48 AJ-3	500mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x
550 PC-SET 48 AJ-1	550mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
550 PC-SET 48 AJ-2	550mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
550 PC-SET 48 AJ-3	550mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x
600 PC-SET 48 AJ-1	600mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
600 PC-SET 48 AJ-2	600mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
600 PC-SET 48 AJ-3	600mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x
650 PC-SET 48 AJ-1	650mm	1	1x	1x	1x	1x	1x	2x	2x	2x	2x	1x	1x
650 PC-SET 48 AJ-2	650mm	2	1x	1x	2x	2x	2x	4x	4x	4x	4x	1x	1x
650 PC-SET 48 AJ-3	650mm	3	1x	1x	3x	3x	3x	6x	6x	6x	6x	1x	1x

Bestellbeispiel / ordering example / exemple de commande: 400 PC-SET 48 AJ-2

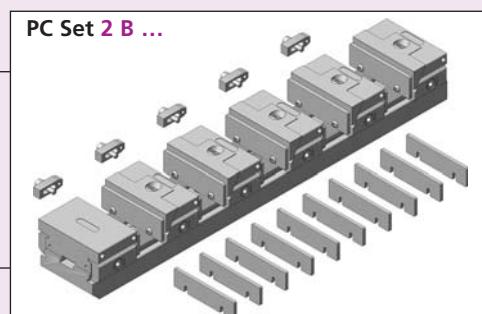
## PC Set 1/2/3 A ...

<b>A.</b>	<b>PC SET 1A 450</b>	<b>A.</b>	<b>PC SET 1A 500</b>
1 x	PCB 40-50-450	1 x	PCB 40-50-500
4 x	PS1 R94 N34B80	4 x	PS1 R94 N34B80
1 x	PAND 94 - 34	1 x	PAND 94 - 34
8 x	PCU 20093	8 x	PCU 20093
8 x	PCU 29093	8 x	PCU 29093
4 x	FA 1240	4 x	FA 1240
<b>A.</b>	<b>PC SET 2A 550</b>	<b>A.</b>	<b>PC SET 2A 600</b>
1 x	PCB 40-50-550	1 x	PCB 40-50-600
5 x	PS1 R94 N34B80	5 x	PS1 R94 N34B80
1 x	PAND 94 - 34	1 x	PAND 94 - 34
10 x	PCU 20093	10 x	PCU 20093
10 x	PCU 29093	10 x	PCU 29093
5 x	FA 1240	5 x	FA 1240
<b>A.</b>	<b>PC SET 3A 650</b>		
1 x	PCB 40-50-650		
6 x	PS1 R94 N34B80		
1 x	PAND 94 - 34		
12 x	PCU 20093		
12 x	PCU 29093		
6 x	FA 1240		



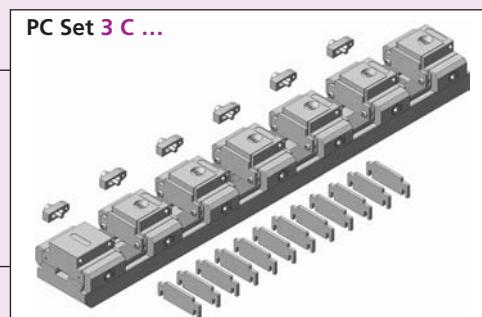
## PC Set 1/2/3 B ...

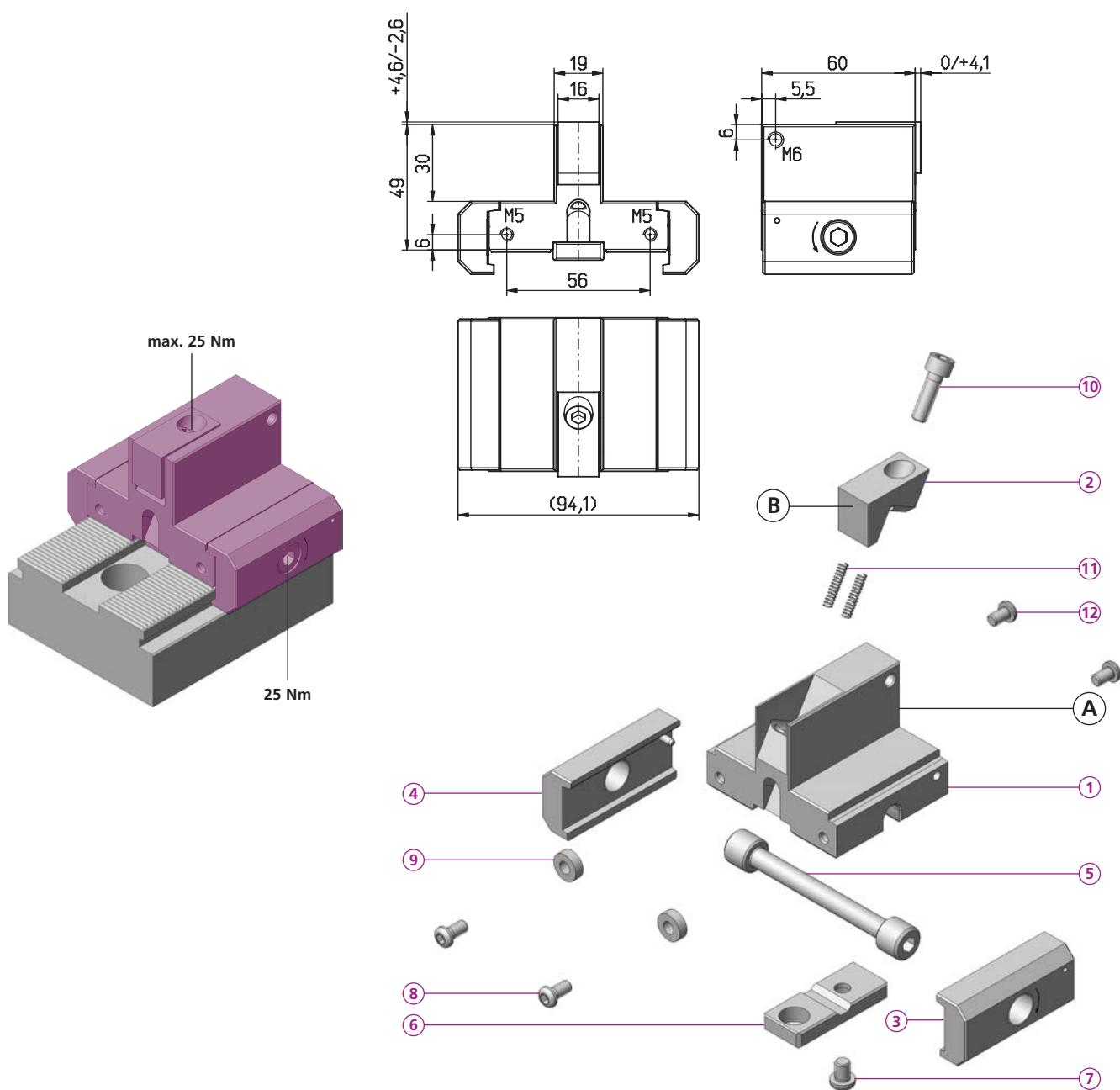
<b>B.</b>	<b>PC SET 1B 450</b>	<b>B.</b>	<b>PC SET 1B 500</b>
1 x	PCB 40-50-450	1 x	PCB 40-50-500
4 x	PS1 R94 N34B90	4 x	PS1 R94 N34B90
1 x	PAND 94 - 34	1 x	PAND 94 - 34
8 x	PCU 20093	8 x	PCU 20093
8 x	PCU 29093	8 x	PCU 29093
4 x	FA 1240	4 x	FA 1240
<b>B.</b>	<b>PC SET 2B 550</b>	<b>B.</b>	<b>PC SET 2B 600</b>
1 x	PCB 40-50-550	1 x	PCB 40-50-600
5 x	PS1 R94 N34B90	5 x	PS1 R94 N34B90
1 x	PAND 94 - 34	1 x	PAND 94 - 34
10 x	PCU 20093	10 x	PCU 20093
10 x	PCU 29093	10 x	PCU 29093
5 x	FA 1240	5 x	FA 1240
<b>B.</b>	<b>PC SET 3B 650</b>		
1 x	PCB 40-50-650		
6 x	PS1 R94 N34B90		
1 x	PAND 94 - 34		
12 x	PCU 20093		
12 x	PCU 29093		
6 x	FA 1240		



## PC Set 1/2/3 C ...

<b>C.</b>	<b>PC SET 1C 450</b>	<b>C.</b>	<b>PC SET 1C 500</b>
1 x	PCB 40-50-450	1 x	PCB 40-50-500
4 x	PS1 R48 N34B80	4 x	PS1 R48 N34B80
1 x	PAND 48 - 34	1 x	PAND 48 - 34
8 x	PCU 20047	8 x	PCU 20047
8 x	PCU 29047	8 x	PCU 29047
4 x	FA 1240	4 x	FA 1240
<b>C.</b>	<b>PC SET 2C 550</b>	<b>C.</b>	<b>PC SET 2C 600</b>
1 x	PCB 40-50-550	1 x	PCB 40-50-600
5 x	PS1 R48 N34B80	5 x	PS1 R48 N34B80
1 x	PAND 48 - 34	1 x	PAND 48 - 34
10 x	PCU 20047	10 x	PCU 20047
10 x	PCU 29047	10 x	PCU 29047
5 x	FA 1240	5 x	FA 1240
<b>C.</b>	<b>PC SET 3C 650</b>		
1 x	PCB 40-50-650		
6 x	PS1 R48 N34B80		
1 x	PAND 48 - 34		
12 x	PCU 20047		
12 x	PCU 29047		
6 x	FA 1240		

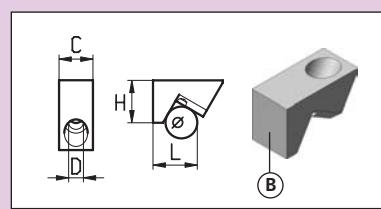


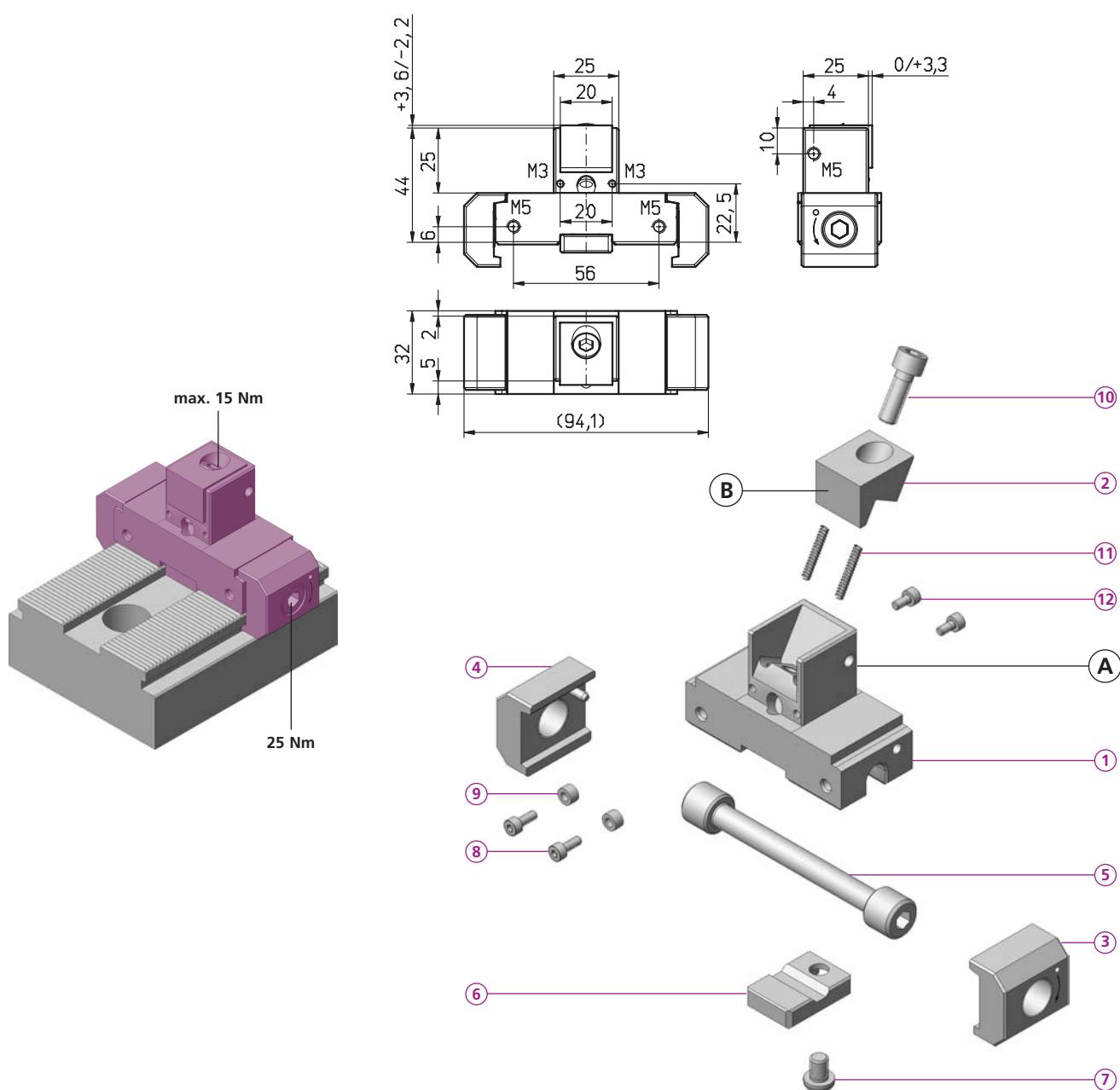


Bestellbeispiel / ordering example / exemple de commande: PS1R 19N49 B21

PS1R 19N49 -20		B20	B21	B22
①	1x PS1R 19N49 -20	16	16	16
②	1x	20	20	20
③	1x PCSP 60R	19	19	19
④	1x PCSP 60L	6,5	6,5	6,5
⑤	1x PCS 14	12	12	12
⑥	1x PCGU 20 49	HV700x HV700x 0,2mm 0,2mm		
⑦	1x M6x8 ISO 7380	*		
⑧	2x M5x14 ISO 4762			
⑨	2x PCD 005			
⑩	1x M6x20 ISO 4762			
⑪	2x FED 0418			
⑫	2x M5x10 ISO 4762			
<b>kg</b>	1,2			

\* = weich / soft / doux

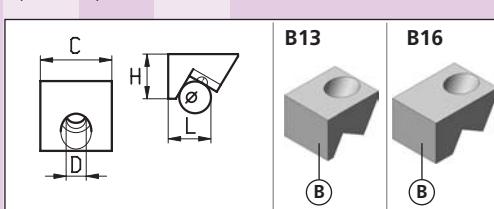


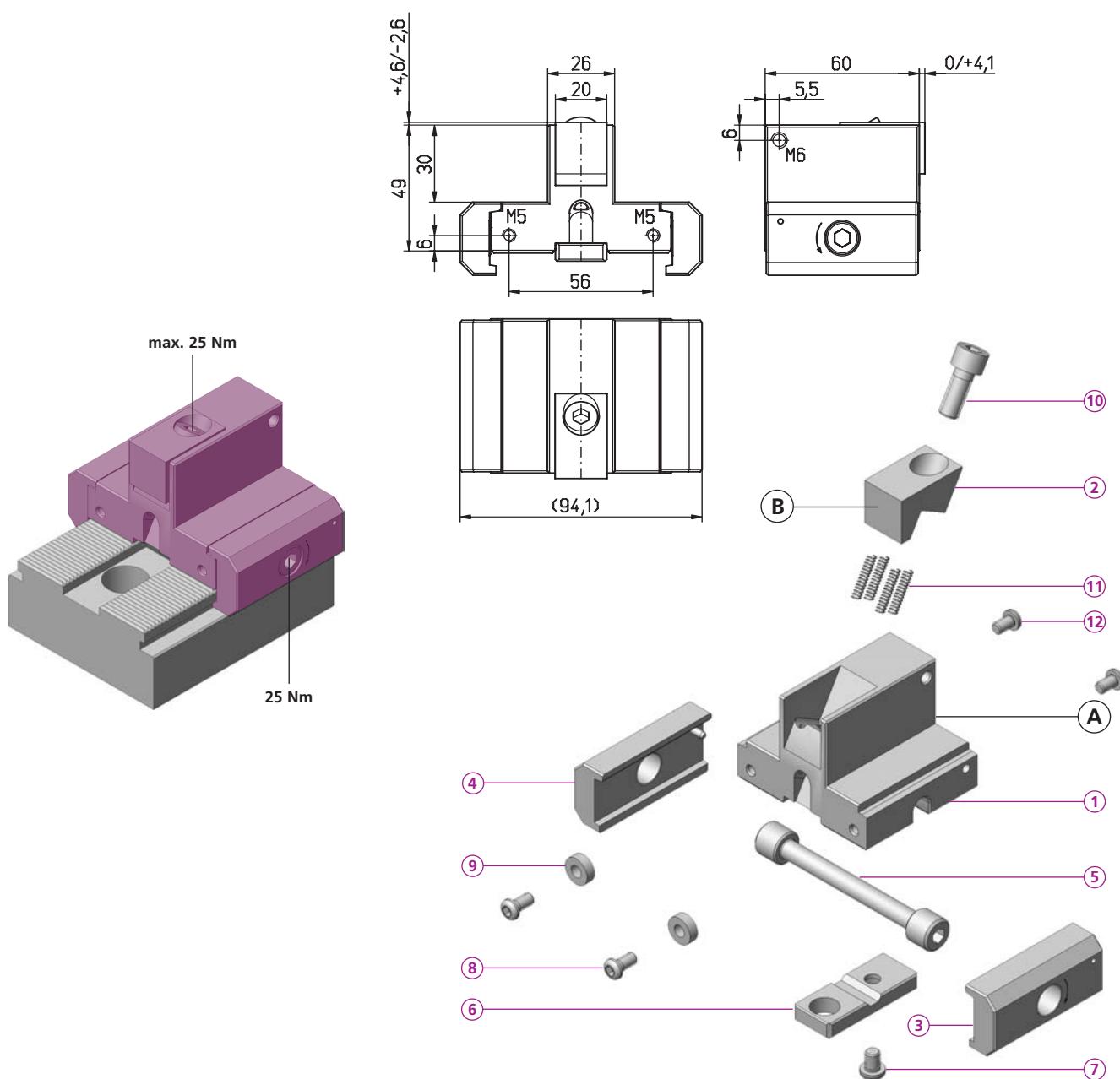


PS1R 25N44 -13		B	Bestellbeispiel / ordering example / exemple de commande: PS1R 25N44 B13			
			B13	B14	B15	B16
①	1x PS1R 25N44 -13		20	20	20	20
②	1x		16	16	16	16
③	1x PCSP 30R		13,8	13,8	13,8	19
④	1x PCSP 30L		6,5	6,5	6,5	6,5
⑤	1x PCS 14		10	10	10	10
⑥	1x PCGU 20 30		HV700x HV700x 0,2mm 0,2mm			
⑦	1x M6x8 ISO 7380		*	*		
⑧	2x M3x10 ISO 4762					
⑨	2x MCD 004					
⑩	1x M6x16 ISO 4762					
⑪	2x FED 03018					
⑫	2x M3x6 ISO 4762					
kg	0,65					

\* = weich / soft / doux

MCU	H	B	N
11037	11	23	2
15037	15	23	2
18037	18	23	2
20037	20	23	2
22537	22,5	23	2

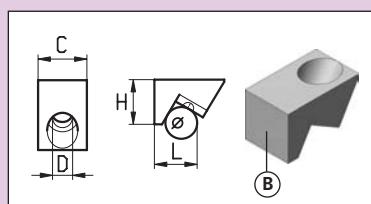


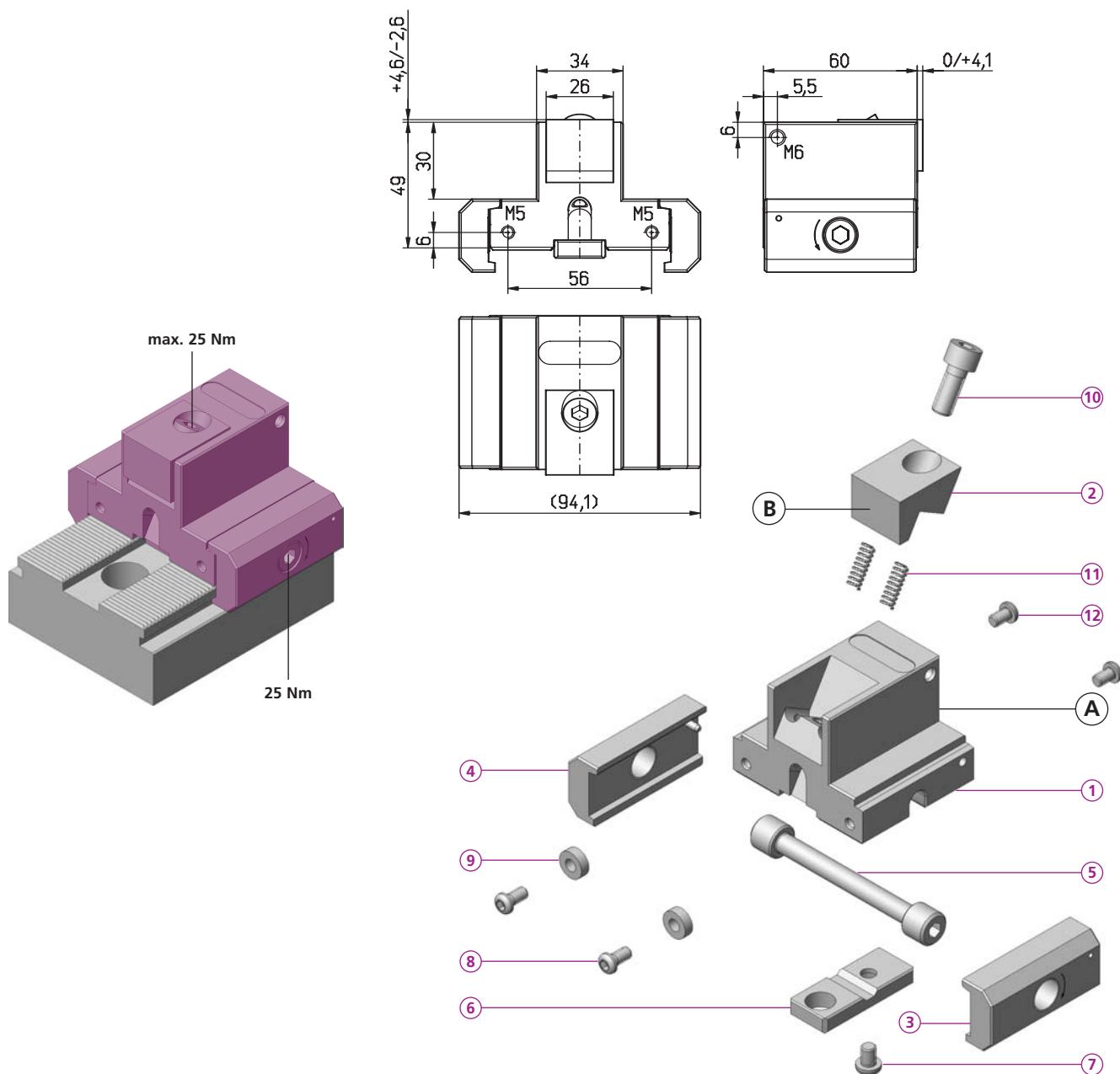


**Bestellbeispiel / ordering example / exemple de commande: PS1R 26N49 B26**

①	PS1R 26N49 -26	B26			B27			B28		
		C	H	L	D	O	i	56HRc	56HRc	*
②	1x PS1R 26N49 -26									
③	1x PCSP 60R	20	20	20						
④	1x PCSP 60L	20	20	20						
⑤	1x PCS 14	19	19	19						
⑥	1x PCGU 20 49	9	9	9						
⑦	1x M6x8 ISO 7380	12	12	12						
⑧	2x M5x14 ISO 4762	56HRc	56HRc							
⑨	2x PCD 005									
⑩	1x M8x20 ISO 4762									
⑪	4x FED 0418									
⑫	2x M5x10 ISO 4762									
<b>kg</b>	1,2									

\* = weich / soft / doux

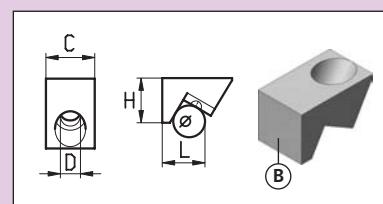


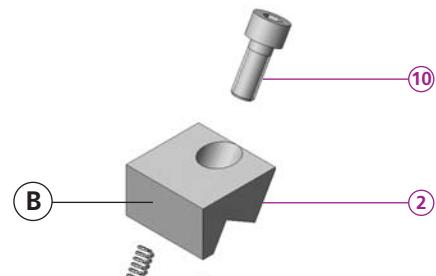
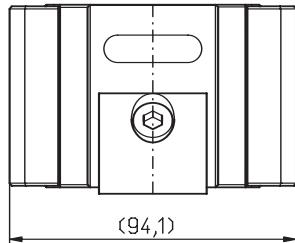
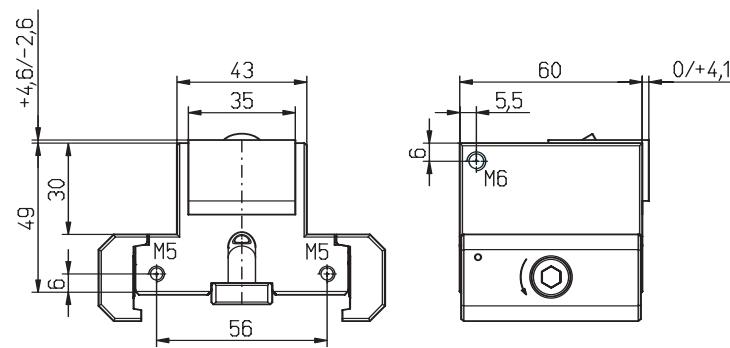
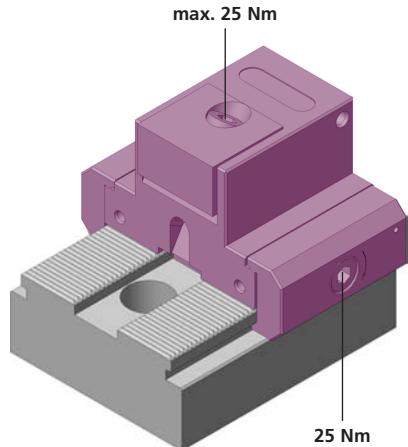


Bestellbeispiel / ordering example / exemple de commande: PS1R 34N49 B46

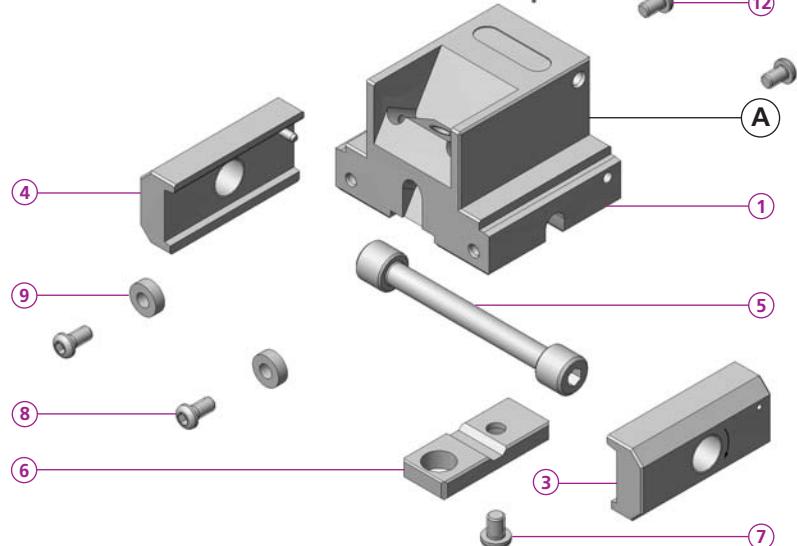
	A	B	B45	B46	B47	
①	1x PS1R 34N49 -45					
②	1x					
③	1x PCSP 60R					
④	1x PCSP 60L					
⑤	1x PCS 14					
⑥	1x PCGU 20 49					
⑦	1x M6x8 ISO 7380					
⑧	2x M5x14 ISO 4762					
⑨	2x PCD 005					
⑩	1x M8x20 ISO 4762					
⑪	2x FED 0618					
⑫	2x M5x10 ISO 4762					
<b>kg</b>	1,4					

\* = weich / soft / doux

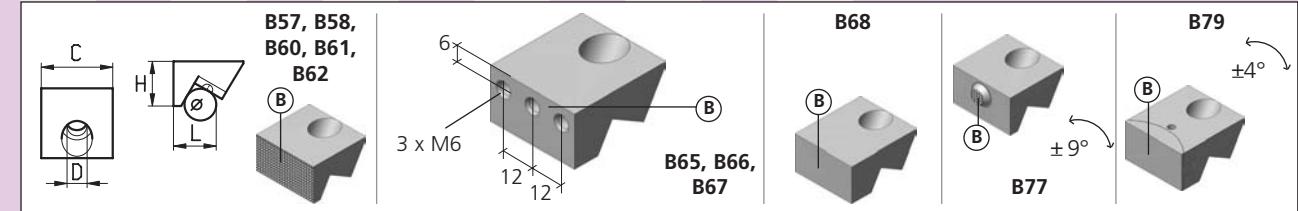




<b>A</b>	
<b>PS1F 43N49 -60</b>	
<b>PS1R 43N49 -60</b>	
<b>1</b>	1x PS1R/F 43N49 -60
<b>2</b>	1x
<b>3</b>	1x PCSP 60R
<b>4</b>	1x PCSP 60L
<b>5</b>	1x PCS 14
<b>6</b>	1x PCGU 20 49
<b>7</b>	1x M6x8 ISO 7380
<b>8</b>	2x M5x14 ISO 4762
<b>9</b>	2x PCD 005
<b>10</b>	1x M8x20 ISO 4762
<b>11</b>	2x FED 0618
<b>12</b>	2x M5x10 ISO 4762
<b>kg</b>	1,4



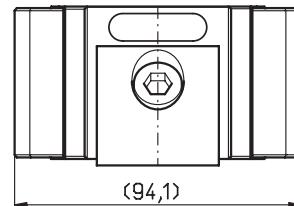
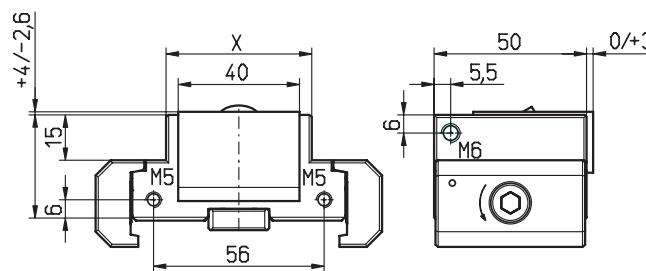
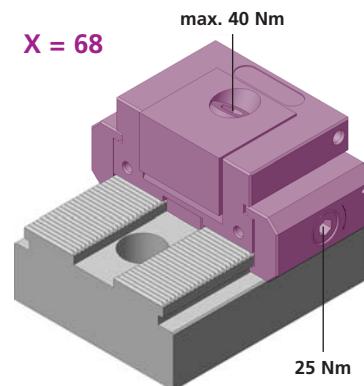
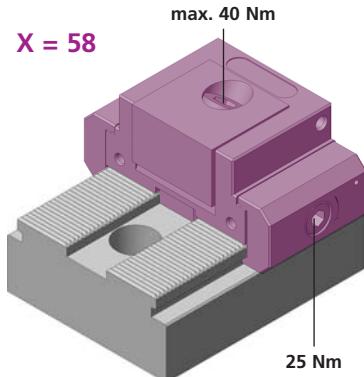
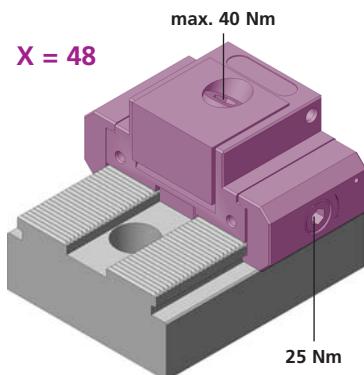
<b>B</b>										
Bestellbeispiel / ordering example / exemple de commande: PS1R 43N49 <b>B61</b>										
<b>B57</b>	<b>B58</b>	<b>B60</b>	<b>B61</b>	<b>B62</b>	<b>B65</b>	<b>B66</b>	<b>B67</b>	<b>B68</b>	<b>B77</b>	<b>B79</b>
<b>C</b> 35	35	35	35	35	35	35	35	35	35	35
<b>H</b> 20	20	20	20	20	20	20	20	20	20	20
<b>L</b> 19	24	19	19	19	19	19	24	26	22	25
<b>D</b> 9	9	9	9	9	9	9	9	9	9	9
<b>E</b> 12	12	12	12	12	12	12	12	12	12	12
<b>i</b> ALU *	ALU *	56 HRc	56 HRc	*	56 HRc	56 HRc	56 HRc	*	56 HRc	HV700x 0,2mm



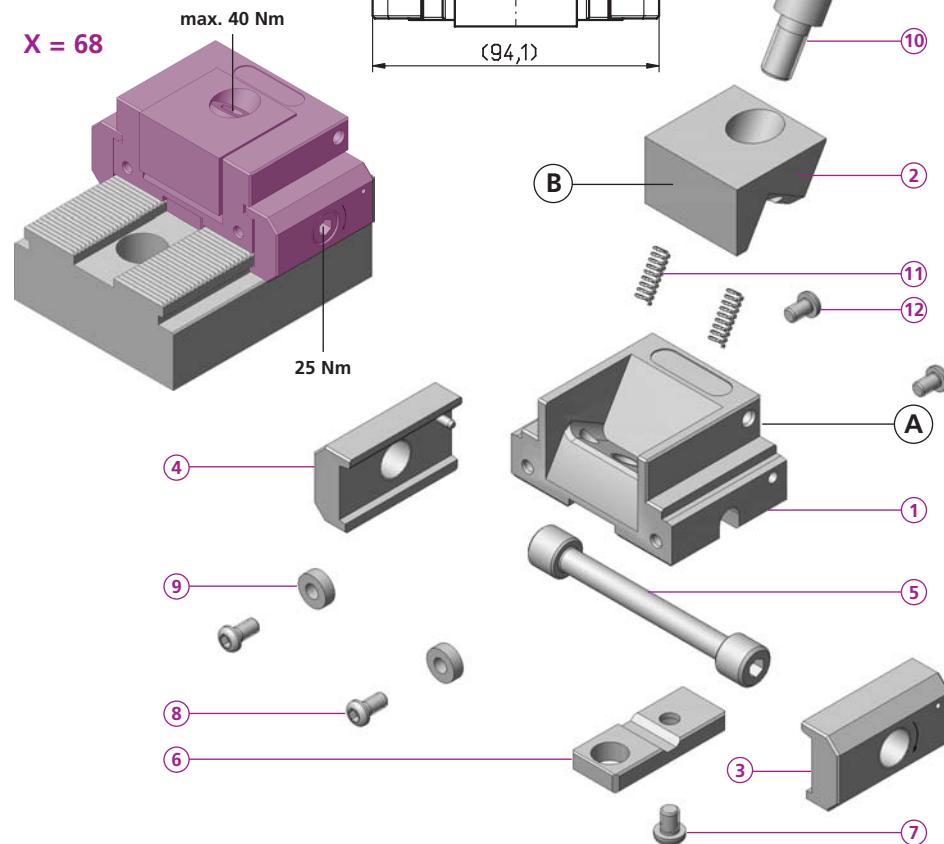
\* = weich / soft / doux

**PS1R/F 48N34 -80**  
**PS1R/F 58N34 -80**  
**PS1R/F 68N34 -80**

**powerCLAMP**



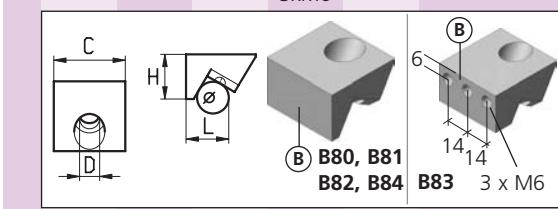
<b>PS1F 48N34 -80</b>	
<b>PS1R 48N34 -80</b>	
<b>①</b> 1x PS1R/F 48N34 -80	
<b>②</b> 1x	
<b>③</b> 1x PCSP 50R	
<b>④</b> 1x PCSP 50L	
<b>⑤</b> 1x PCS 14	
<b>⑥</b> 1x PCGU 20 49	
<b>⑦</b> 1x M6x8 ISO 7380	
<b>⑧</b> 2x M5x14 ISO 4762	
<b>⑨</b> 2x PCD 005	
<b>⑩</b> 1x M10x25 ISO 4762	
<b>⑪</b> 2x FED 0618	
<b>⑫</b> 2x M5x10 ISO 4762	
<b>X</b> 48	
<b>kg</b> 1,04	



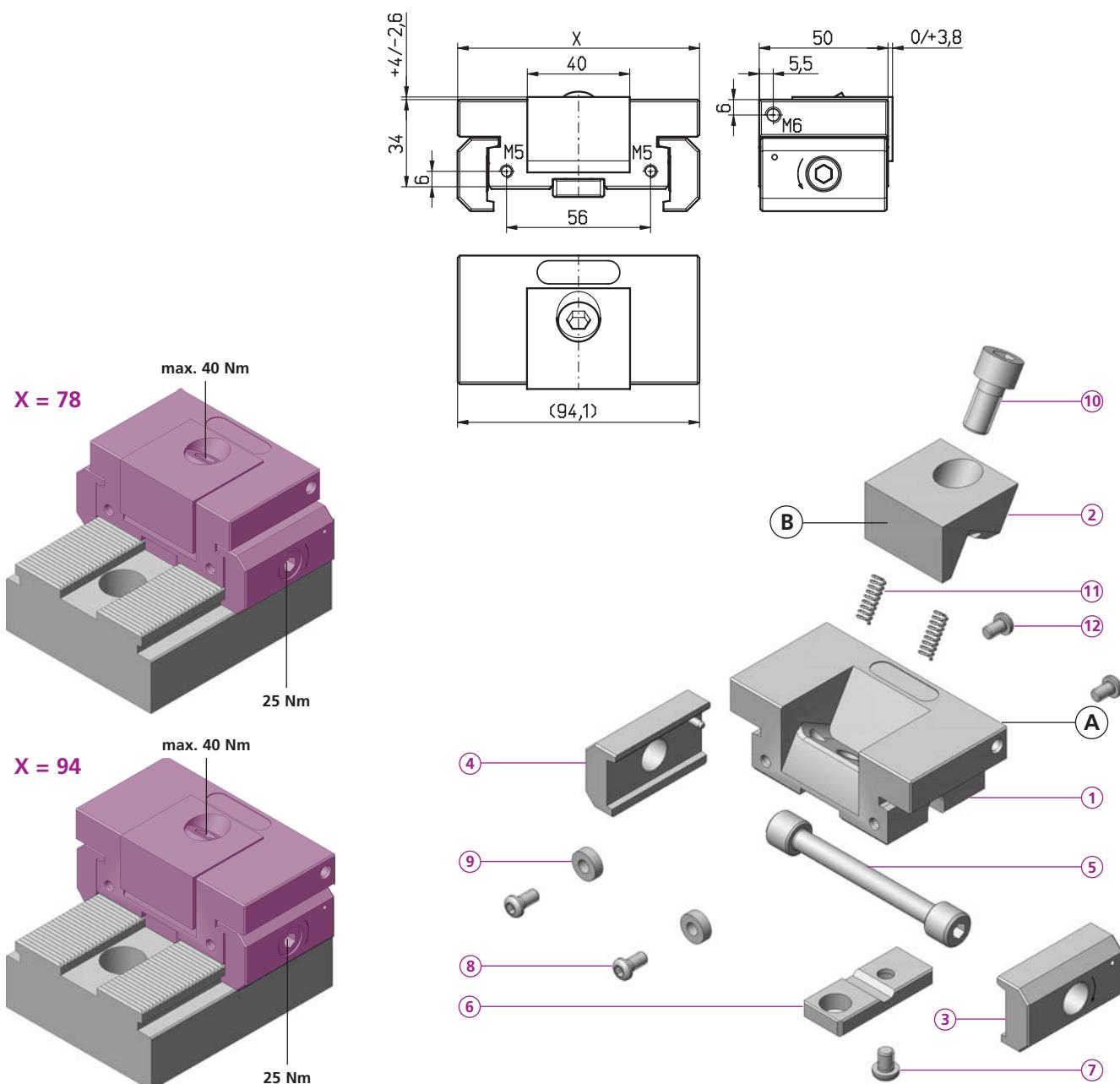
**Bestellbeispiel / ordering example / exemple de commande:** PS1R 48N34 B81

<b>PS1F 58N34 -80</b>	
<b>PS1R 58N34 -80</b>	
<b>①</b> 1x PS1R/F 58N34 -80	
<b>②</b> 1x	
<b>③</b> 1x PCSP 50R	
<b>④</b> 1x PCSP 50L	
<b>⑤</b> 1x PCS 14	
<b>⑥</b> 1x PCGU 20 49	
<b>⑦</b> 1x M6x8 ISO 7380	
<b>⑧</b> 2x M5x14 ISO 4762	
<b>⑨</b> 2x PCD 005	
<b>⑩</b> 1x M10x25 ISO 4762	
<b>⑪</b> 2x FED 0618	
<b>⑫</b> 2x M5x10 ISO 4762	
<b>X</b> 58	
<b>kg</b> 0,9	

<b>PS1F 68N34 -80</b>		<b>PS1R 68N34 -80</b>	
<b>①</b> 1x PS1R/F 68N34 -80		<b>①</b> 1x PS1R/F 68N34 -80	
<b>②</b> 1x		<b>②</b> 1x	
<b>③</b> 1x PCSP 50R		<b>③</b> 1x PCSP 50R	
<b>④</b> 1x PCSP 50L		<b>④</b> 1x PCSP 50L	
<b>⑤</b> 1x PCS 14		<b>⑤</b> 1x PCS 14	
<b>⑥</b> 1x PCGU 20 49		<b>⑥</b> 1x PCGU 20 49	
<b>⑦</b> 1x M6x8 ISO 7380		<b>⑦</b> 1x M6x8 ISO 7380	
<b>⑧</b> 2x M5x14 ISO 4762		<b>⑧</b> 2x M5x14 ISO 4762	
<b>⑨</b> 2x PCD 005		<b>⑨</b> 2x PCD 005	
<b>⑩</b> 1x M10x25 ISO 4762		<b>⑩</b> 1x M10x25 ISO 4762	
<b>⑪</b> 2x FED 0618		<b>⑪</b> 2x FED 0618	
<b>⑫</b> 2x M5x10 ISO 4762		<b>⑫</b> 2x M5x10 ISO 4762	
<b>X</b> 68		<b>X</b> 68	
<b>kg</b> 0,95		<b>kg</b> 0,95	



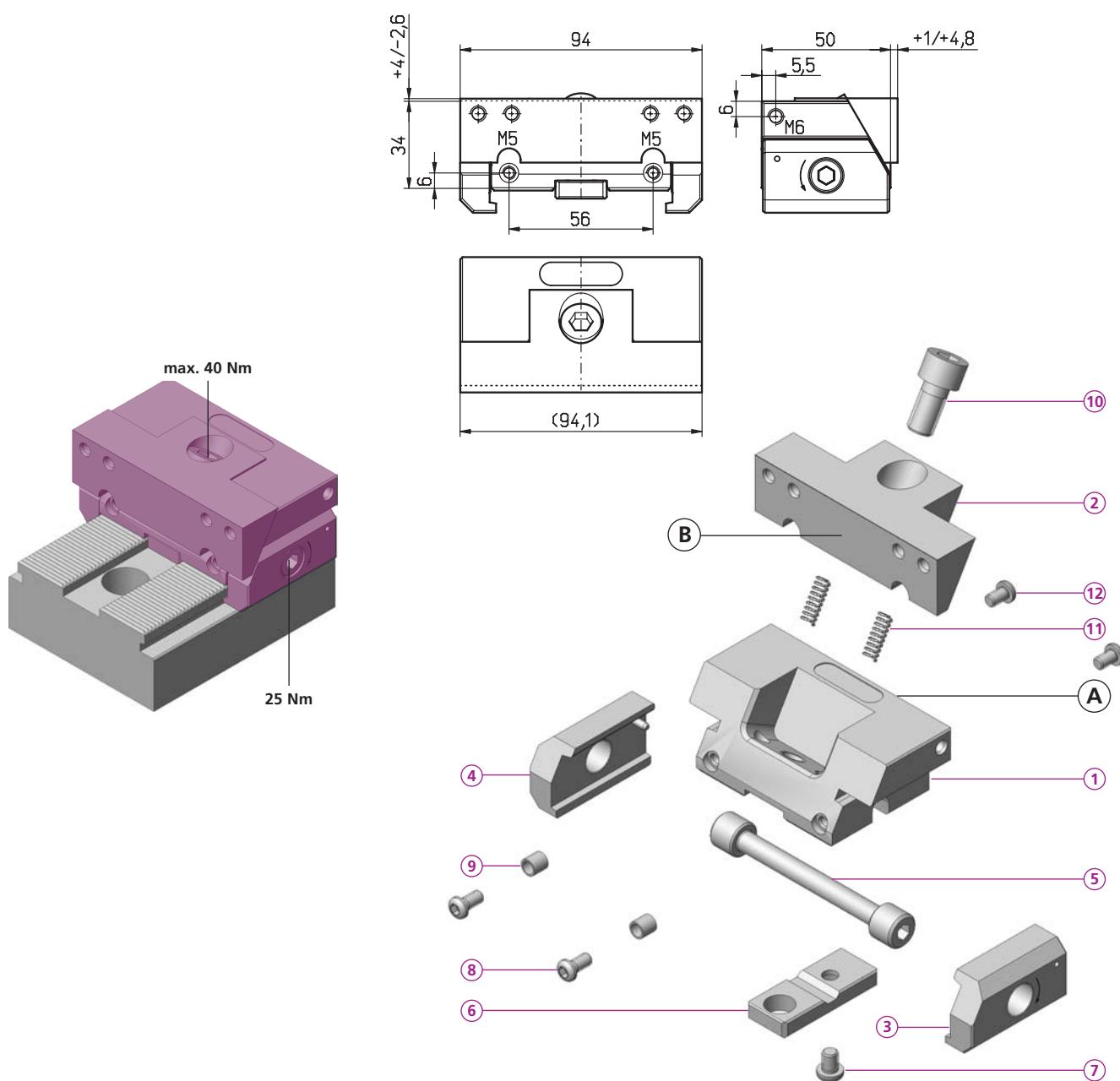
\* = weich / soft / doux



Bestellbeispiel / ordering example / exemple de commande: PS1R 78N34 B81

<b>PS1F 78N34 -80</b>	<b>A</b>	<b>PS1F 94N34 -80</b>	<b>A</b>	<b>B</b>
<b>PS1R 78N34 -80</b>		<b>PS1R 94N34 -80</b>		<b>B80</b> <b>B81</b> <b>B82</b> <b>B83</b> <b>B84</b>
<b>①</b> 1x PS1R/F 78N34 -80		<b>①</b> 1x PS1R/F 94N34 -80		<b>C</b> 40   40   40   40   40
<b>②</b> 1x —		<b>②</b> 1x —		<b>H</b> 25   25   25   25   25
<b>③</b> 1x PCSP 50R		<b>③</b> 1x PCSP 50R		<b>L</b> 22   22   22.2   22   26,3
<b>④</b> 1x PCSP 50L		<b>④</b> 1x PCSP 50L		<b>D</b> 11   11   11   11   11
<b>⑤</b> 1x PCS 14		<b>⑤</b> 1x PCS 14		<b>ø</b> 15   15   15   15   15
<b>⑥</b> 1x PCGU 20 49		<b>⑥</b> 1x PCGU 20 49		<b>i</b> 56HRc   56HRc   *   HV700x 0.2mm   *
<b>⑦</b> 1x M6x8 ISO 7380		<b>⑦</b> 1x M6x8 ISO 7380		3xM6
<b>⑧</b> 2x M5x14 ISO 4762		<b>⑧</b> 2x M5x14 ISO 4762		
<b>⑨</b> 2x PCD 005		<b>⑨</b> 2x PCD 005		
<b>⑩</b> 1x M10x25 ISO 4762		<b>⑩</b> 1x M10x25 ISO 4762		
<b>⑪</b> 2x FED 0618		<b>⑪</b> 2x FED 0618		
<b>⑫</b> 2x M5x10 ISO 4762		<b>⑫</b> 2x M5x10 ISO 4762		
<b>X</b> 78		<b>X</b> 94		
<b>kg</b> 1,0		<b>kg</b> 1,4		

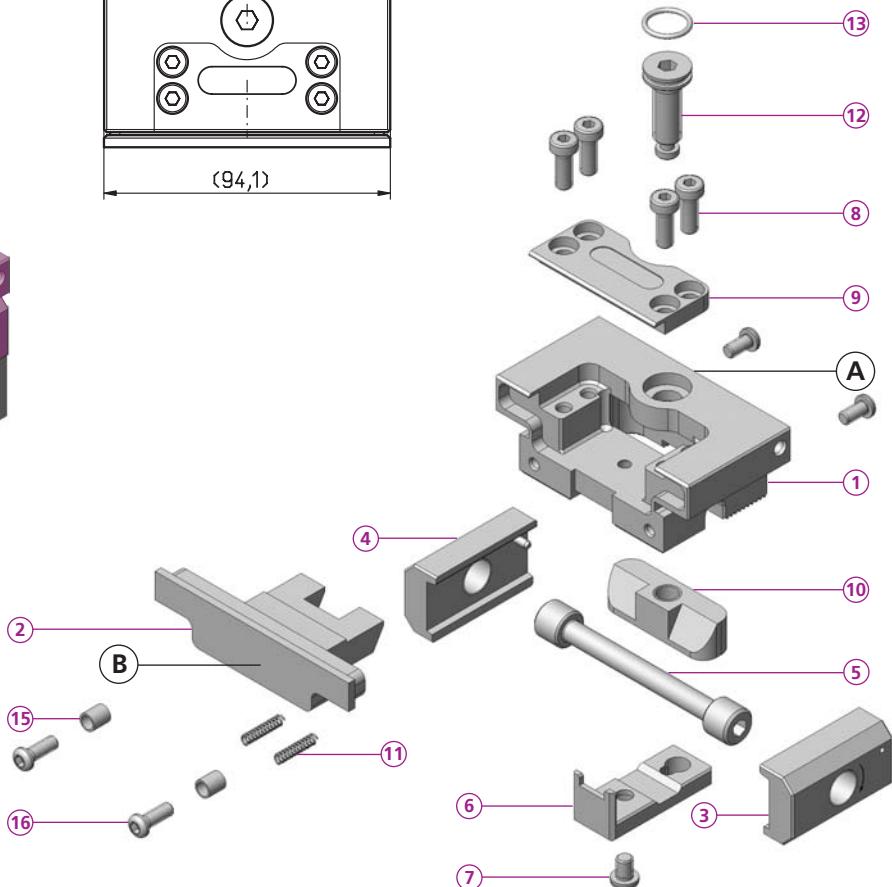
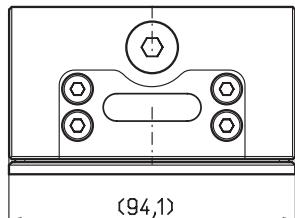
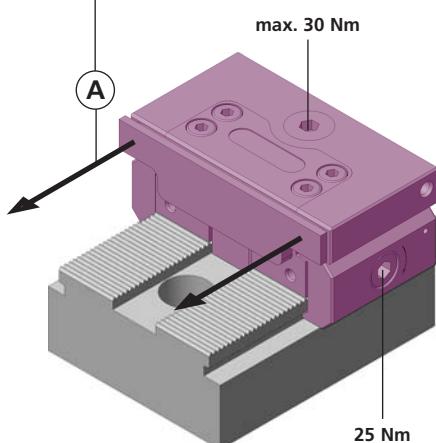
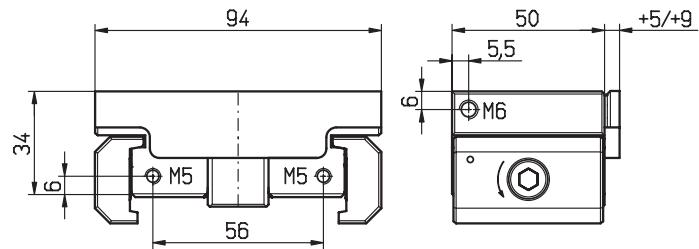
\* = weich / soft / doux



		Bestellbeispiel / ordering example / exemple de commande: PS1R 94N34 B92				
(A)	(B)	B90	B91	B92	B93	B94
PS1F 94N34 -90						
PS1R 94N34 -90						
① 1x PS1R 94N34 -90						
② 1x		B90	B91	B92	B93	B94
③ 1x PCSP 50R F		C 94	94	94	94	94
④ 1x PCSP 50L F		H 25	25	25	25	25
⑤ 1x PCS 14		L 23	23	23	23	40
⑥ 1x PCGU 20 49		D 11	11	11	11	11
⑦ 1x M6x8 ISO 7380		O 15	15	15	15	15
⑧ 2x M5x16 ISO 4762		i HV700x HV700x 0,2mm 0,2mm	*	HV700x 0,2mm	*	
⑨ 2x PCD 008						
⑩ 1x M10x25 ISO 4762						
⑪ 2x FED 0618						
⑫ 2x M5x10 ISO 4762						
<b>kg</b>						
1,4						

\* = weich / soft / doux

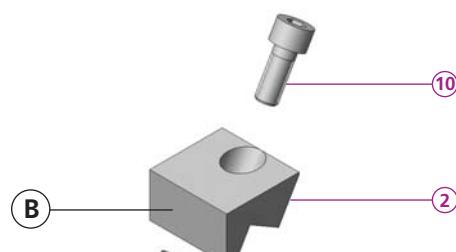
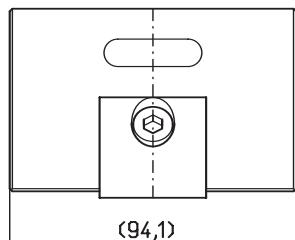
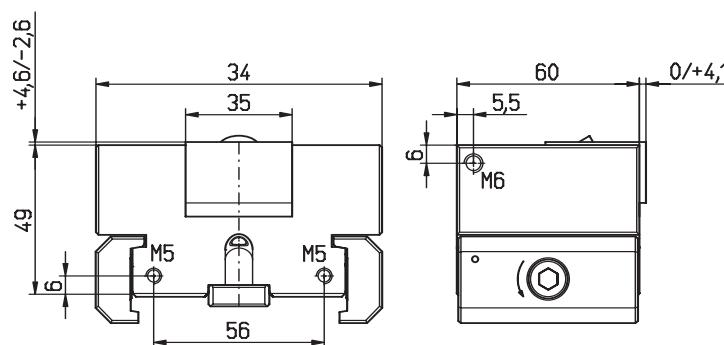
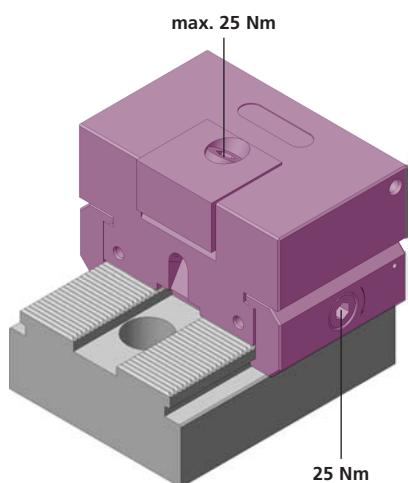
Nm	F=daN	(t)
10	600	0,6
20	900	0,9
30	1300	1,3



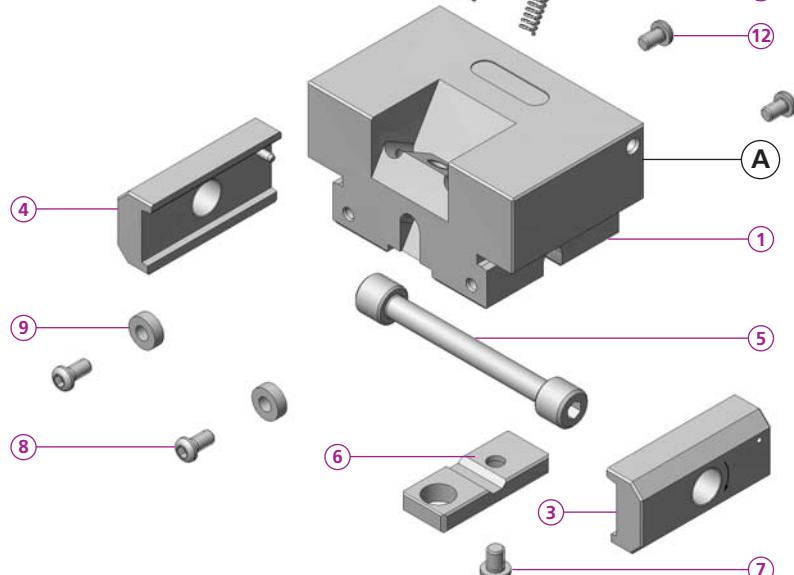
Bestellbeispiel / ordering example / exemple de commande: PS1R 94L34 B85

<b>PS1F 94L34 -85</b>	<b>A</b>	<b>B</b>
1x PS1R 94L34 -85		
1x		
3: PCSP 50R		
4: PCSP 50L		
5: PCS 14		
6: PCGU 20 49 LSP		
7: M6x8 ISO 7380		
8: M6x16 ISO 7984		
9: PCD SP		
10: PCKLL		
11: FED 4x18x063		
12: PC 10 37		
13: OR 14x1,78		
14: M5x10 ISO 4762		
15: PCD 010		
16: M5x18 ISO 4762		
<b>kg</b>		
1,4		

<b>B85</b>	<b>B86</b>	<b>B87</b>
<b>C</b>	94	94
<b>H</b>	22	22
<b>L</b>	54	64
<b>i</b>	12	12
	HV700x0,2mm	HV700x0,2mm

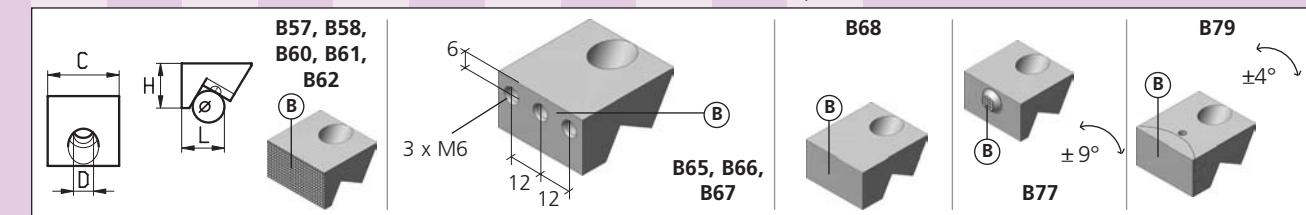


PS1R 94N49 -60	
①	1x PS1R 94N49 -60
②	1x
③	1x PCSP 60R
④	1x PCSP 60L
⑤	1x PCS 14
⑥	1x PCGU 20 49
⑦	1x M6x8 ISO 7380
⑧	2x M5x14 ISO 4762
⑨	2x PCD 005
⑩	1x M8x20 ISO 4762
⑪	2x FED 0618
⑫	2x M5x10 ISO 4762
<b>kg</b>	<b>2,0</b>

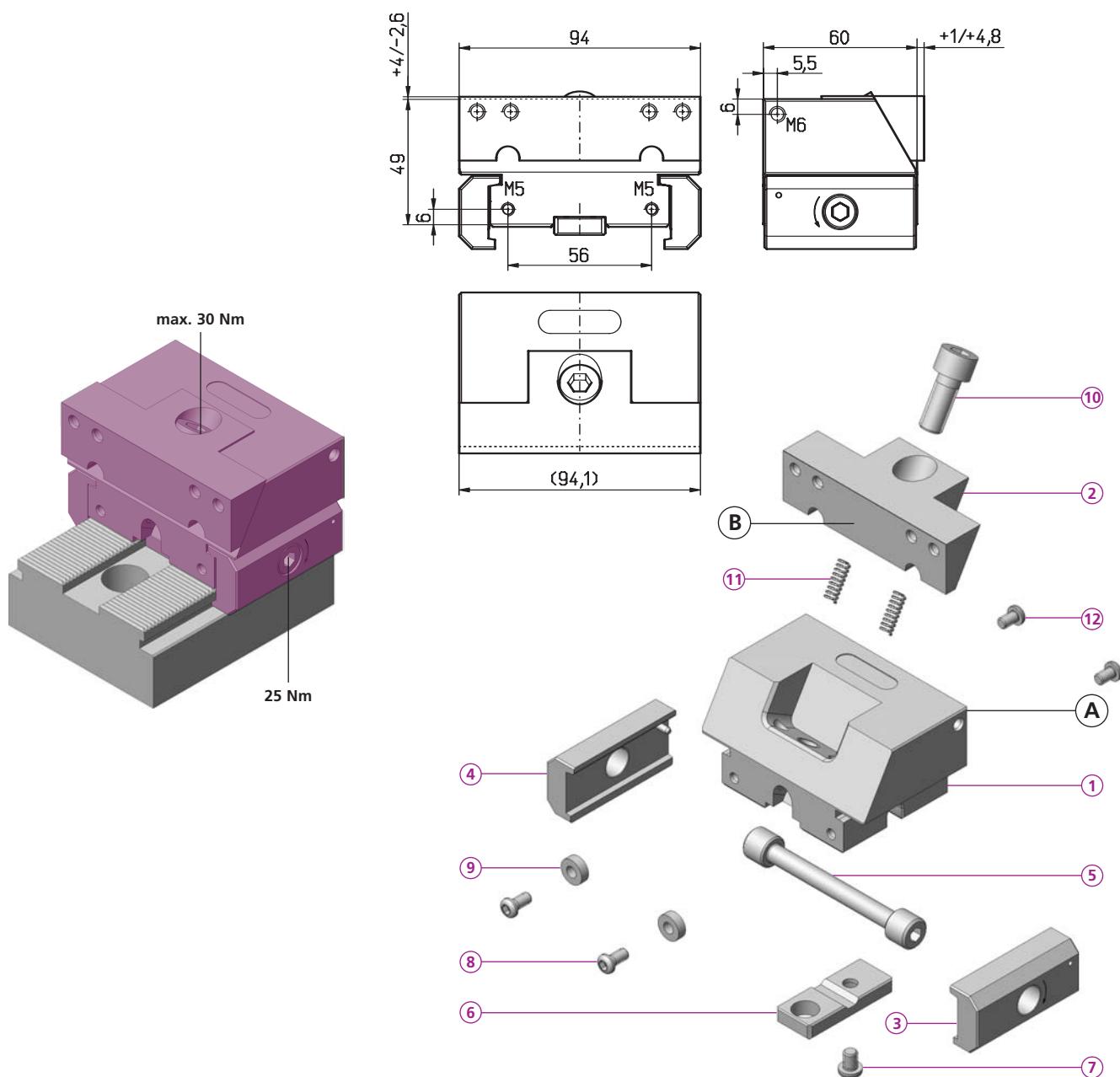


Bestellbeispiel / ordering example / exemple de commande: PS1R 94N49 B61

B	B57	B58	B60	B61	B62	B65	B66	B67	B68	B77	B79
C	35	35	35	35	35	35	35	35	35	35	35
H	20	20	20	20	20	20	20	20	20	20	20
L	19	24	19	19	19	19	19	24	26	22	25
D	9	9	9	9	9	9	9	9	9	9	9
Ø	12	12	12	12	12	12	12	12	12	12	12
i	ALU *	ALU *	56 HRc	56 HRc	*	56 HRc	56 HRc	56 HRc	*	56 HRc	HV700x 0,2mm



\* = weich / soft / doux

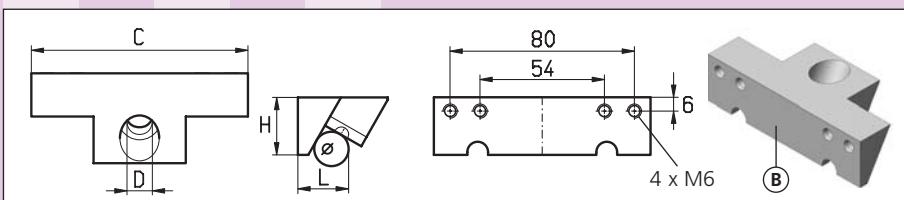
**A****B**

Bestellbeispiel / ordering example / exemple de commande: PS1R 94N49 B92

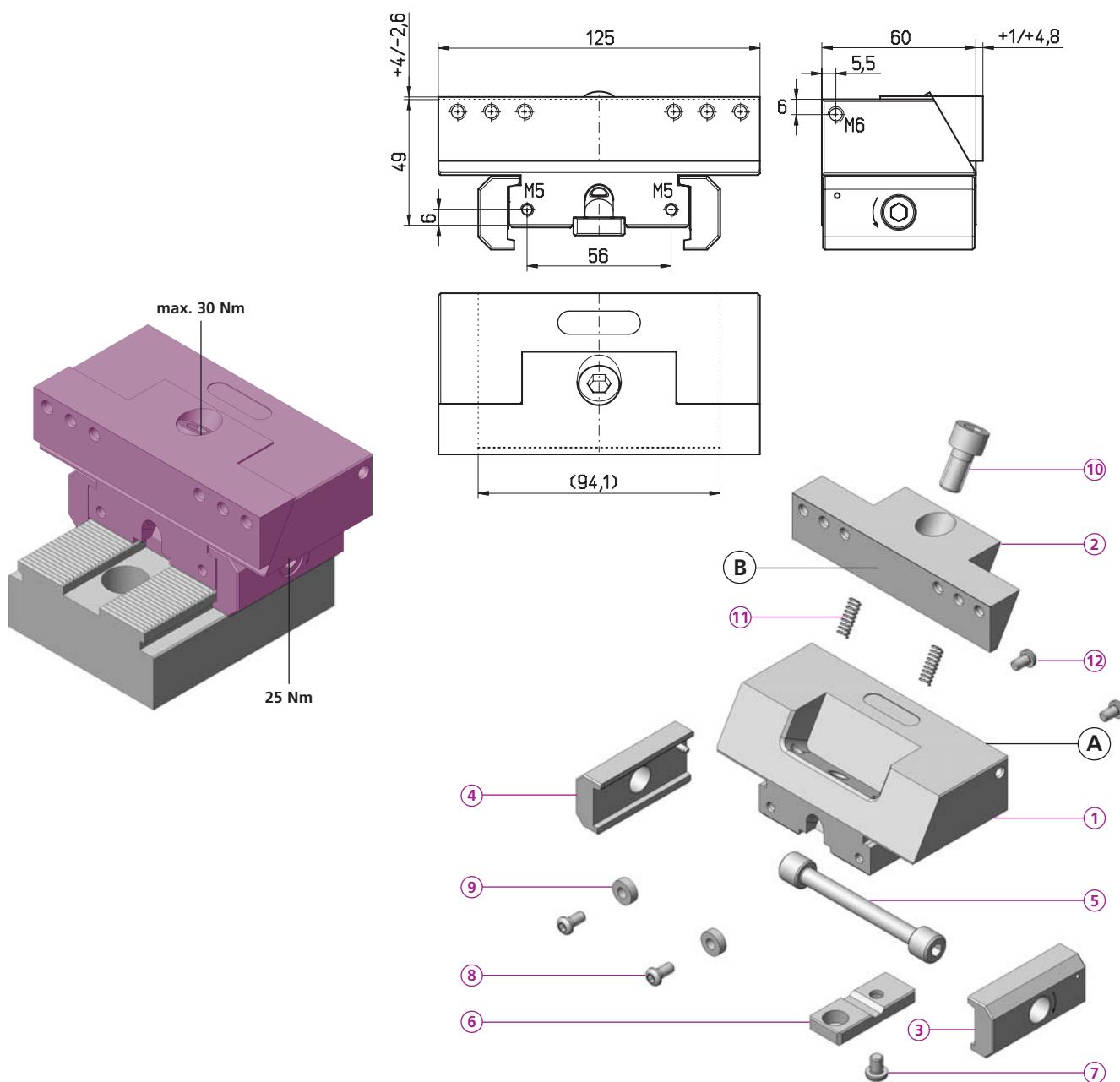
**PS1F 94N49 -90****PS1R 94N49 -90**

<b>1</b>	1x PS1R 94N49 -90
<b>2</b>	1x _____
<b>3</b>	1x PCSP 60R
<b>4</b>	1x PCSP 60L
<b>5</b>	1x PCS 14
<b>6</b>	1x PCGU 20 49
<b>7</b>	1x M6x8 ISO 7380
<b>8</b>	2x M5x14 ISO 4762
<b>9</b>	2x PCD 005
<b>10</b>	1x M10x25 ISO 4762
<b>11</b>	2x FED 0618
<b>12</b>	2x M5x10 ISO 4762
<b>kg</b>	2,0

	B90	B91	B92	B93	B94
<b>C</b>	94	94	94	94	94
<b>H</b>	25	25	25	25	25
<b>L</b>	23	23	23	23	40
<b>D</b>	11	11	11	11	11
<b>O</b>	15	15	15	15	15
<b>i</b>	HV700 x HV700 x 0,2mm 0,2mm	*	HV700 x 0,2mm	*	



\* = weich / soft / doux

**A****B**

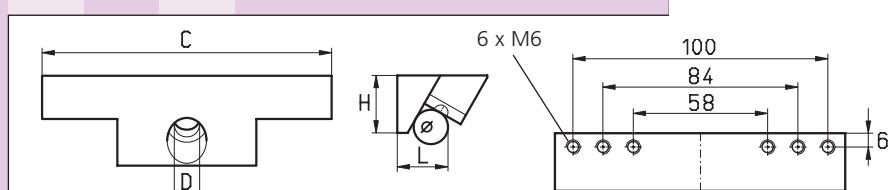
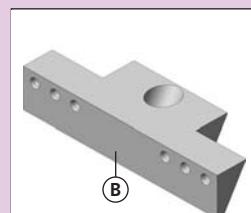
Bestellbeispiel / ordering example / exemple de commande: PS1R 125N49 B95

**PS1R 125N49 -95**

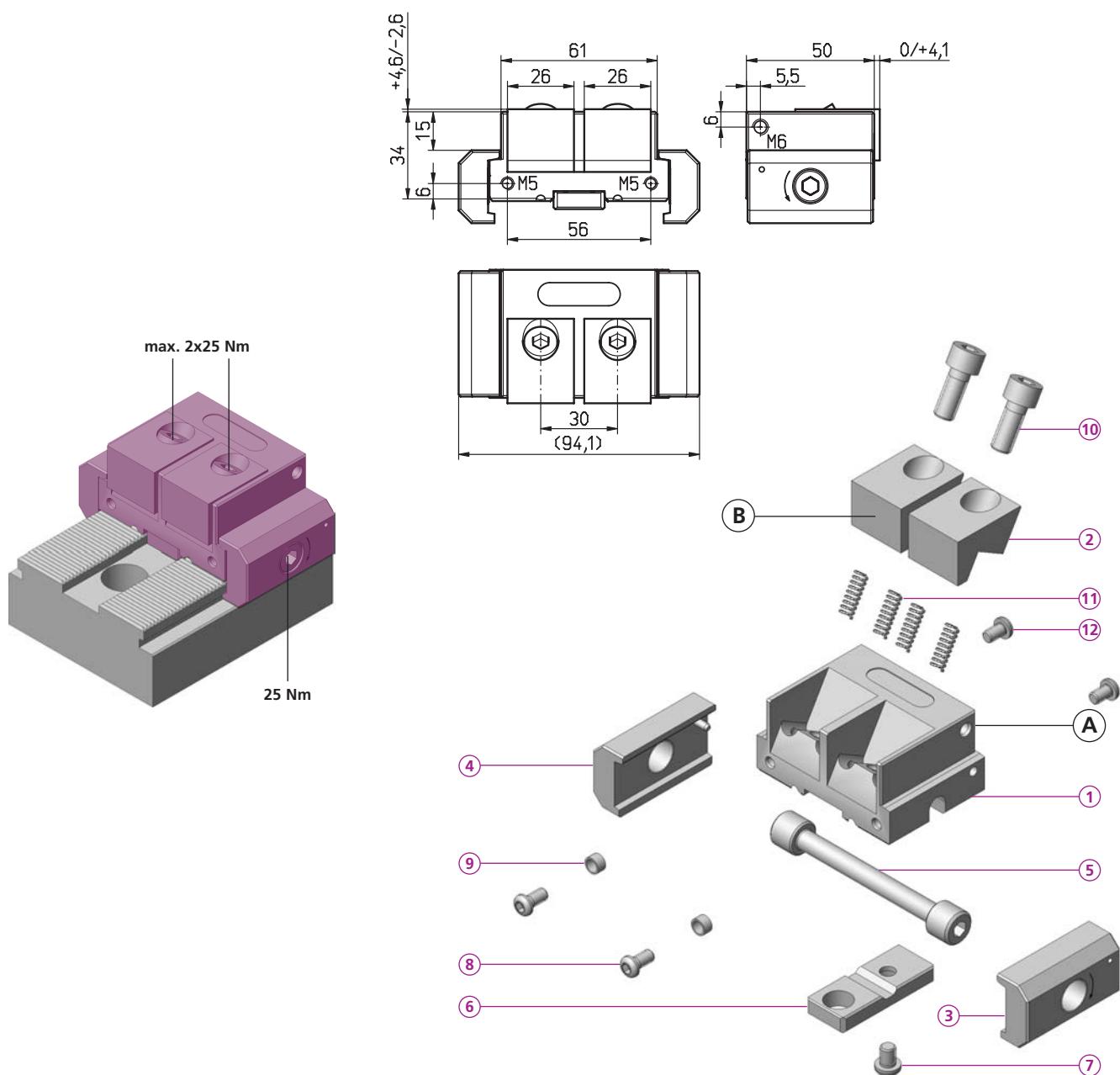
- 1** 1x PS1R 125N49 -95
  - 2** 1x \_\_\_\_\_
  - 3** 1x PCSP 60R
  - 4** 1x PCSP 60L
  - 5** 1x PCS 14
  - 6** 1x PCGU 20 49
  - 7** 1x M6x8 ISO 7380
  - 8** 2x M5x10 ISO 4762
  - 9** 2x PCD 005
  - 10** 1x M10x25 ISO 4762
  - 11** 2x FED 0618
  - 12** 2x M5x10 ISO 4762
- kg** 2,4

<b>B95</b>	<b>B96</b>	<b>B97</b>
------------	------------	------------

<b>C</b>	125	125	125
<b>H</b>	25	25	25
<b>L</b>	22	22	22.2
<b>D</b>	11	11	11
<b>O</b>	15	15	15
<b>i</b>	HV700x HV700x 0,2mm 0,2mm	*	



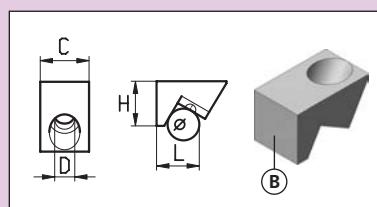
\* = weich / soft / doux

**(A)****(B)**

Bestellbeispiel / ordering example / exemple de commande: PS2R 61N34 B46

PS2R 61N34 -45		B45	B46	B47
<b>1</b>	1x PS2R 61N34 -45			
<b>2</b>	2x			
<b>3</b>	1x PCSP 50R	C H	26 20	26 20
<b>4</b>	1x PCSP 50L	L D	19 9	19,1 9
<b>5</b>	1x PCS 14	O i	12 56HRc	12 56HRc
<b>6</b>	1x PCGU 20 49			*
<b>7</b>	1x M6x8 ISO 7380			
<b>8</b>	2x M5x16 ISO 4762			
<b>9</b>	2x PCD 005			
<b>10</b>	2x M8x20 ISO 4762			
<b>11</b>	4x FED 0618			
<b>12</b>	2x M5x10 ISO 4762			
<b>kg</b>	1,2			

\* = weich / soft / doux



**PS2X 94N49 -60**

max. 2x15 Nm  
25 Nm

Dimensions:

- Overall height: 49 mm (+4,6/-2,6)
- Base width: 60 mm (0/+4,1)
- Base thickness: 6 mm
- Base hole diameter: M5
- Base hole distance: 56 mm
- Base hole center height: 49 mm
- Base hole side distance: 35 mm
- Base hole side height: 35 mm
- Base hole side width: 50 mm (94,1)

**Exploded View:**

- A:** PS2X 94N49 -60
- B:** Components: (2) PCSP 60R, (3) PCSP 60L, (4) PCS 14, (5) PCGU 20 49, (7) M6x8 ISO 7380, (8) M5x14 ISO 4762, (9) PCD 005, (10) M8x20 ISO 4762, (11) FED 0618, (12) M5x10 ISO 4762, (13) PCWB 2525 94, (14) PCBO 0605 40, (15) M5x16 ISO 4026.

**Dimensions:**

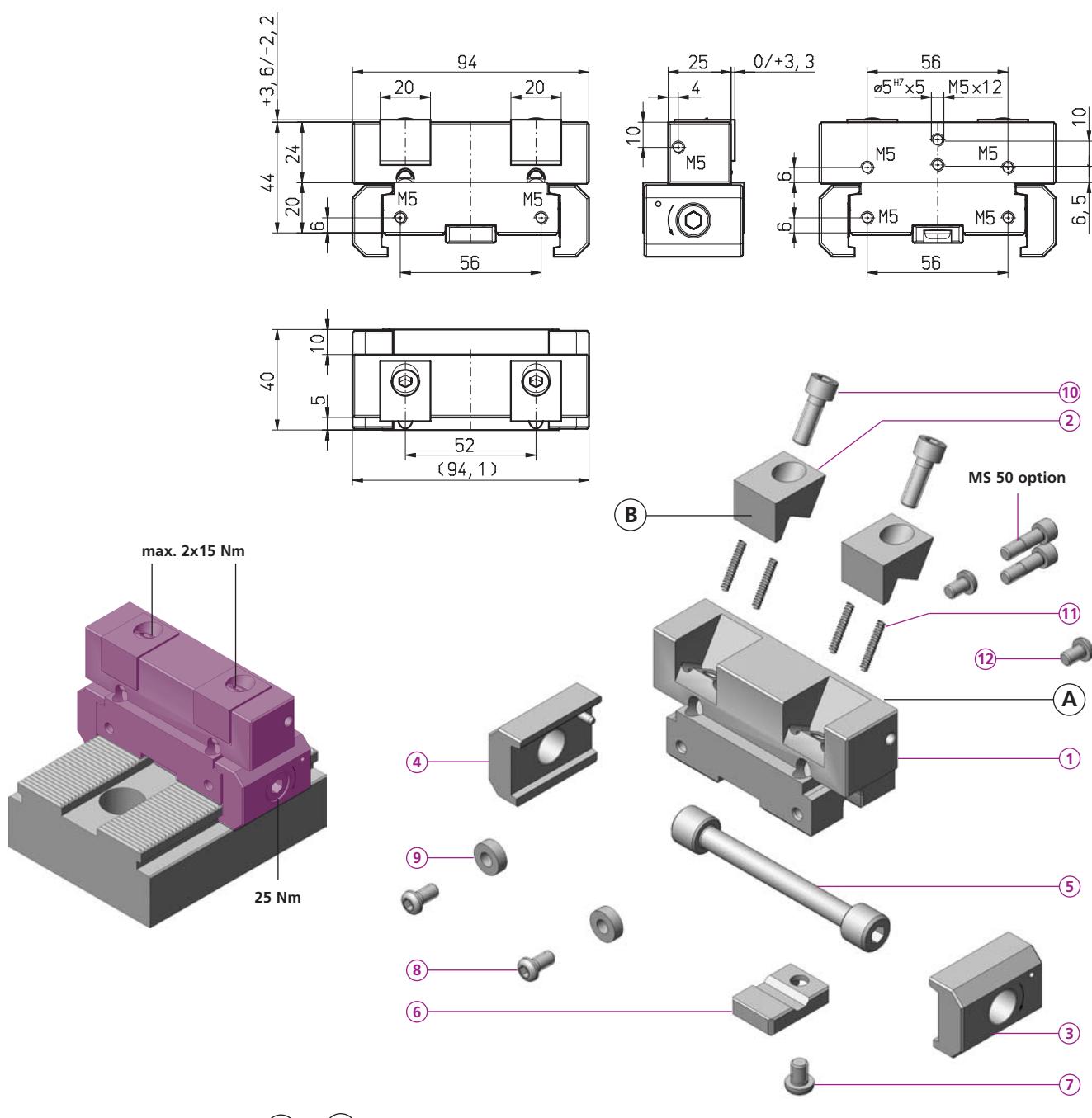
	B57	B58	B60	B61	B62	B65	B66	B67	B68	B77	B79
<b>C</b>	35	35	35	35	35	35	35	35	35	35	35
<b>H</b>	20	20	20	20	20	20	20	20	20	20	20
<b>L</b>	19	24	19	19	19	19	19	24	26	22	25
<b>D</b>	9	9	9	9	9	9	9	9	9	9	9
<b>e</b>	12	12	12	12	12	12	12	12	12	12	12
<b>i</b>	ALU *	ALU *	56 HRc	56 HRc	*	56 HRc	56 HRc	56 HRc	*	56 HRc	HV700x 0,2mm

**Bestellbeispiel / ordering example / exemple de commande:** PS2X 94N49 B60

**Technical Drawing:**

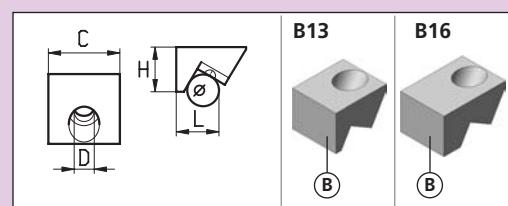
**Notes:**

- \* = weich / soft / doux

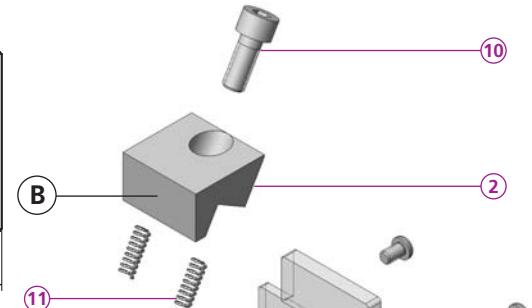
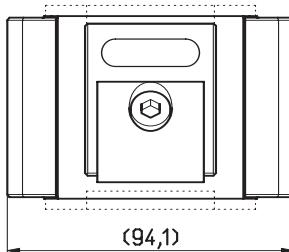
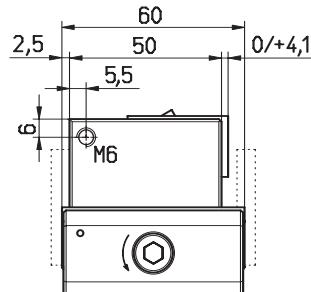
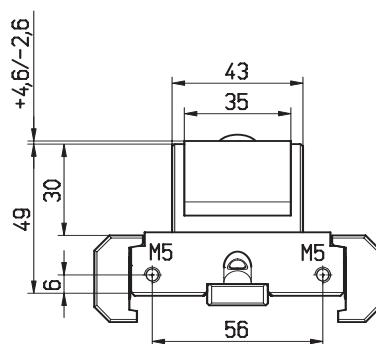
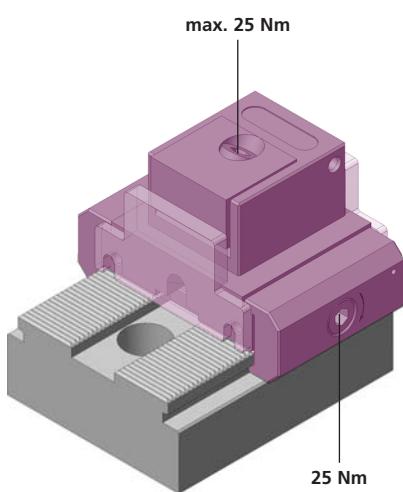


Bestellbeispiel / ordering example / exemple de commande: PS1G 49N44 B13

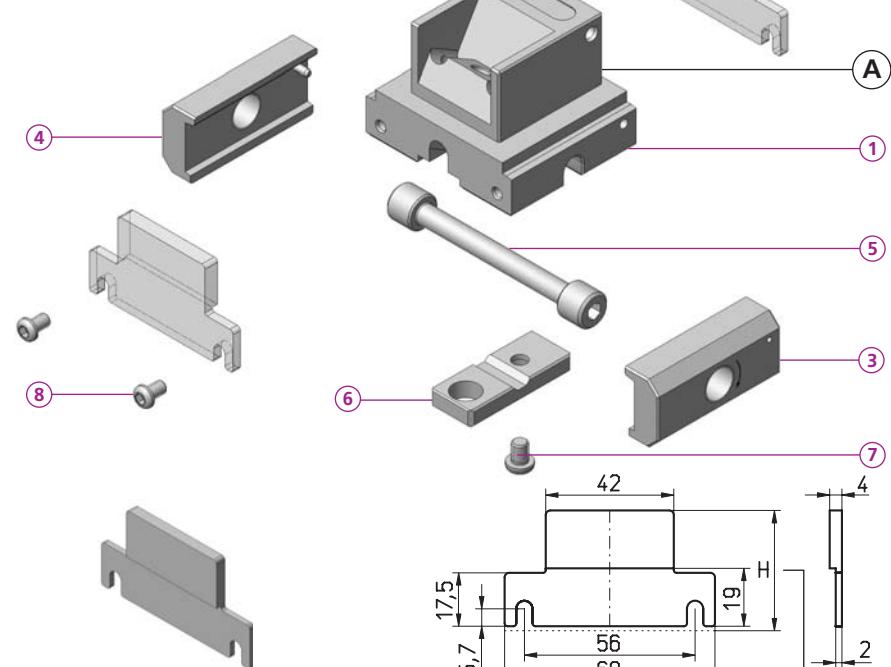
PS1G 94N44 -13		B13	B14	B15	B16
①	1x PS1G 94N44 -13	C H L D Ø i	20 16 13,8 6,5 10 HV700x HV700x 0,2mm	20 16 13,8 6,5 10 *	20 16 19 6,5 10 *
②	2x				
③	1x PCSP 40R				
④	1x PCSP 40L				
⑤	1x PCS 14				
⑥	1x PCGU 20 30				
⑦	1x M6x8 ISO 7380				
⑧	2x M5x14 ISO 4762				
⑨	2x PCD 005				
⑩	2x M6x16 ISO 4762				
⑪	4x FED 03018				
⑫	2x M5x10 ISO 4762				
<b>kg</b>	0,65				



\* = weich / soft / doux

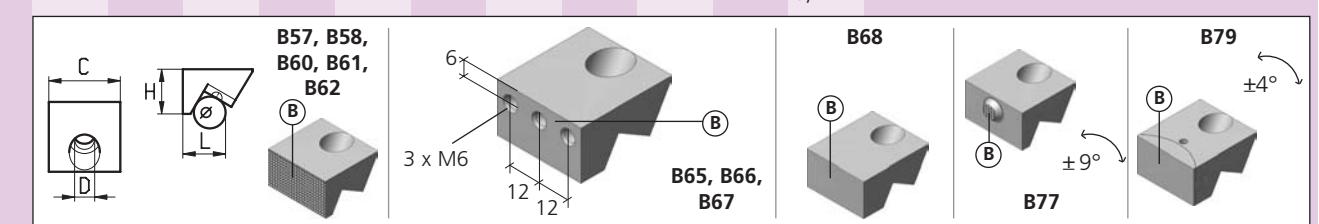


PS1X 43N49 -60	
①	1x PS1X 43N49 -60
②	1x
③	1x PCSP 60R
④	1x PCSP 60L
⑤	1x PCS 14
⑥	1x PCGU 20 49
⑦	1x M6x8 ISO 7380
⑧	4x M5x14 ISO 4762
⑩	1x M8x20 ISO 4762
⑪	2x FED 0618
kg	1,4

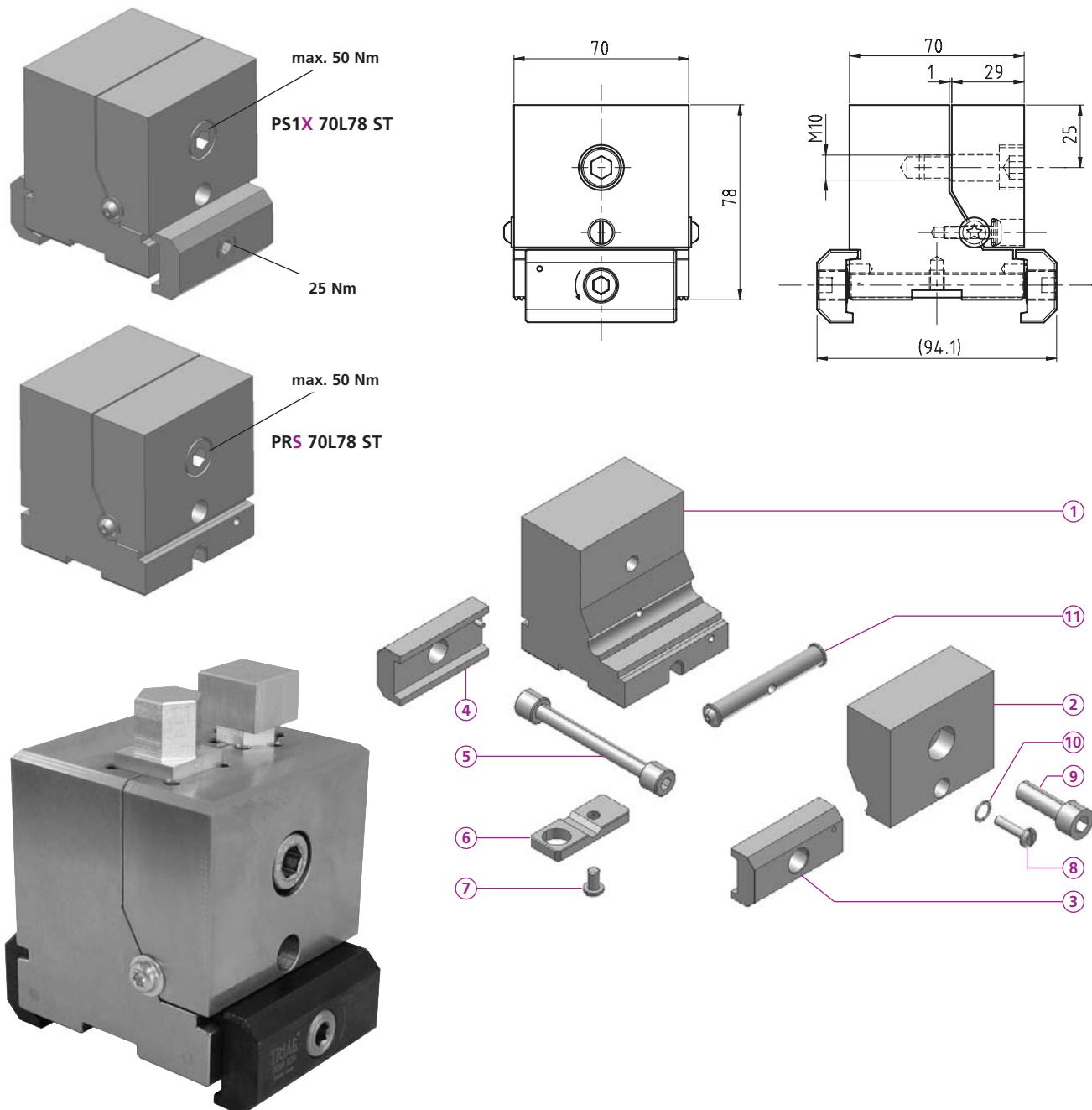


B Bestellbeispiel / ordering example / exemple de commande: PS1X 43N49 B60

	B57	B58	B60	B61	B62	B65	B66	B67	B68	B77	B79	PCU	H
C	35	35	35	35	35	35	35	35	35	35	35	PCUA 42034	34
H	20	20	20	20	20	20	20	20	20	20	20	PCUA 42039	39
L	19	24	19	19	19	19	19	19	24	22	25	PCUA 42044	44
D	9	9	9	9	9	9	9	9	9	9	9	PCUA 42047	47
ø	12	12	12	12	12	12	12	12	12	12	12	PCUA 42048	48
i	ALU *	ALU *	56 HRc	56 HRc	*	56 HRc	56 HRc	56 HRc	*	56 HRc HV700x 0,2mm			



\* = weich / soft / doux



Bestellbeispiel / ordering example / exemple de commande: PS1X 70L78 ST

**PS1X 70L78 ST** (Stahl/steel/acier) 1.2312

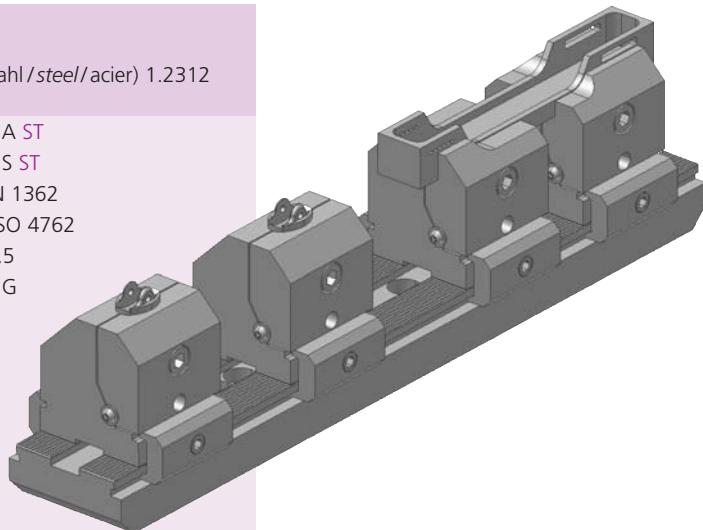
- ① 1x PRS 7078 A ST
- ② 1x PRS 7078 S ST
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- ⑧ 1x M5x20 BN 1362
- ⑨ 1x M10x30 ISO 4762
- ⑩ 1x OR Ø 8x1,5
- ⑪ 1x PRS 7078 G

**kg** 3,12

**PRS 70L78 ST** (Stahl/steel/acier) 1.2312

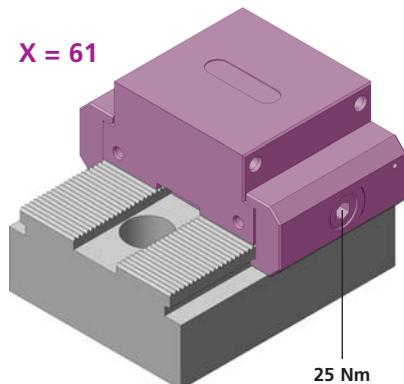
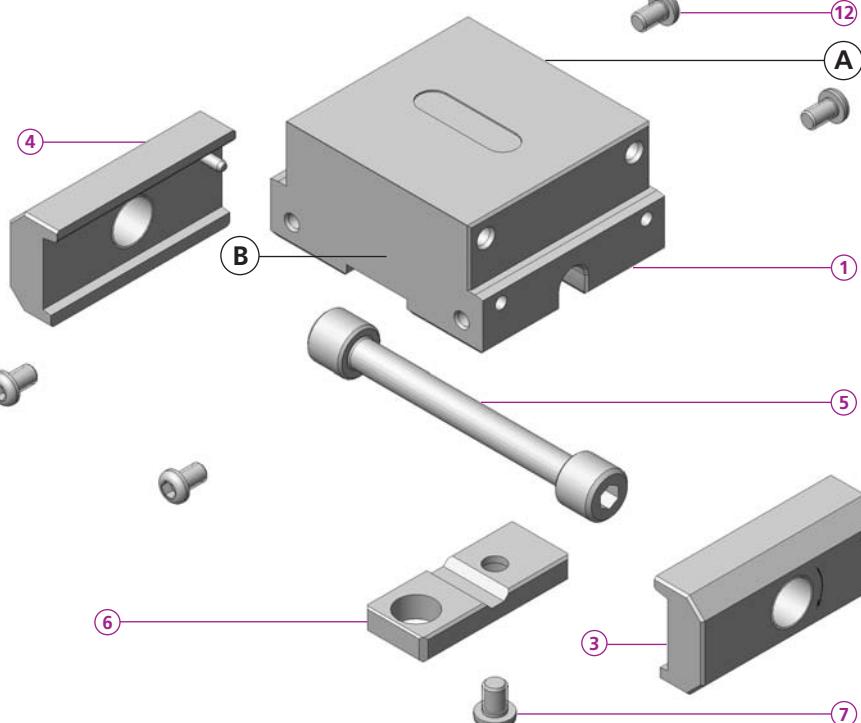
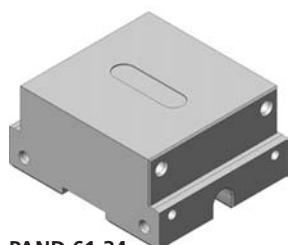
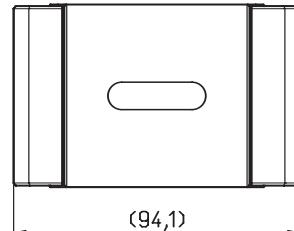
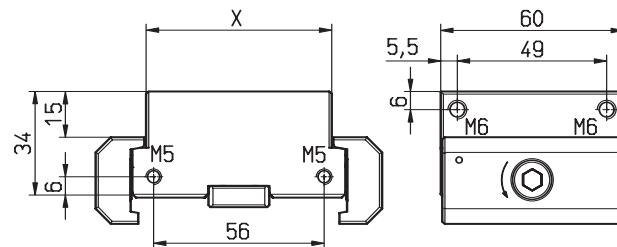
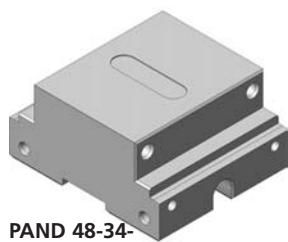
- ① 1x PRS 7078 A ST
- ② 1x PRS 7078 S ST
- ⑧ 1x M5x20 BN 1362
- ⑨ 1x M10x30 ISO 4762
- ⑩ 1x OR Ø 8x1,5
- ⑪ 1x PRS 7078 G

**kg** 2,76



**PAND 48-34  
PAND 58-34  
PAND 61-34**

**powerCLAMP**

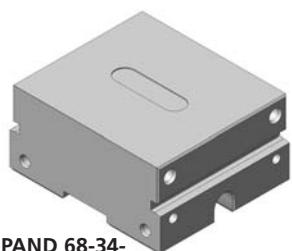


Bestellbeispiel / ordering example / exemple de commande: PAND 61-34

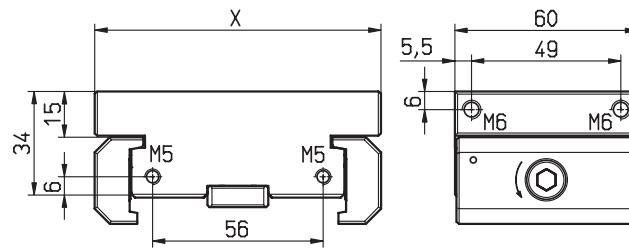
	A	B
<b>PAND 48-34</b>		
①	1x PAND 48-34-	
②		
③	1x PCSP 60R	
④	1x PCSP 60L	
⑤	1x PCS 14	
⑥	1x PCGU 20 49	
⑦	1x M6x8 ISO 7380	
⑧		
⑨		
⑩		
⑪		
⑫	4x M5x10 ISO 4762	
X	48	
kg	1,3	

	A	B
<b>PAND 58-34</b>		
①	1x PAND 58-34-	
②		
③	1x PCSP 60R	
④	1x PCSP 60L	
⑤	1x PCS 14	
⑥	1x PCGU 20 49	
⑦	1x M6x8 ISO 7380	
⑧		
⑨		
⑩		
⑪		
⑫	4x M5x10 ISO 4762	
X	58	
kg	1,4	

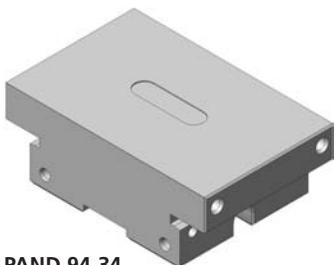
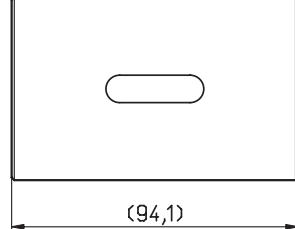
	A	B
<b>PAND 61-34</b>		
①	1x PAND 61-34-	
②		
③	1x PCSP 60R	
④	1x PCSP 60L	
⑤	1x PCS 14	
⑥	1x PCGU 20 49	
⑦	1x M6x8 ISO 7380	
⑧		
⑨		
⑩		
⑪		
⑫	4x M5x10 ISO 4762	
X	61	
kg	1,4	



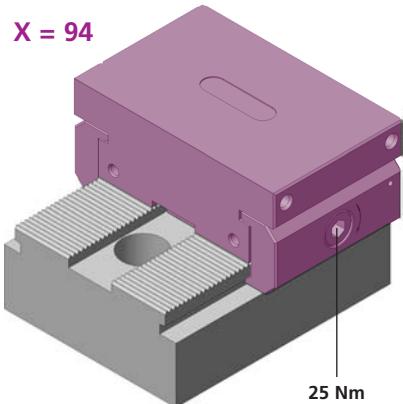
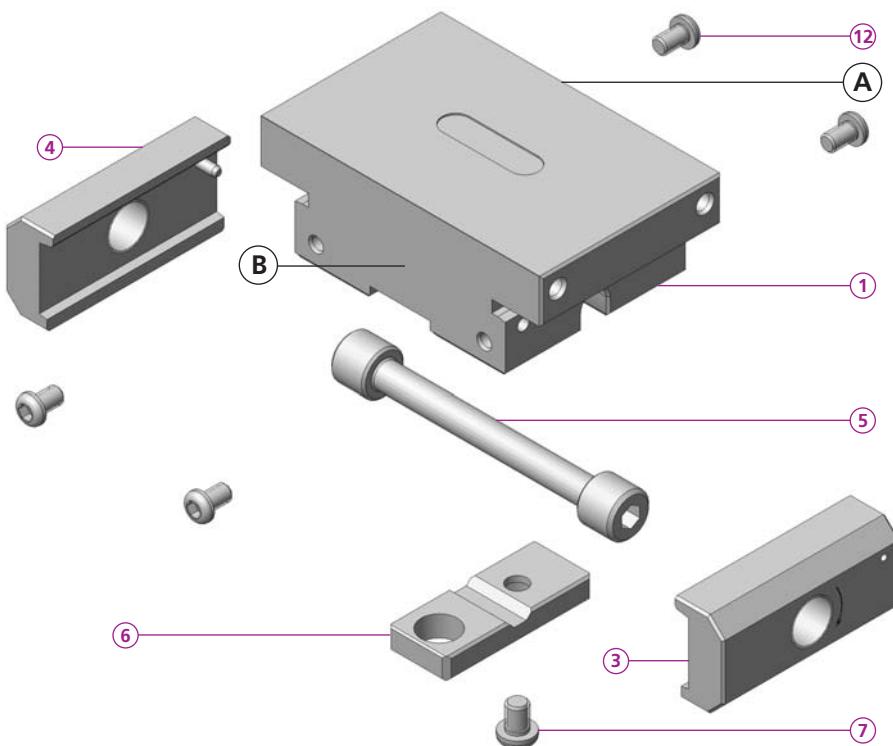
PAND 68-34-



PAND 78-34-



PAND 94-34-



Bestellbeispiel / ordering example / exemple de commande: PAND 94-34

		A	B
	PAND 68-34		
①	1x PAND 68-34-		
②			
③	1x PCSP 60R		
④	1x PCSP 60L		
⑤	1x PCS 14		
⑥	1x PCGU 20 49		
⑦	1x M6x8 ISO 7380		
⑧			
⑨			
⑩			
⑪			
⑫	4x M5x10 ISO 4762		
X	68		
kg	1,4		

		A	B
	PAND 78-34		
①	1x PAND 78-34-		
②			
③	1x PCSP 60R		
④	1x PCSP 60L		
⑤	1x PCS 14		
⑥	1x PCGU 20 49		
⑦	1x M6x8 ISO 7380		
⑧			
⑨			
⑩			
⑪			
⑫	4x M5x10 ISO 4762		
X	78		
kg	1,5		

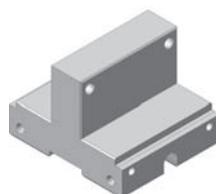
		A	B
	PAND 94-34		
①	1x PAND 94-34-		
②			
③	1x PCSP 60R		
④	1x PCSP 60L		
⑤	1x PCS 14		
⑥	1x PCGU 20 49		
⑦	1x M6x8 ISO 7380		
⑧			
⑨			
⑩			
⑪			
⑫	4x M5x10 ISO 4762		
X	94		
kg	1,6		

# PAND 19-49 PAND 25-44

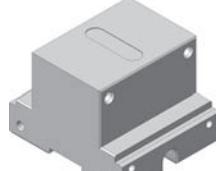
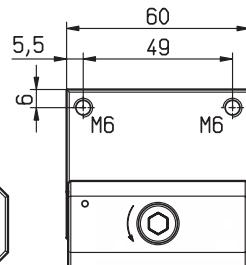
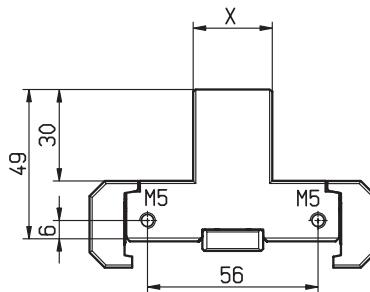
## PAND 26-49

## PAND 34-49

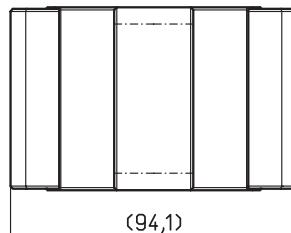
**powerCLAMP**



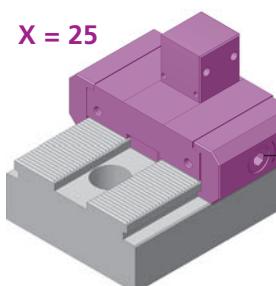
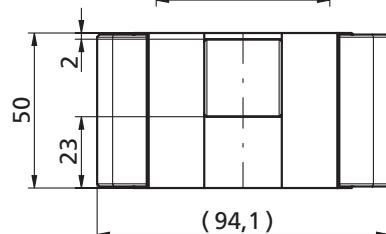
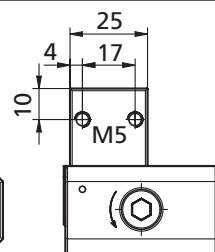
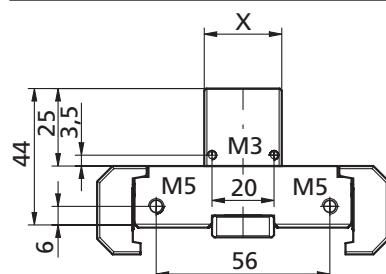
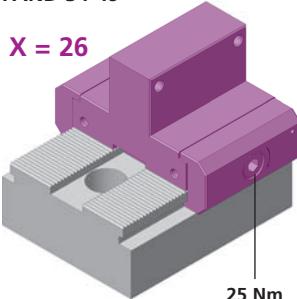
PAND 19-49-



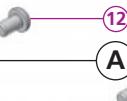
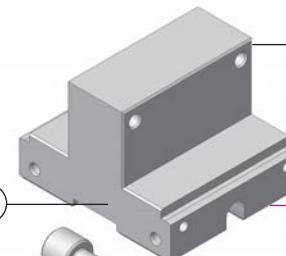
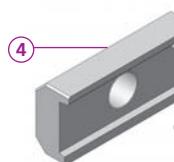
PAND 34-49-



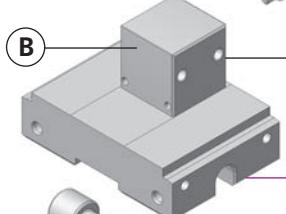
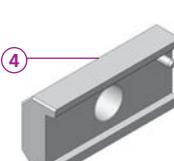
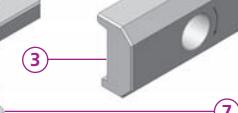
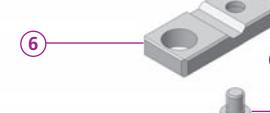
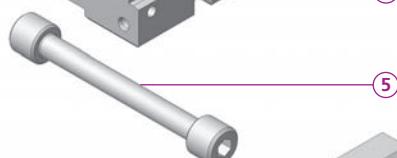
X = 26



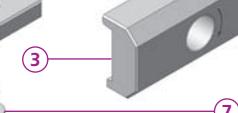
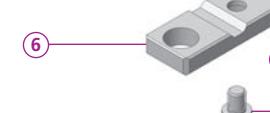
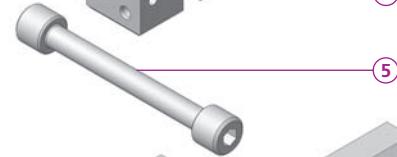
X = 25



PAND 26-49-



PAND 25-44-



Bestellbeispiel / ordering example / exemple de commande: PAND 25-44



PAND 19-49

- ① 1x PAND 19-49-
- ②
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫ 4x M5x10 ISO 4762
- X 19
- kg 1,1



PAND 25-44

- ① 1x PAND 25-44-
- ②
- ③ 1x PCSP 50R
- ④ 1x PCSP 50L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫ 4x M3x6 ISO 4762
- X 25
- kg 1,1



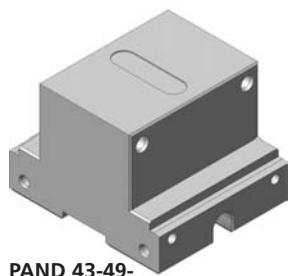
PAND 26-49

- ① 1x PAND 26-49-
- ②
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫ 4x M5x10 ISO 4762
- X 26
- kg 1,2

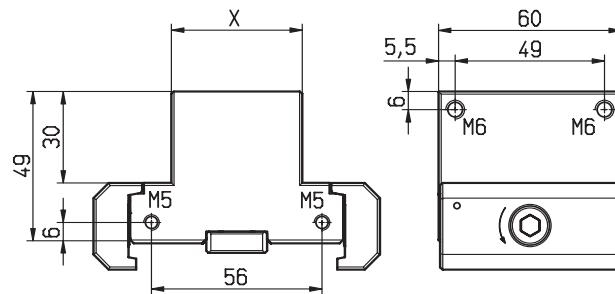


PAND 34-49

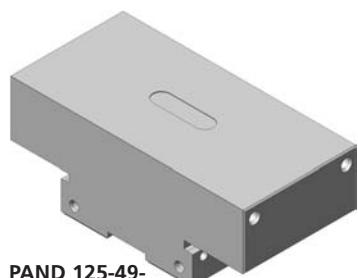
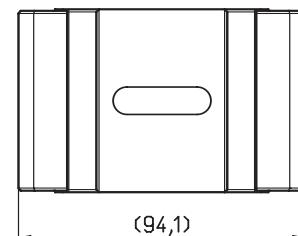
- ① 1x PAND 34-49-
- ②
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫ 4x M5x10 ISO 4762
- X 34
- kg 1,3



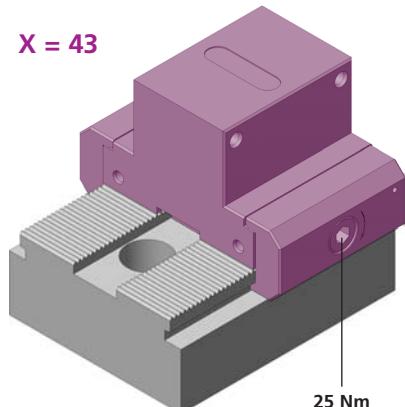
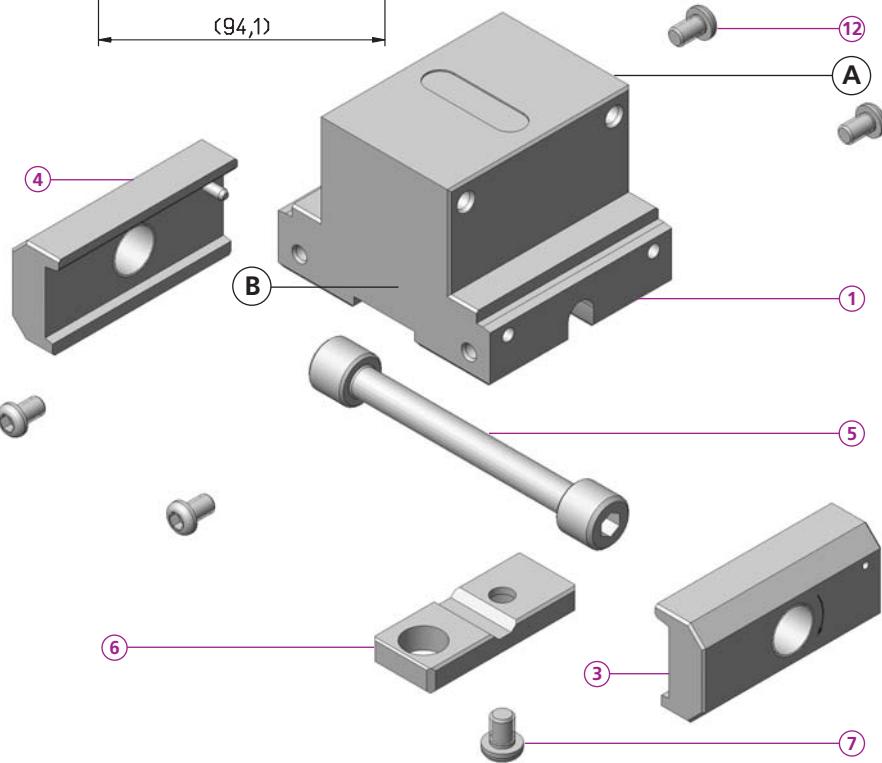
PAND 43-49-



PAND 94-49-



PAND 125-49-



X = 43

	PAND 43-49
①	1x PAND 43-49-
②	
③	1x PCSP 60R
④	1x PCSP 60L
⑤	1x PCS 14
⑥	1x PCGU 20 49
⑦	1x M6x8 ISO 7380
⑧	
⑨	
⑩	
⑪	
⑫	4x M5x10 ISO 4762
X	43
kg	1,5

	PAND 94-49
①	1x PAND 94-49-
②	
③	1x PCSP 60R
④	1x PCSP 60L
⑤	1x PCS 14
⑥	1x PCGU 20 49
⑦	1x M6x8 ISO 7380
⑧	
⑨	
⑩	
⑪	
⑫	4x M5x10 ISO 4762
X	94
kg	2,0

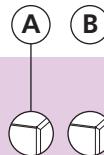
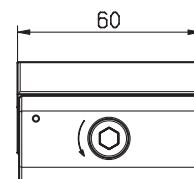
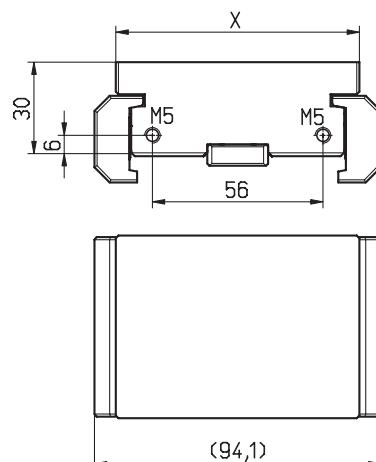
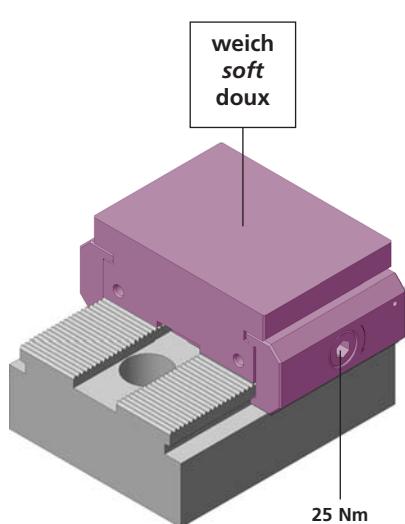
	PAND 125-49
①	1x PAND 125-49-
②	
③	1x PCSP 60R
④	1x PCSP 60L
⑤	1x PCS 14
⑥	1x PCGU 20 49
⑦	1x M6x8 ISO 7380
⑧	
⑨	
⑩	
⑪	
⑫	4x M5x10 ISO 4762
X	125
kg	2,7

**PT-F 61-25 X30**  
**PT-F 61-25 X50**  
**PT-F 61-25 X60**

**PT-F 80-30 X60**

**powerCLAMP**

PT-F 80-30-60

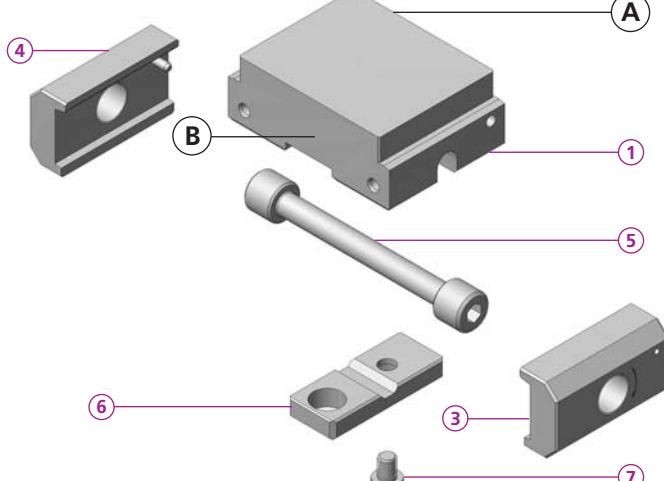
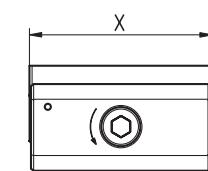
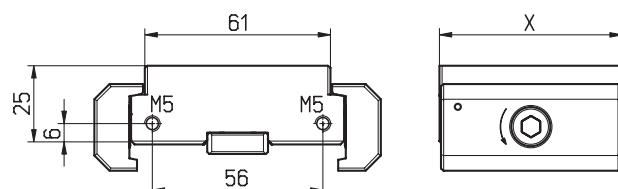
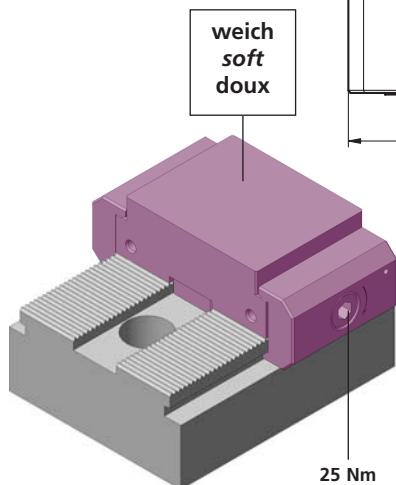


PT-F 80-30 X60

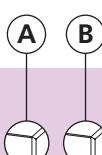
- ① 1x PT-F 80-30-60
- ②
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380

kg 1,4

PT-F 61-25-30

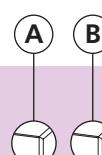


Bestellbeispiel / ordering example / exemple de commande: PT-F 61-25 X30



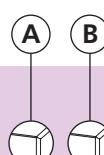
PT-F 61-25 X30

- ① 1x PT-F 61-25-30
- ②
- ③ 1x PCSP 30R
- ④ 1x PCSP 30L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 30
- ⑦ 1x M6x8 ISO 7380
- X 30
- kg 0,6



PT-F 61-25 X50

- ① 1x PT-F 61-25-50
- ②
- ③ 1x PCSP 50R
- ④ 1x PCSP 50L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- X 50
- kg 1,0



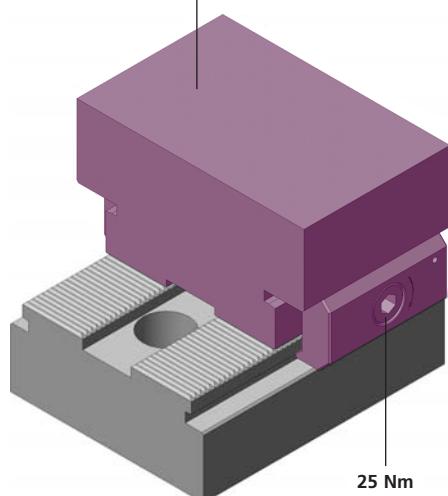
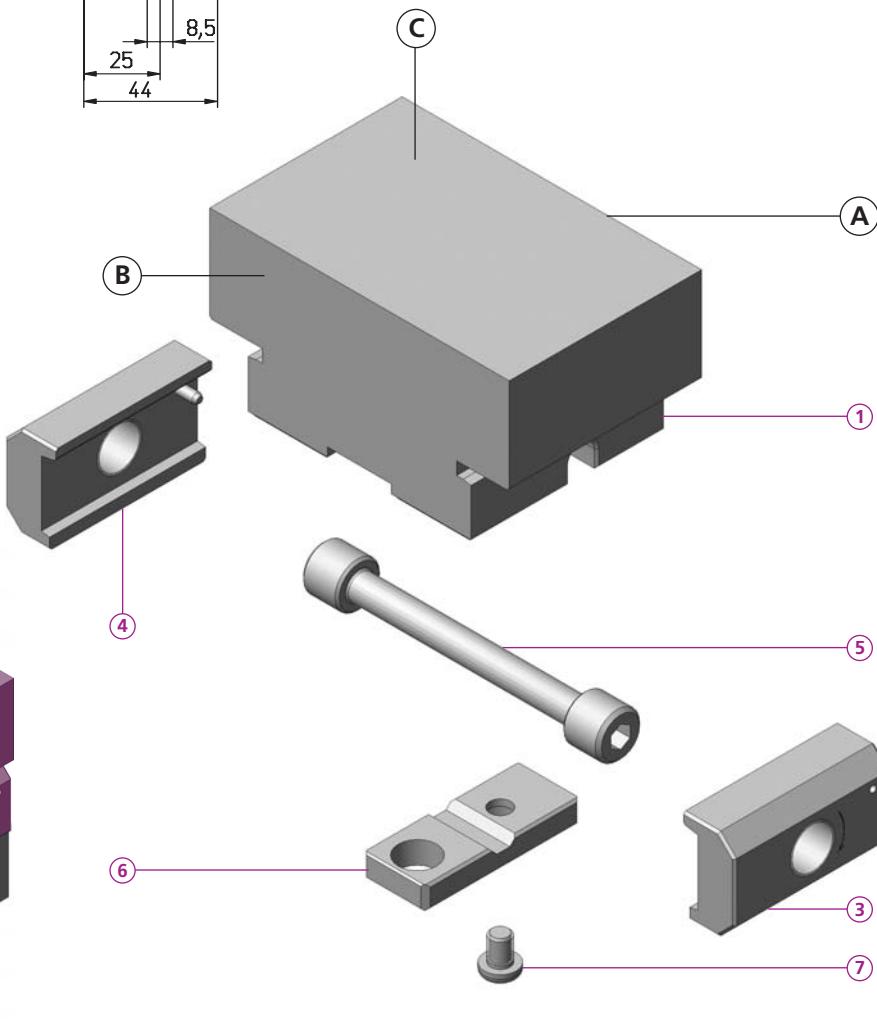
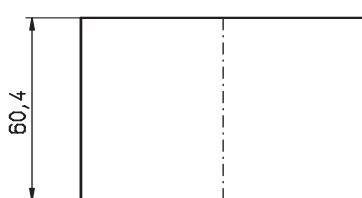
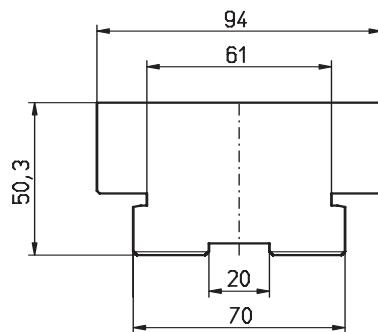
PT-F 61-25 X60

- ① 1x PT-F 61-25-60
- ②
- ③ 1x PCSP 60R
- ④ 1x PCSP 60L
- ⑤ 1x PCS 14
- ⑥ 1x PCGU 20 49
- ⑦ 1x M6x8 ISO 7380
- X 60
- kg 1,1

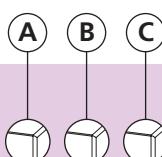
**\*PR 94-49 SET**

**Backenrohling**  
**blank jaw**  
**ébauche du mors**

**powerCLAMP**



**Bestellbeispiel / ordering example / exemple de commande: PR 94-49 SET**  
\* PR 94-49 SET = 1 Stück / piece / pièce



<b>①</b>	1x PR 94-49 SET
<b>③</b>	1x PCSP 50R
<b>④</b>	1x PCSP 50L
<b>⑤</b>	1x PCS 14
<b>⑥</b>	1x PCGU 20 49
<b>⑦</b>	1x M6x8 ISO 7380
<b>kg</b>	2,2

**PCZ 170 PND 170**

Zentrisch Spanner pneumatisch

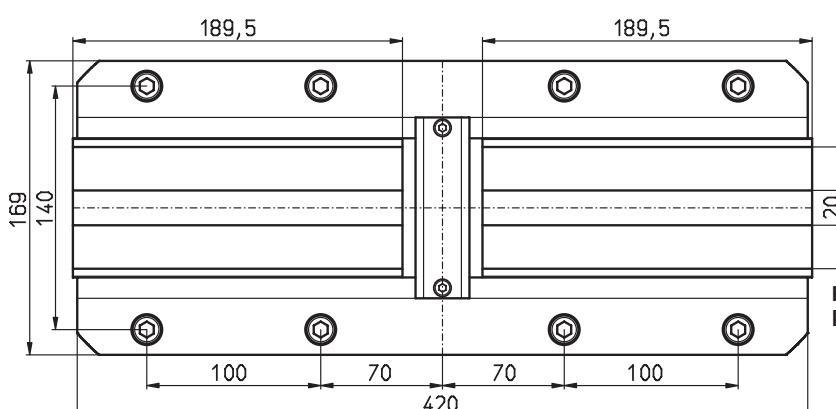
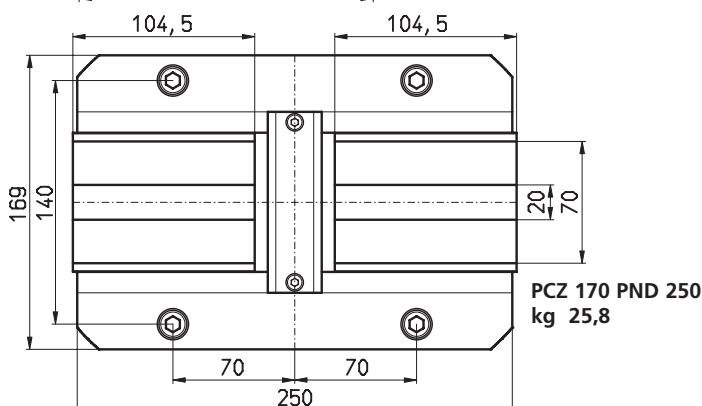
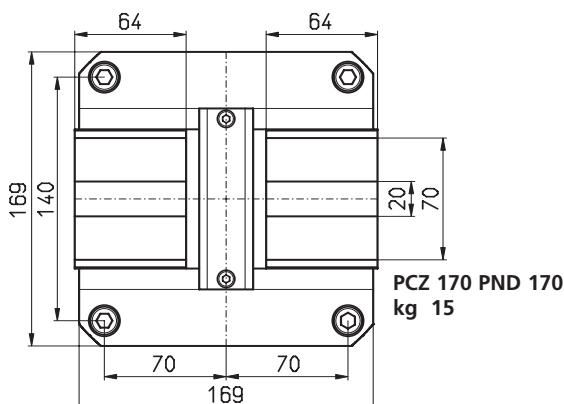
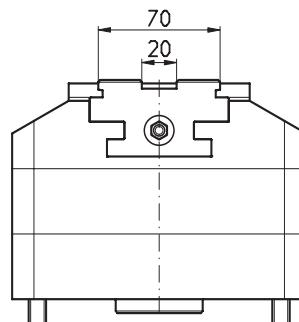
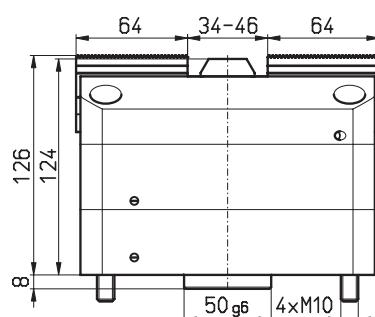
**PCZ 170 PND 250**

Pneumatic centric vice

**PCZ 170 PND 450**

Etau à centrer pneumatique

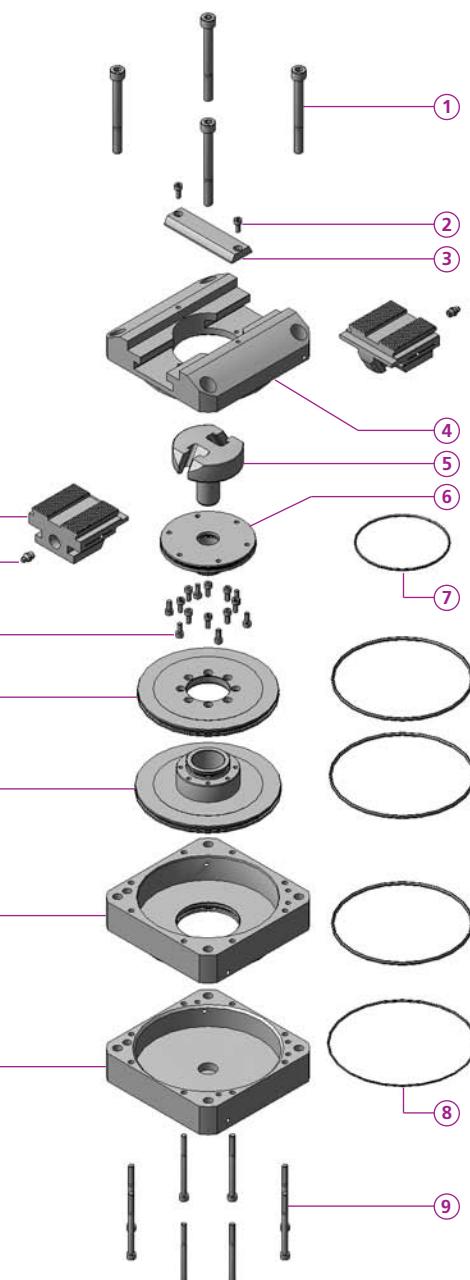
**powerCLAMP**



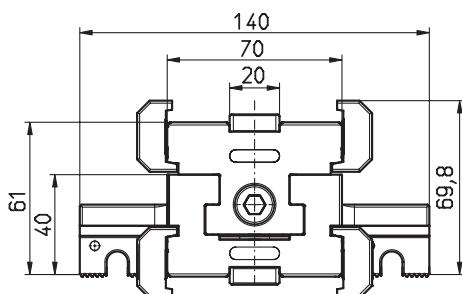
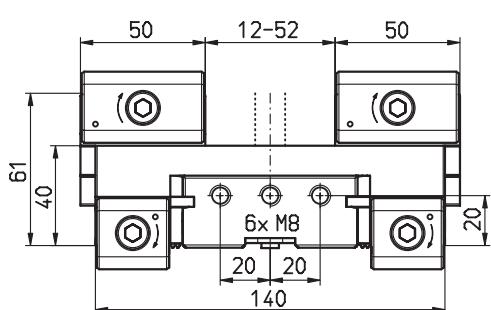
Backenhub 6 mm (pro Backe)  
stroke of clamping 6 mm (each jaw)  
cours du mors se serrage 6 mm (par mors)

bar	max.
9	4 t 40'000N
6	2,7 t 27'000N
5	2,3 t 23'000N
4	1,8 t 18'000N
3	1,3 t 14'000N

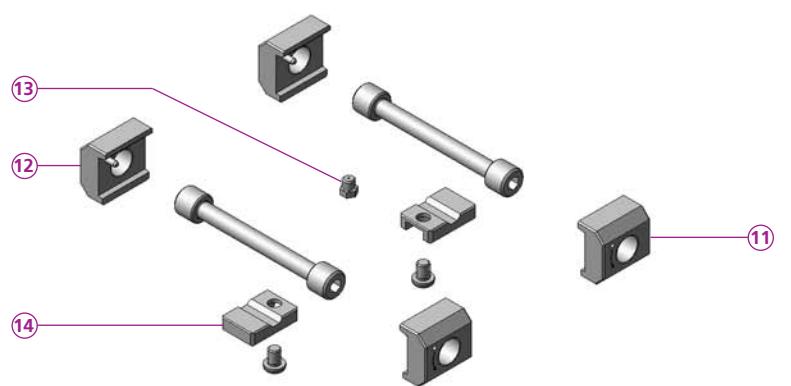
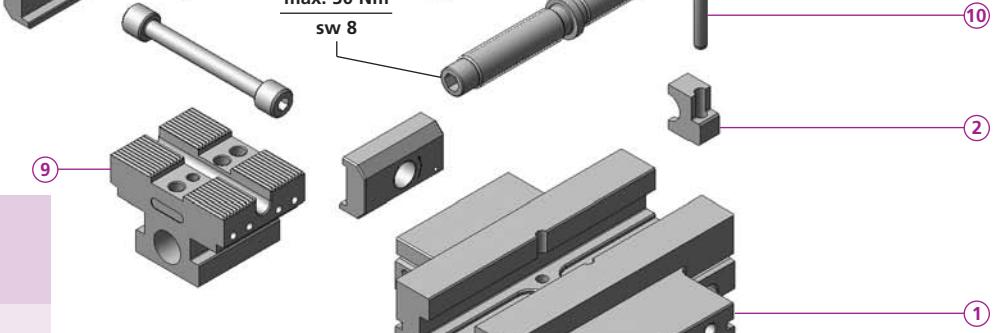
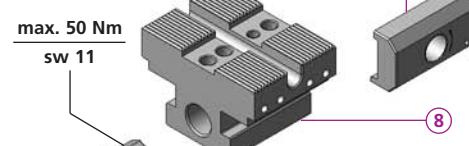
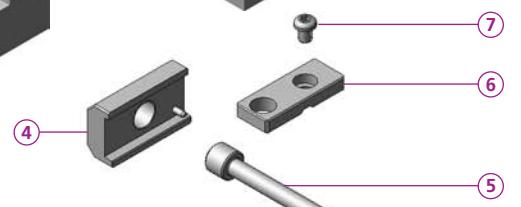
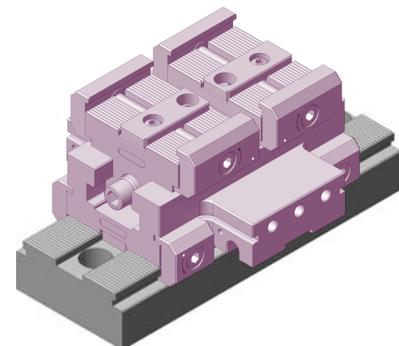
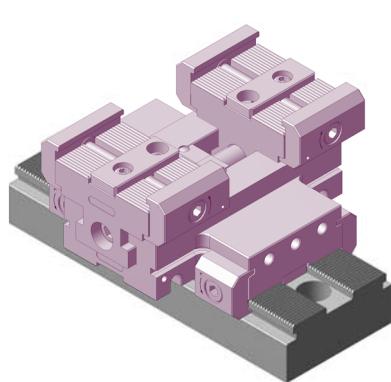
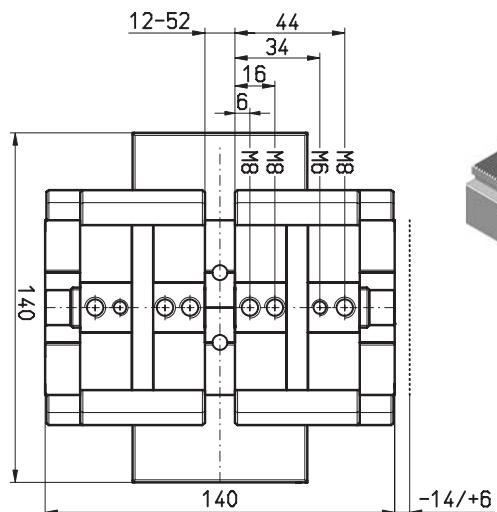
mit Sperrluftanschluss  
air purge connection  
avec raccord pour arrêt d'air



Bestellbeispiel / ordering example / exemple de commande: PCZ 170 PND 170



Drehmoment Torque Couple de torsion	Spannkraft Workholding force Force de serrage
50 Nm	= 1,6 t 16'000 N
40 Nm	= 1,3 t 13'000 N
30 Nm	= 1,0 t 10'000 N
20 Nm	= 0,5 t 5'000 N
10 Nm	= 0,2 t 2'000 N



## PCZ 140 L60

- ① 1x PCZ 140 L60M
- ② 2x PCZML 16
- ③ 2x PCSP 50L
- ④ 2x PCSP 50R
- ⑤ 4x PCS 14
- ⑥ 2x PCGU 20 49
- ⑦ 4x M6x8 ISO 7380
- ⑧ 1x PCZS 4550R
- ⑨ 1x PCZS 4550L
- ⑩ 2x D6x34 ISO 8734
- ⑪ 2x PCSP 30L
- ⑫ 2x PCSP 30R
- ⑬ 1x PCZSNP
- ⑭ 2x PCGU 20 30
- ⑮ 1x PCS 16TR 140

kg

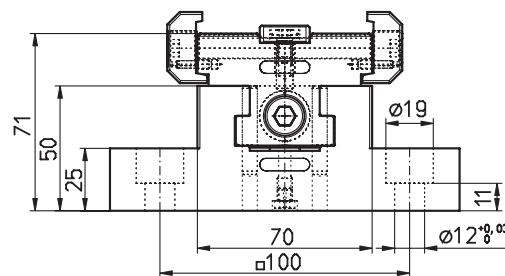
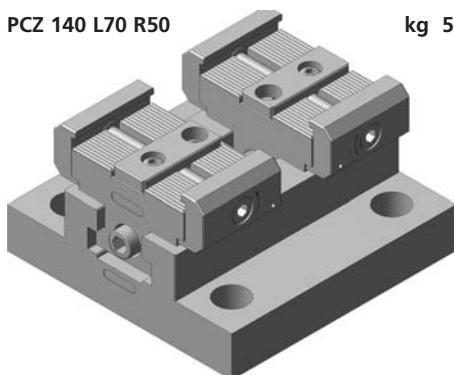
5,6

Bestellbeispiel / ordering example / exemple de commande: PCZ 140 L60

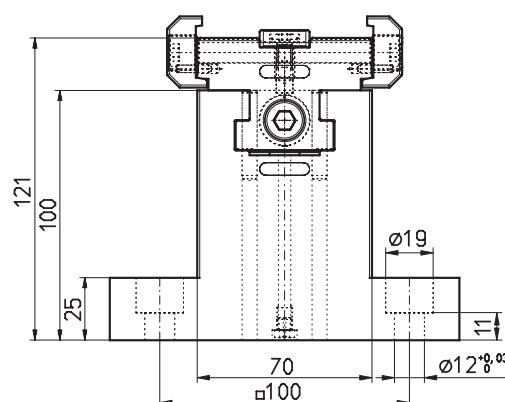
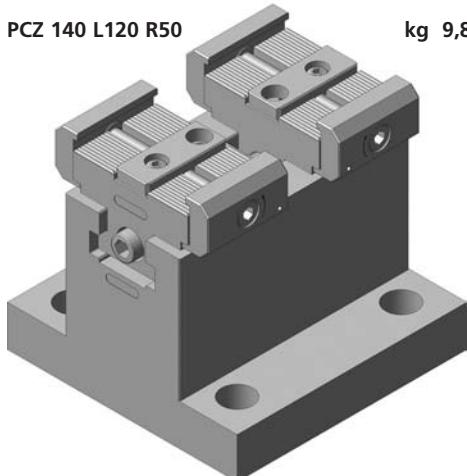
# PCZ 140 L70 R50 PCZ 140 L120 R50

**powerCLAMP**

PCZ 140 L70 R50 kg 5,7

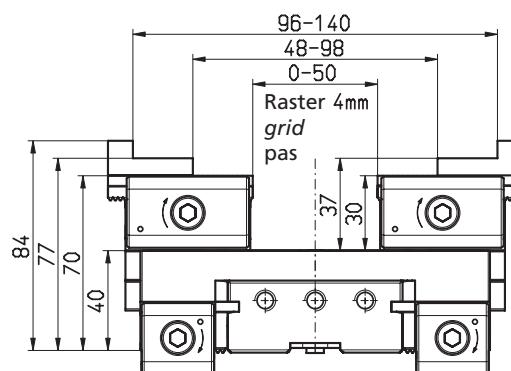
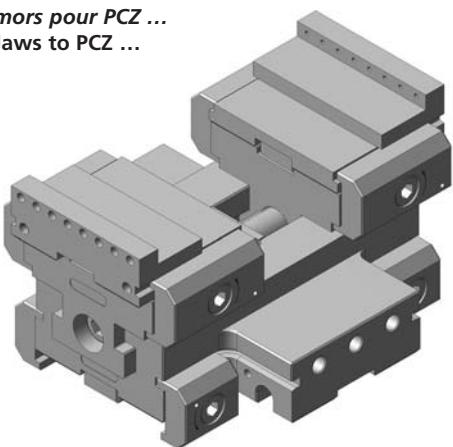


PCZ 140 L120 R50 kg 9,8

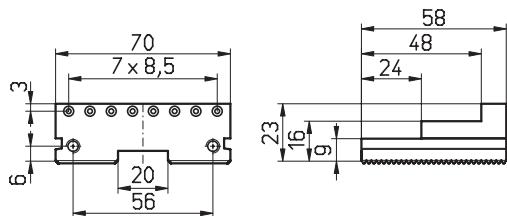


Bestellbeispiel / ordering example / exemple de commande: PCZ 140 L70 R50

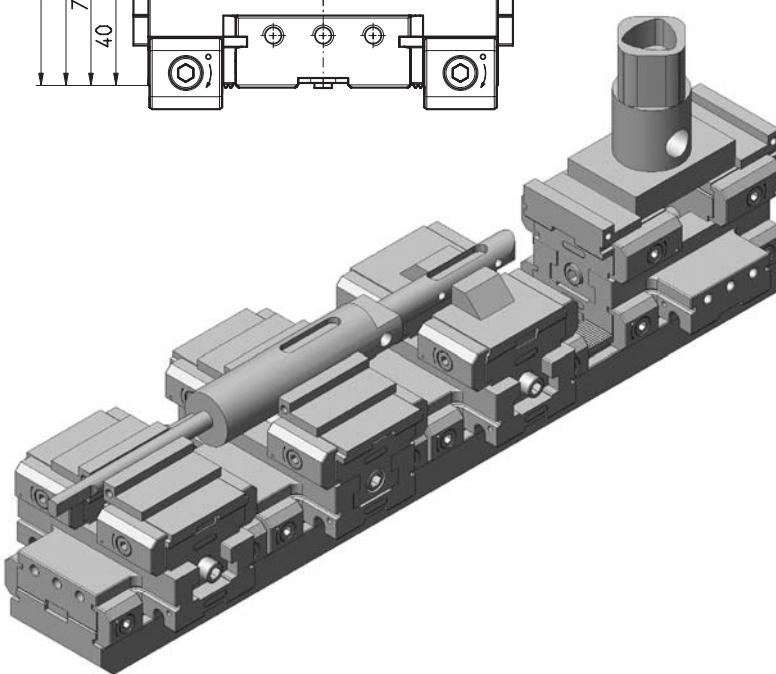
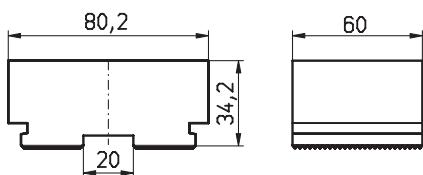
Aufsatzbacken zu PCZ ...  
mors pour PCZ ...  
Jaws to PCZ ...

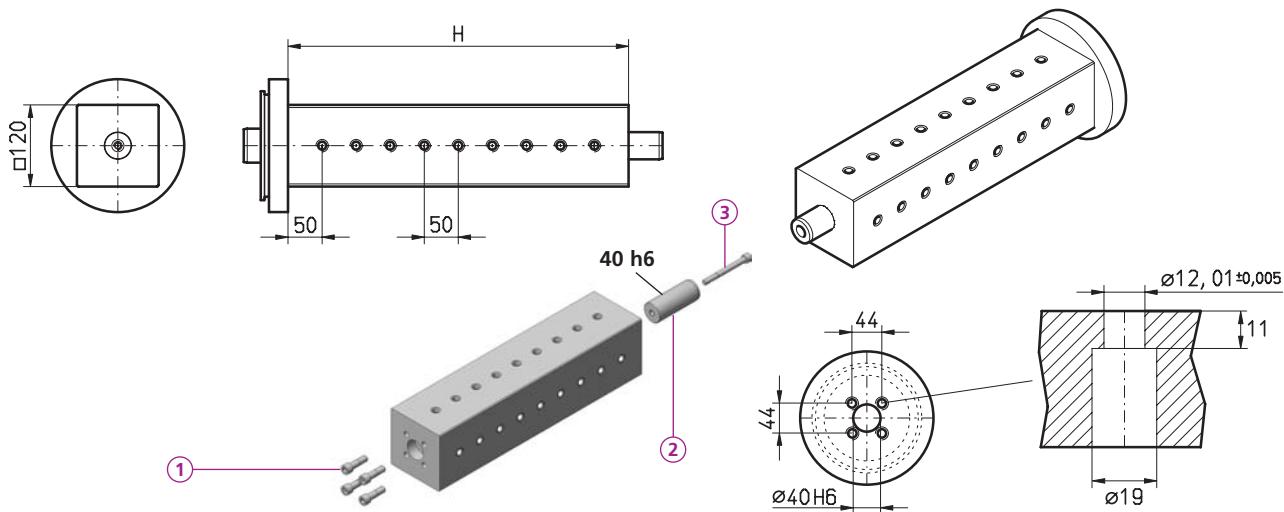


PCZB 5823 UPR kg 0,4



PCZB 8060 R34 (Stahl / steel / acier) kg 1,2  
PCZB 8060 R40 ALU kg 0,52



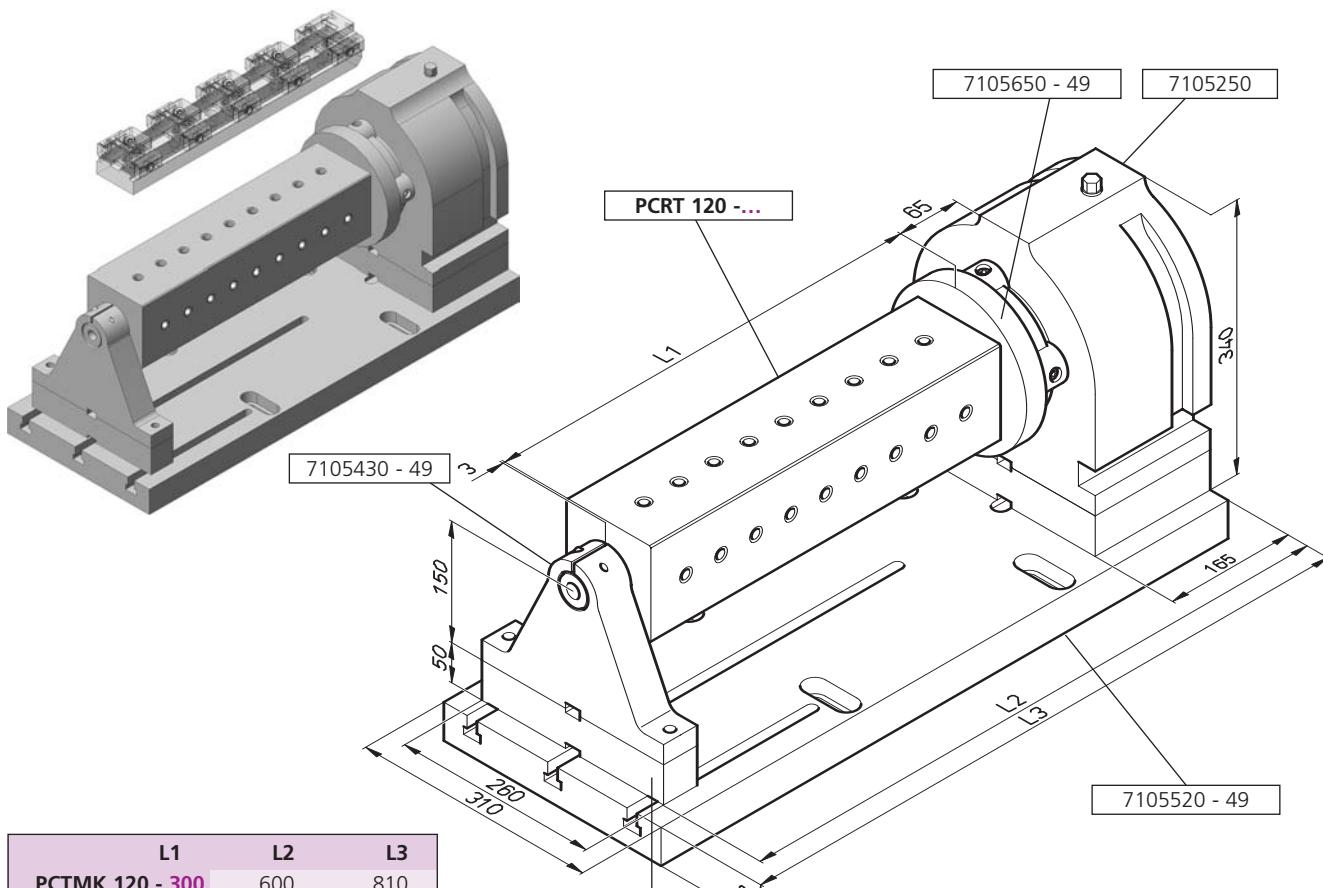


H	G25
350	<b>PCRT 120-350-G25</b>
400	<b>PCRT 120-400-G25</b>
450	<b>PCRT 120-450-G25</b>
500	<b>PCRT 120-500-G25</b>

- (1) 4x TWPAS 1240
- (2) 1x PCTBO 40100
- (3) 1x M10x100 ISO 4762

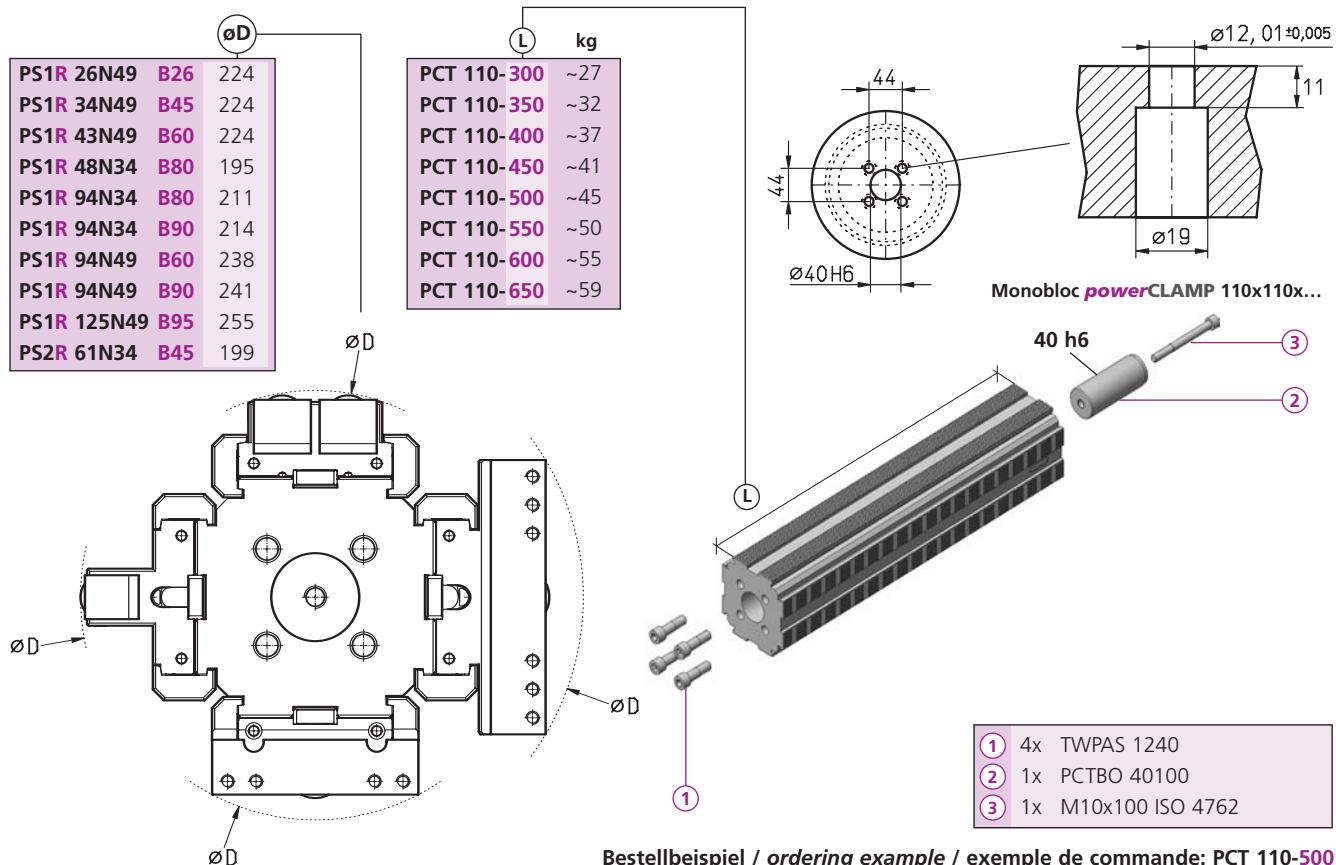
H	ALU
350	<b>PCRT 120-350-ALU</b>
400	<b>PCRT 120-400-ALU</b>
450	<b>PCRT 120-450-ALU</b>
500	<b>PCRT 120-500-ALU</b>

Bestellbeispiel / ordering example / exemple de commande: PCRT 120-350-G25

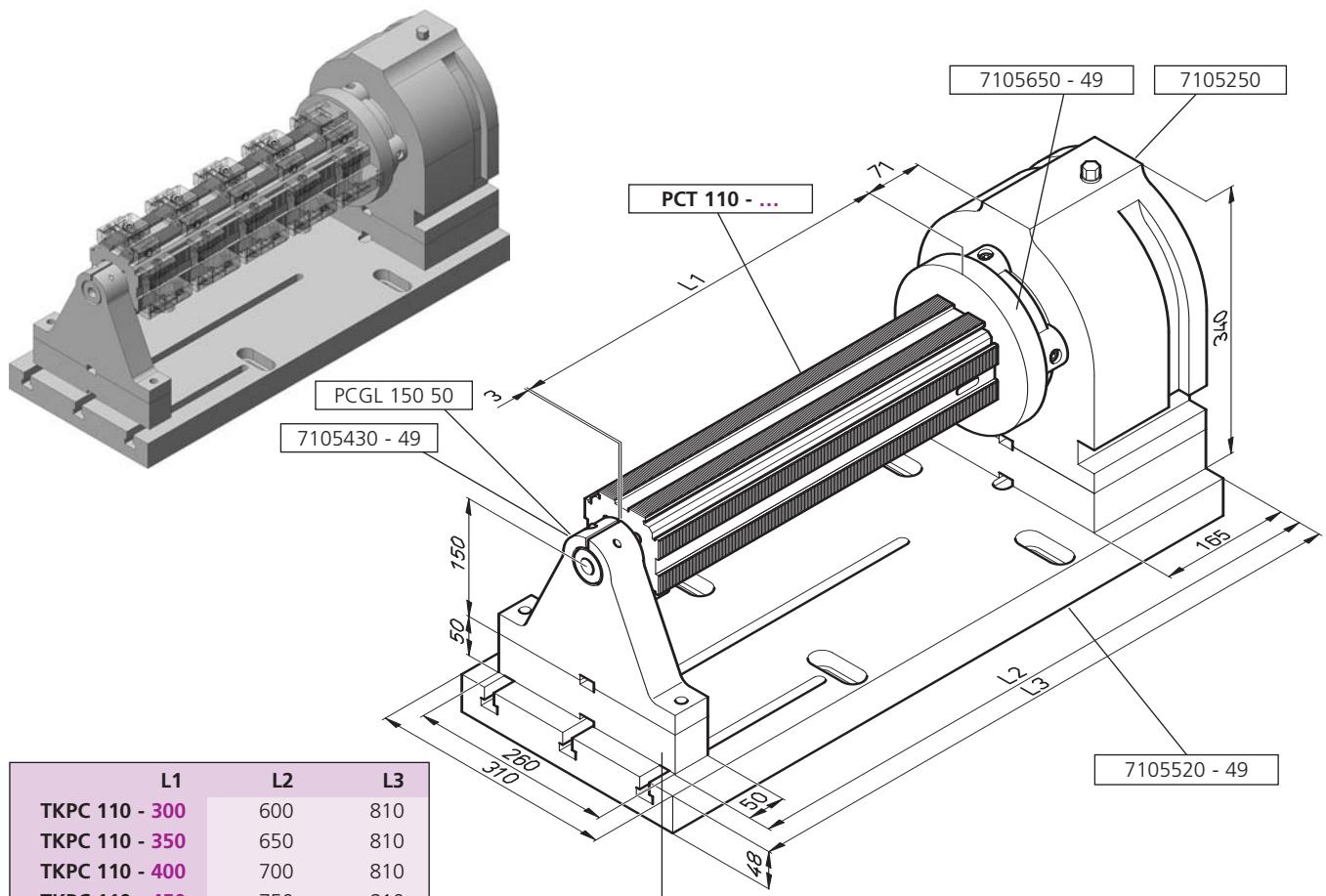


	L1	L2	L3
PCTMK 120 - 300	600	810	
PCTMK 120 - 350	650	810	
PCTMK 120 - 400	700	810	
PCTMK 120 - 450	750	810	
PCTMK 120 - 500	800	810	
*PCTMK 120 - 550	850	960	
*PCTMK 120 - 600	900	960	
*PCTMK 120 - 650	950	960	

Bestellbeispiel / ordering example / exemple de commande: PCTMK 120-300

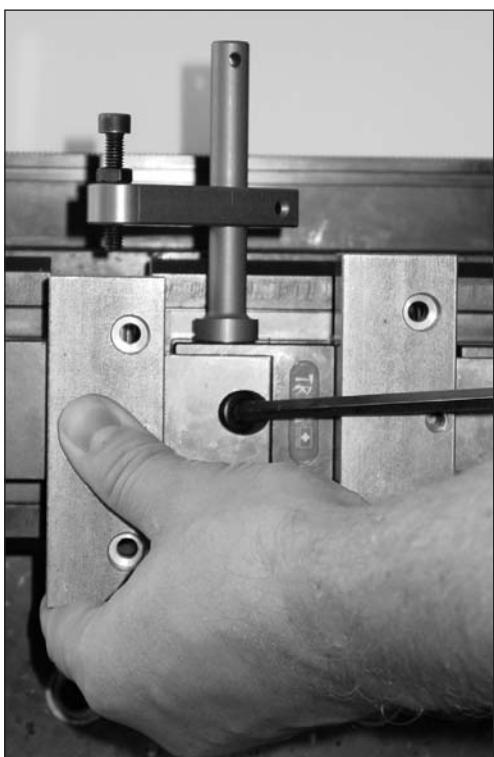


Bestellbeispiel / ordering example / exemple de commande: PCT 110-500



Bestellbeispiel / ordering example / exemple de commande: TKPC 110-500

\* entspricht nicht der Abbildung / does not correspond to the illustration / ne correspond pas à l'illustration



Die einfache Plazierung ermöglicht schnelles Montieren und wieder Entfernen auch auf der 5-Achsen-Maschine!

*The easy positioning makes quick mounting and lifting possible also on five axes machines!*

Le placement simple, l'ajustement rapide et vite rangée, aussi sur des machines à 5 axes!

### Die 3 Sicherheitsstufen:

Durch seine **rote Farbe** ist der Anschlag besser sichtbar, was das Risiko vermindert, dass er in der Maschine vergessen wird.

Die **Bohrung** dient zum Befestigen einer Schnur am Handgelenk oder ausserhalb der Maschine.

Dank dem **Magnet** ist der Anschlag auf allen magnetischen Materialien auf minimalem Platz einsetzbar, bei Kollision wird er weggedrückt. Es entstehen so keine teuren Werkzeugbrüche oder Maschinendefekte.

### The 3 safety levels:

*Because of its **red color**, the buffer is better visible. so the risk of forgetting the device in the machine is diminished.*

*The **drilling** serves to fasten a cord around the wrist or outside the machine.*

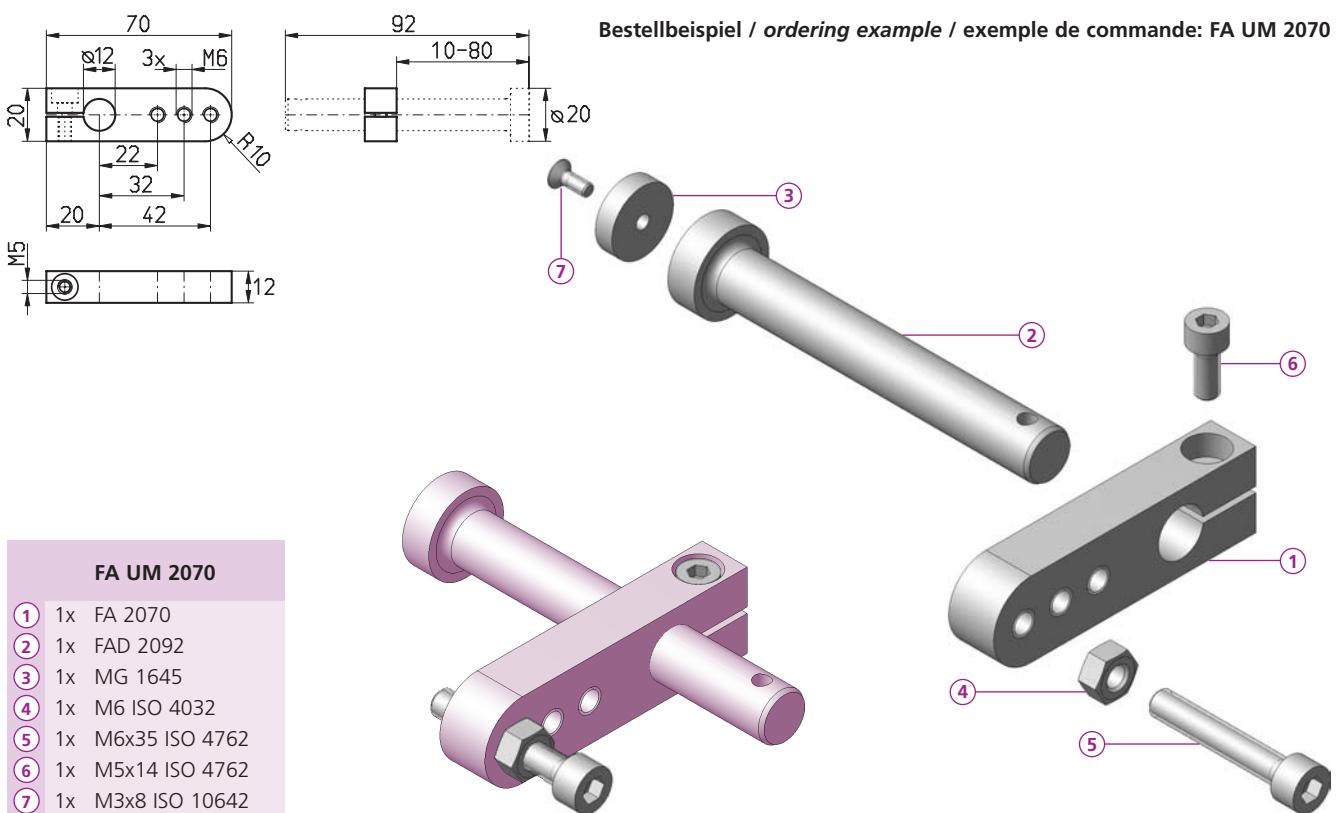
*Its **magnet** makes the buffer applicable on all magnetic materials on minimum space, in case of collision it gets pressed away, so there won't be any expensive breakings of tools or machines.*

### Les 3 points de sécurité:

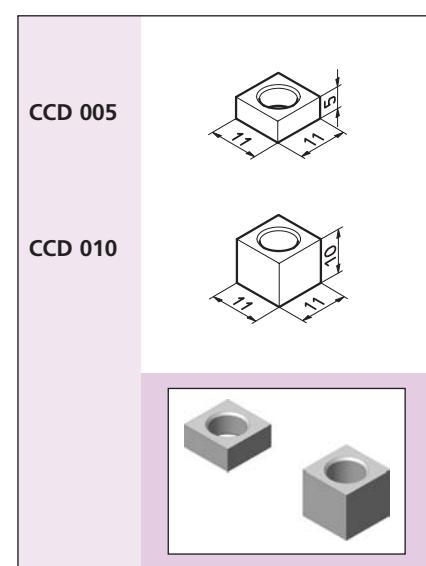
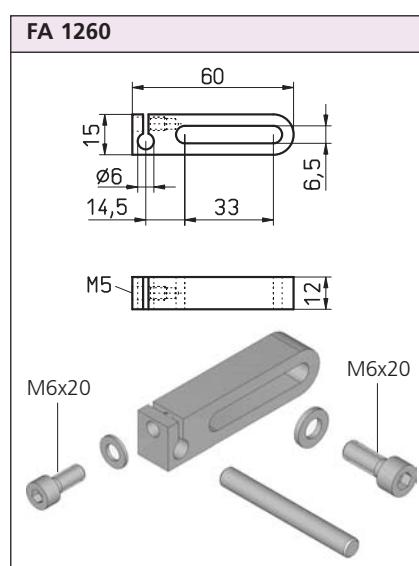
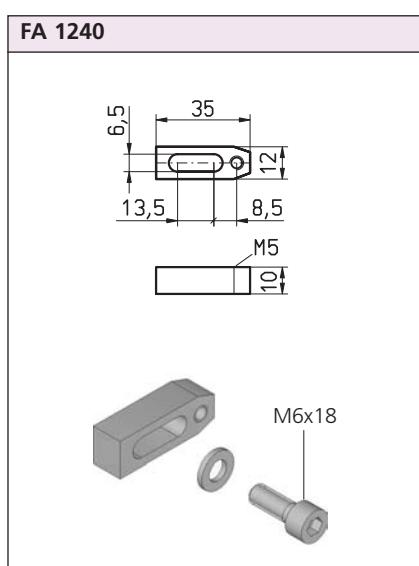
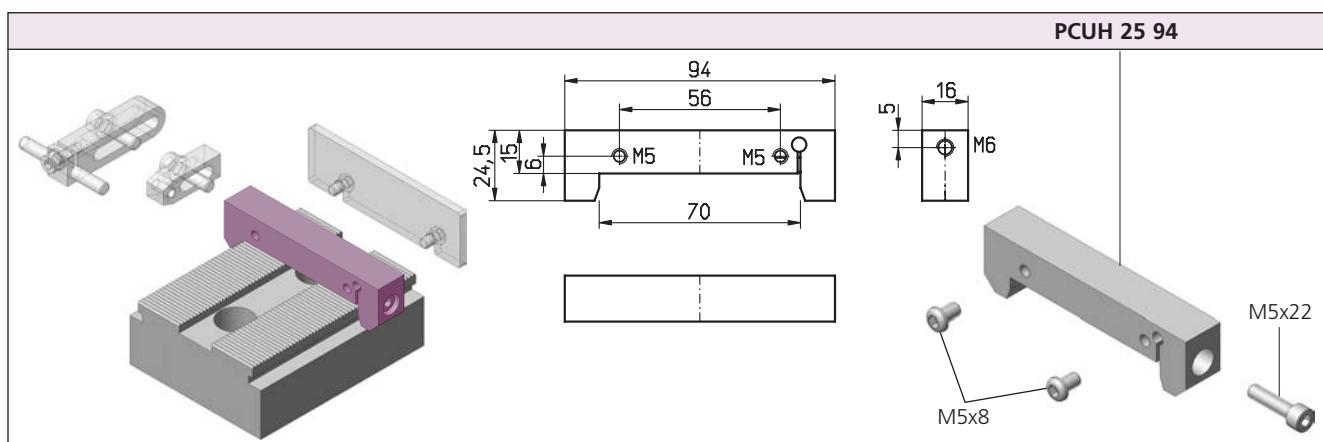
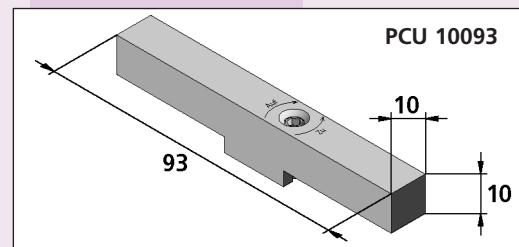
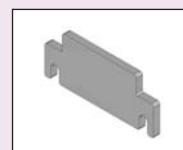
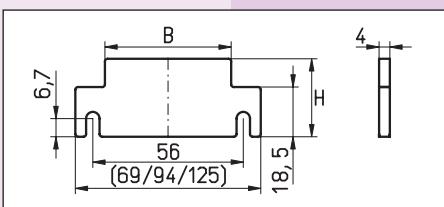
A cause de sa **couleur rouge**, la butée est visible plus clairement. C'est pourquoi le risque de l'oublier dans la machine est diminué.

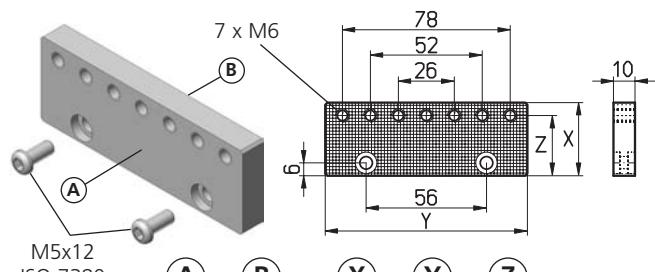
Le **perçage** sert à fixer une ficelle au poignet ou à l'extérieur de la machine.

Grâce à l'**aimant**, la butée peut être posée rapidement sur toutes les pièces métalliques avec un besoin de place minimum. En cas de collision elle est éjectée. Cela veut dire pas de dégâts coûteux à votre machine et à vos outils.

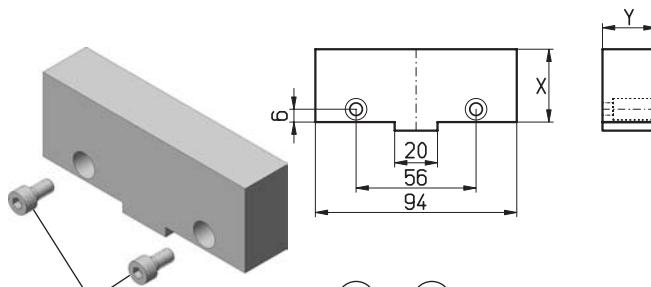


<b>H</b>	<b>Module 19mm</b>	<b>B</b>	<b>H</b>	<b>Module 34mm</b>	<b>B</b>	<b>H</b>	<b>Module 48mm</b>	<b>B</b>	<b>H</b>	<b>Module 61mm</b>	<b>B</b>	<b>H</b>	<b>Module 94mm</b>	<b>B</b>
20	PCU 20018	18	20	PCU 20033	33	20	PCU 20047	47	20	PCU 20060	60	14	PCU 14093	93
24	PCU 24018	18	24	PCU 24033	33	24	PCU 24047	47	24	PCU 24060	60	20	PCU 20093	93
29	PCU 29018	18	29	PCU 29033	33	29	PCU 29047	47	29	PCU 29060	60	24	PCU 24093	93
31	PCU 31018	18	31	PCU 31033	33	31	PCU 31047	47	31	PCU 31060	60	29	PCU 29093	93
34	PCU 34018	18	34	PCU 34033	33	34	PCU 34047	47	39	PCU 39047	47	31	PCU 31093	93
39	PCU 39018	18	39	PCU 39033	33	39	PCU 39047	47	44	PCU 44018	18	34	PCU 34093	93
44	PCU 44018	18	44	PCU 44033	33	44	PCU 44047	47	20	PCU 20067	67	39	PCU 39093	93
46.5	PCU 46518	18	46.5	PCU 46533	33				24	PCU 24067	67	44	PCU 44093	93
<b>H</b>	<b>Module 26mm</b>	<b>B</b>	<b>H</b>	<b>Module 43mm</b>	<b>B</b>	<b>H</b>	<b>Module 58mm</b>	<b>B</b>	31	PCU 31067	67	<b>H</b>	<b>Module 125mm</b>	<b>B</b>
20	PCU 20025	25	20	PCU 20042	42	20	PCU 20057	57				20	PCU 20124	124
24	PCU 24025	25	24	PCU 24042	42	24	PCU 24057	57	<b>H</b>	<b>Module 78mm</b>	<b>B</b>	24	PCU 24124	124
29	PCU 29025	25	29	PCU 29042	42	29	PCU 29057	57	20	PCU 20077	77	29	PCU 29124	124
31	PCU 31025	25	31	PCU 31042	42	31	PCU 31057	57	24	PCU 24077	77	31	PCU 31124	124
34	PCU 34025	25	34	PCU 34042	42				29	PCU 29077	77	34	PCU 34124	124
39	PCU 39025	25	39	PCU 39042	42				31	PCU 31077	77	39	PCU 39124	124
44	PCU 44025	25	44	PCU 44042	42				44	PCU 44124	124			
46.5	PCU 46525	25	46.5	PCU 46042	42									

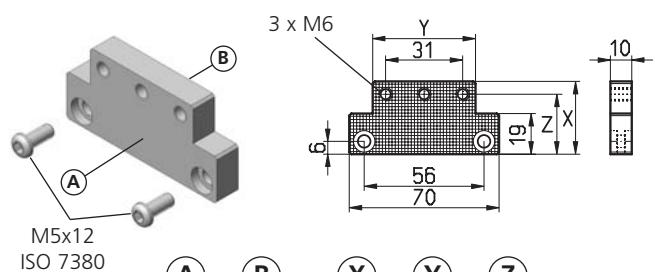




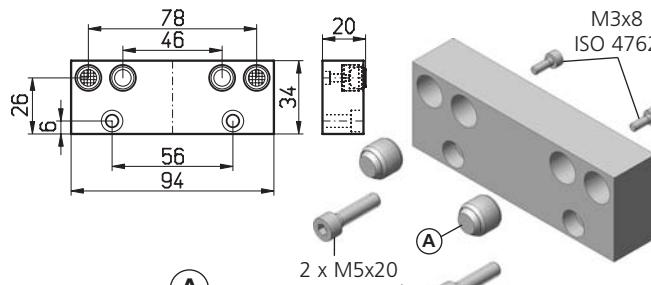
	(A)	(B)	X	Y	Z	
PC 9434			34	94	28	56 HRC
PC 9449			49	94	43	56 HRC
PC 12549			49	125	43	HV 700x0.2



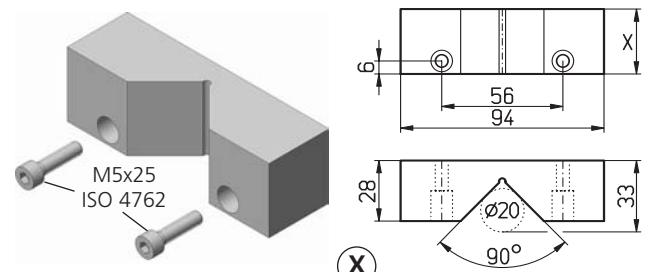
PC 94-34-25W	M5x25	34	25	weich/soft/doux
PC 94-34-30W	M5x30	34	30	weich/soft/doux
PC 94-49-30W	M5x30	49	30	weich/soft/doux



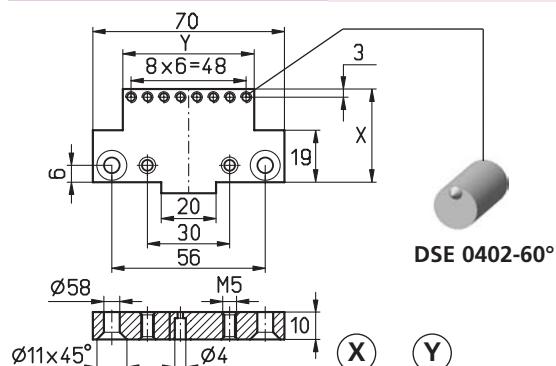
PC 4349		49	43	43	56 HRC
PC 4834		34	48	28	56 HRC



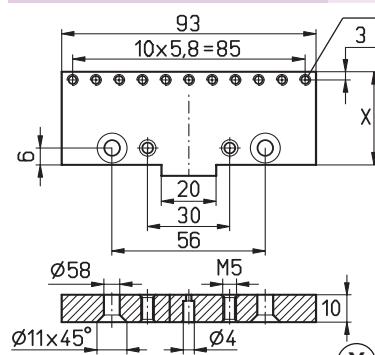
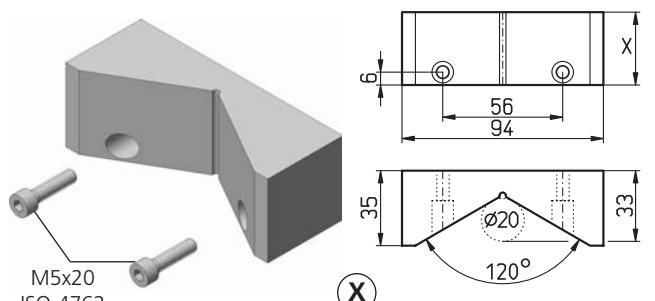
PC 9460	
PC 9460R	



PC 9434 V90°	34	min ø 6 max ø 52
PC 9449 V90°	49	min ø 6 max ø 52



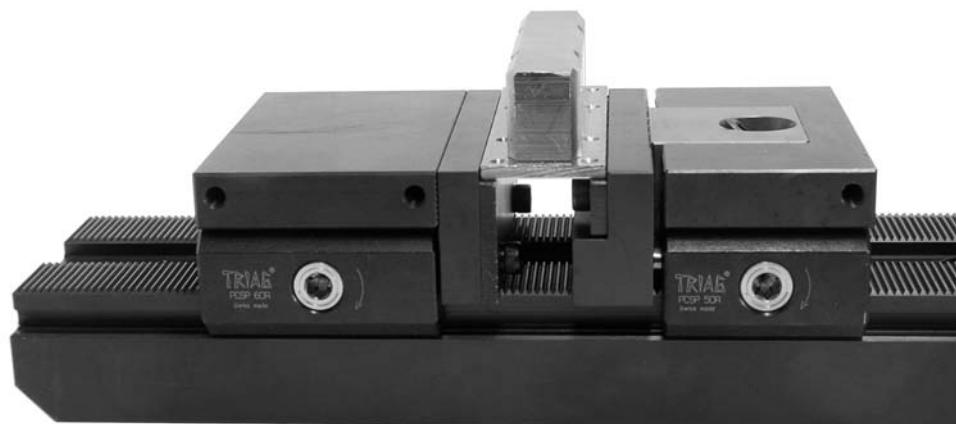
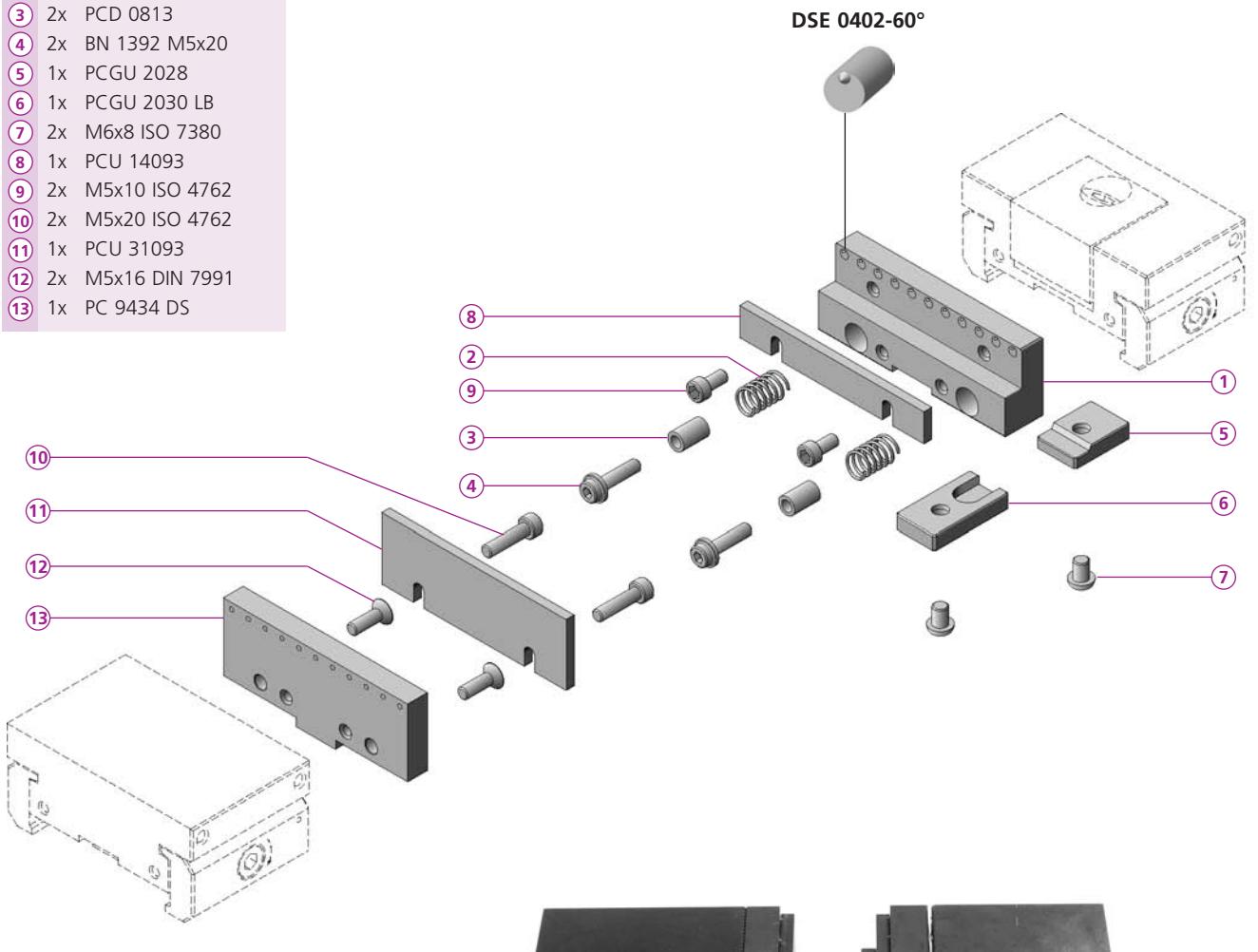
PC 4834 DS	34	48
PC 4349 DS	49	43

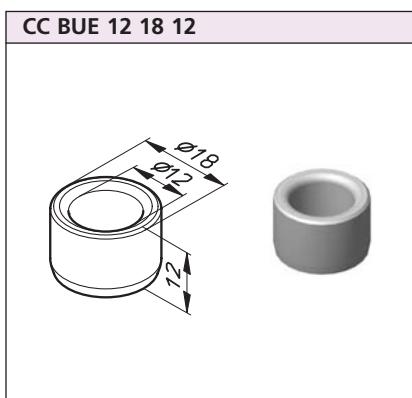


PC 9434 V120°	34	min ø 8 max ø 158
PC 9449 V120°	49	min ø 8 max ø 158

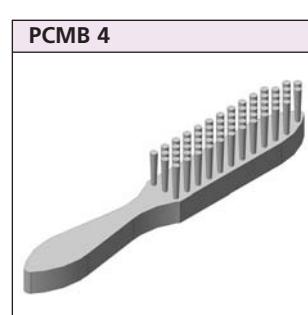
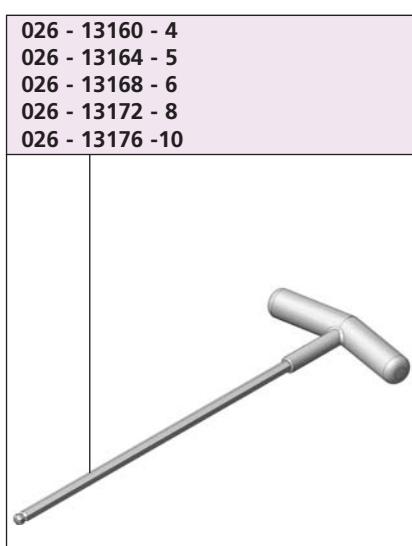
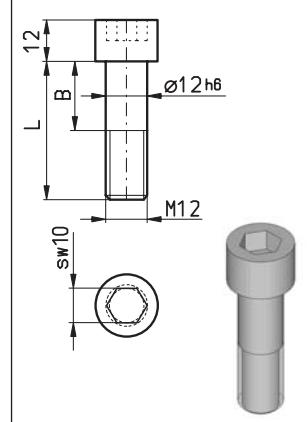
PC 9434 DS	34
PC 9449 DS	49

PCL 94-34 PRG	
①	1x PCL 9434 DS
②	2x FED 10175
③	2x PCD 0813
④	2x BN 1392 M5x20
⑤	1x PCGU 2028
⑥	1x PCGU 2030 LB
⑦	2x M6x8 ISO 7380
⑧	1x PCU 14093
⑨	2x M5x10 ISO 4762
⑩	2x M5x20 ISO 4762
⑪	1x PCU 31093
⑫	2x M5x16 DIN 7991
⑬	1x PC 9434 DS

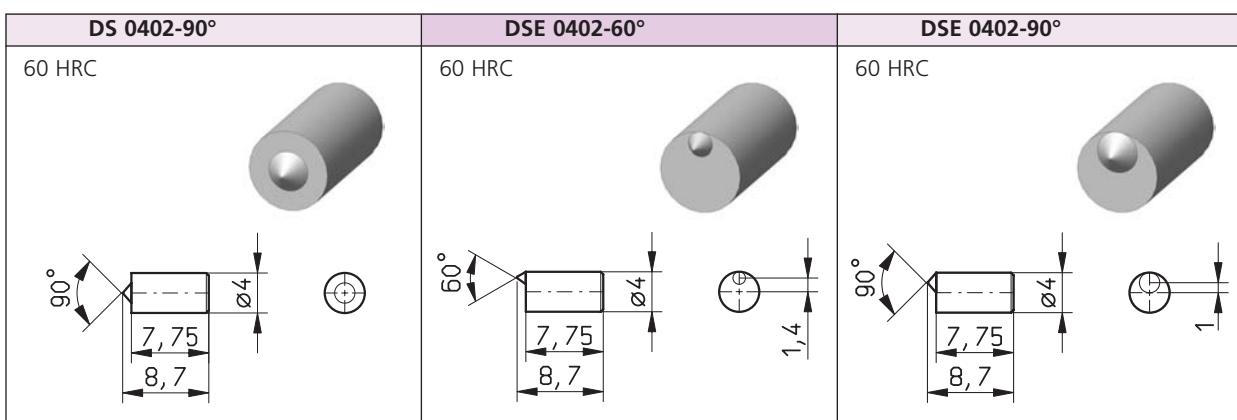
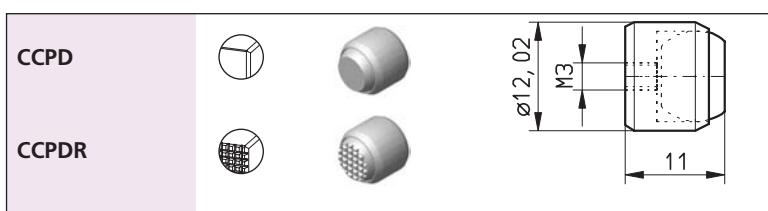
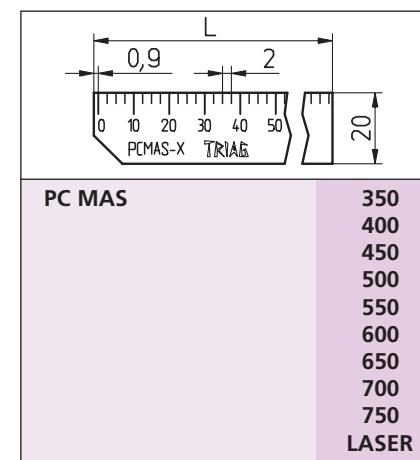
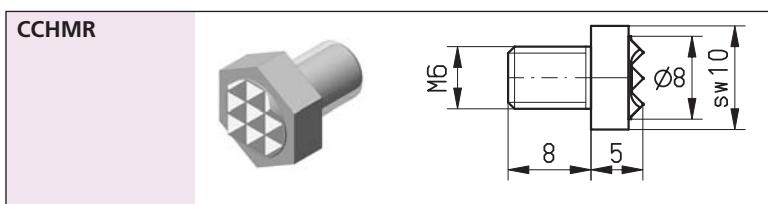
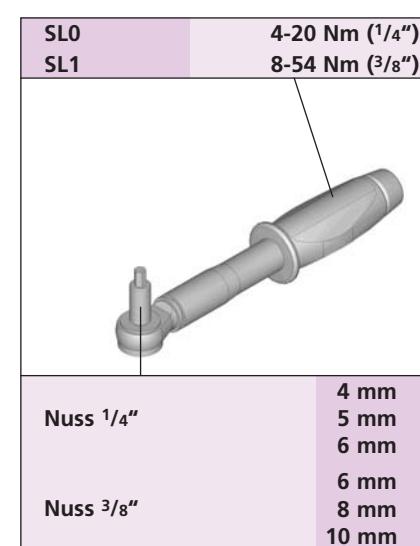


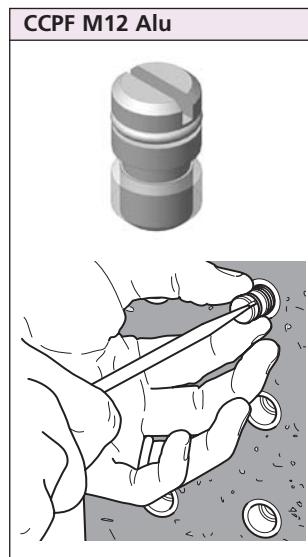
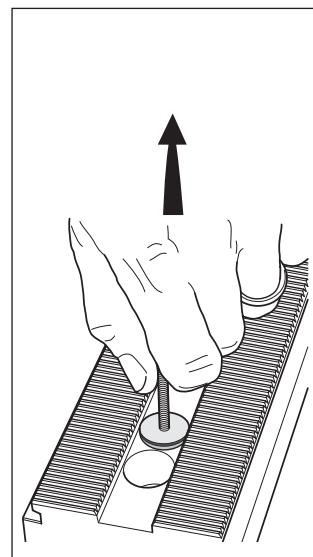
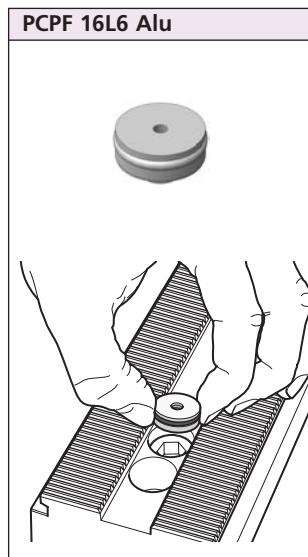
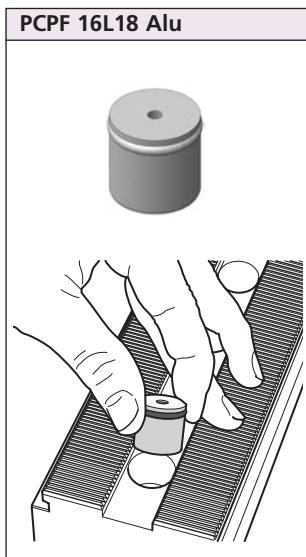


	L	B
TWPAS 1240	40	20
TWPAS 1227	27	13
TWPAS 1232	32	13

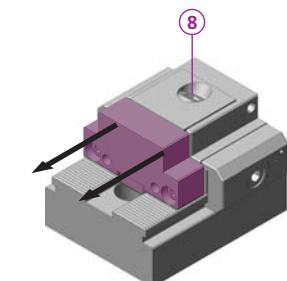


	B
TW ADAPT 10	10
TW ADAPT 12	12
TW ADAPT 14	14
TW ADAPT 16	16
TW ADAPT 18	18
TW ADAPT 20	20
TW ADAPT 22	22

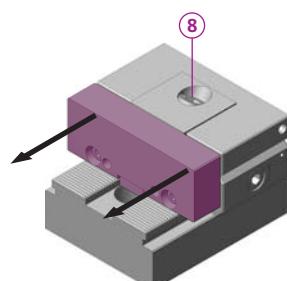
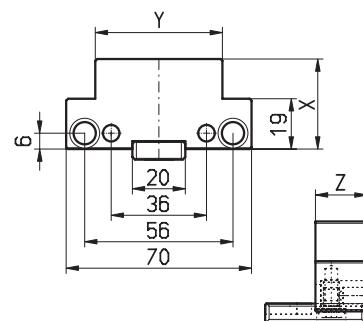




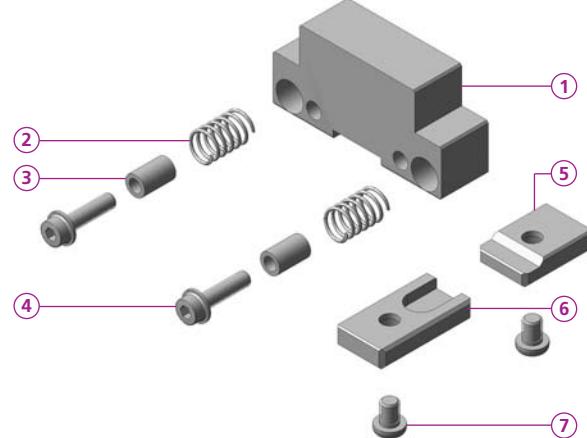
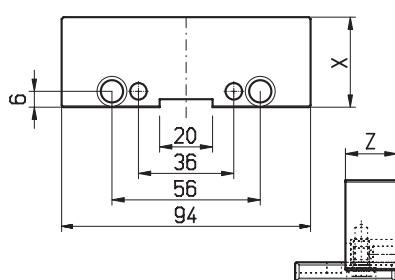
**Von Niederzug zu Linear!**  
**From pull down jaws to linear stroke!**  
**Mors abaissant et serrage linéaire parallèle!**



PCL 4834 N



PCL 9434 N



**PCL 4834 N**

- ① 1x PCL 4834 N20
- ② 2x FED 10175
- ③ 2x PCD 0813
- ④ 2x BN 1392 M5x20
- ⑤ 1x PCGU 2028
- ⑥ 1x PCGU 2030 LB
- ⑦ 2x M6x8 ISO 7380
- ⑧ 1x M10x22
- X 34
- Y 48
- Z 19,5

**PCL 4349 N**

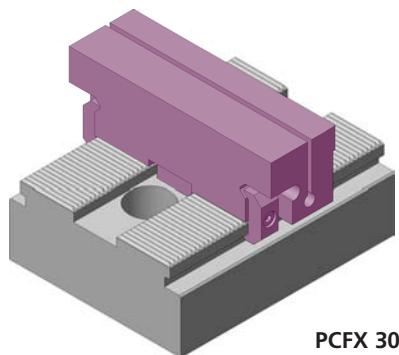
- ① 1x PCL 4349 N20
- ② 2x FED 10175
- ③ 2x PCD 0813
- ④ 2x BN 1392 M5x20
- ⑤ 1x PCGU 2028
- ⑥ 1x PCGU 2030 LB
- ⑦ 2x M6x8 ISO 7380
- X 49
- Y 43
- Z 19,5

**PCL 9434 N**

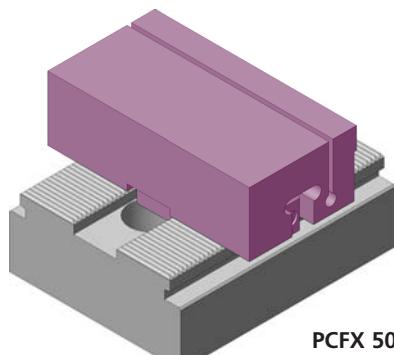
- ① 1x PCL 9434 N20
- ② 2x FED 10175
- ③ 2x PCD 0813
- ④ 2x BN 1392 M5x20
- ⑤ 1x PCGU 2028
- ⑥ 1x PCGU 2030 LB
- ⑦ 2x M6x8 ISO 7380
- ⑧ 1x M10x22
- X 34
- Y 94
- Z 19,5

**PCL 9449 N**

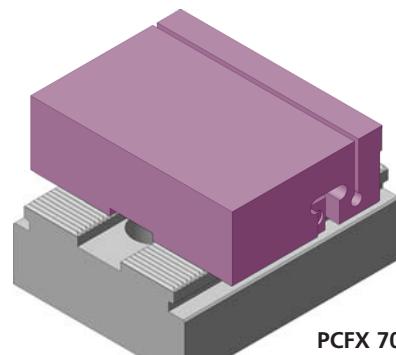
- ① 1x PCL 9449 N20
- ② 2x FED 10175
- ③ 2x PCD 0813
- ④ 2x BN 1392 M5x20
- ⑤ 1x PCGU 2028
- ⑥ 1x PCGU 2030 LB
- ⑦ 2x M6x8 ISO 7380
- X 49
- Y 94
- Z 19,5



PCFX 30



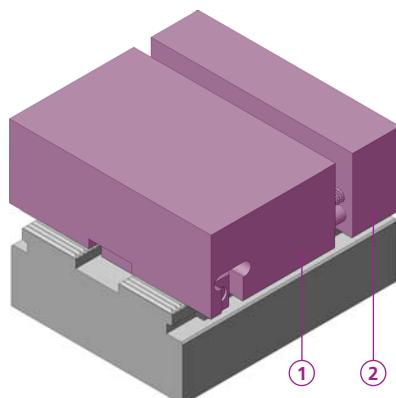
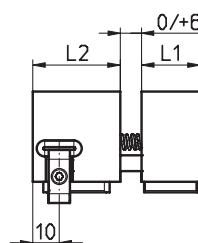
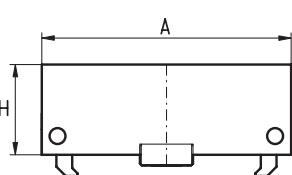
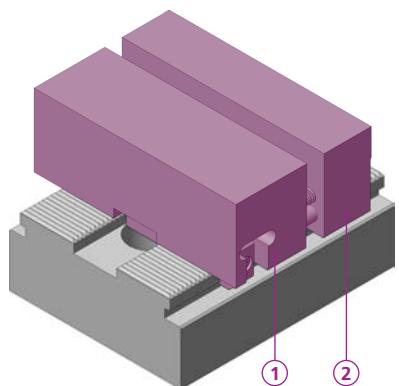
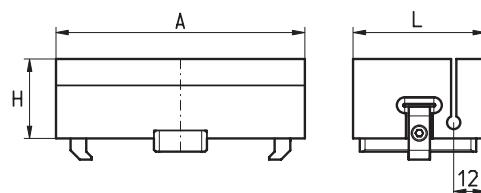
PCFX 50



PCFX 70

	A	L	H
PCFX 30	94	30	34
PCFX 50	94	50	34
PCFX 70	94	70	34

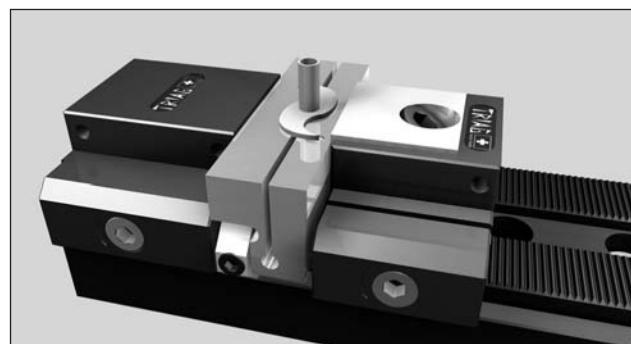
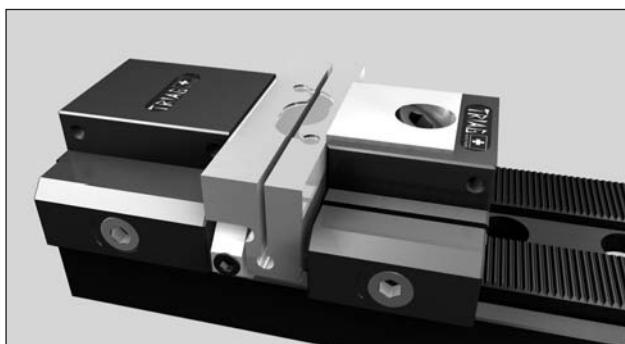
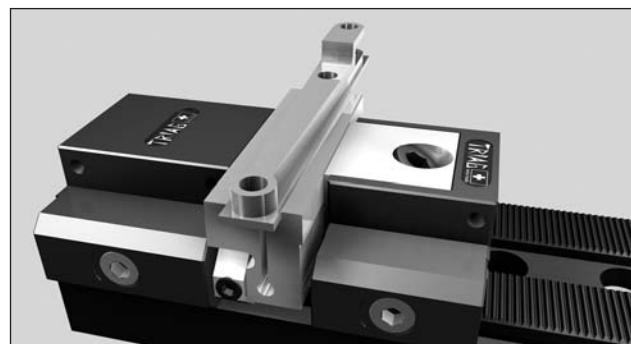
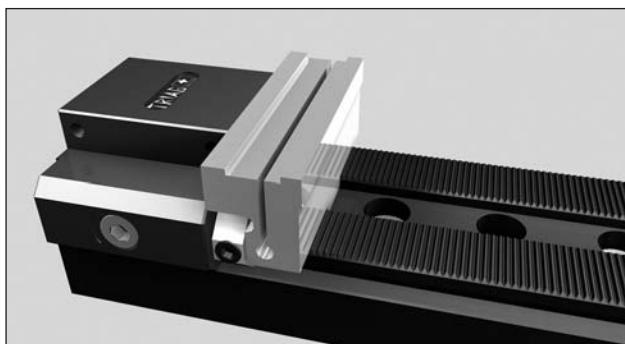
### Click-Flex



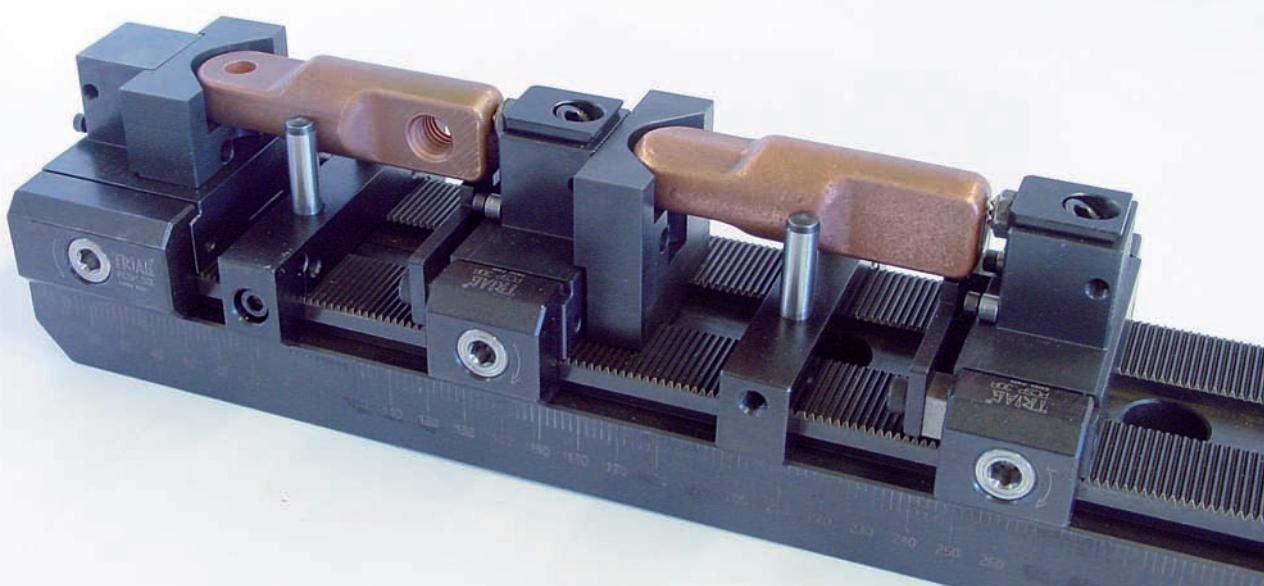
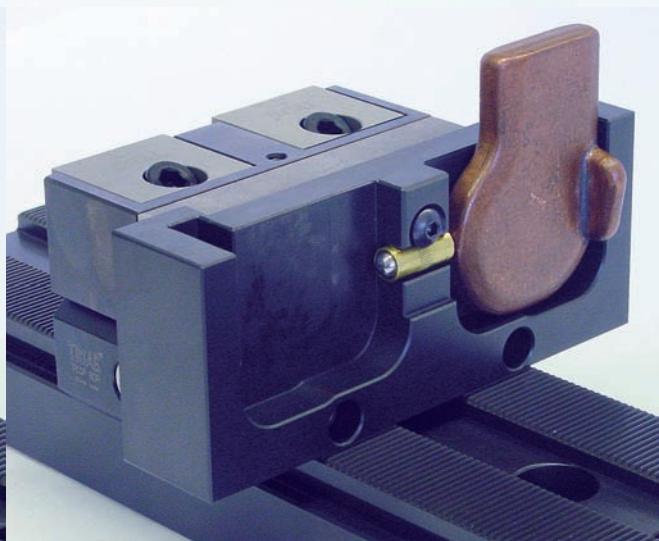
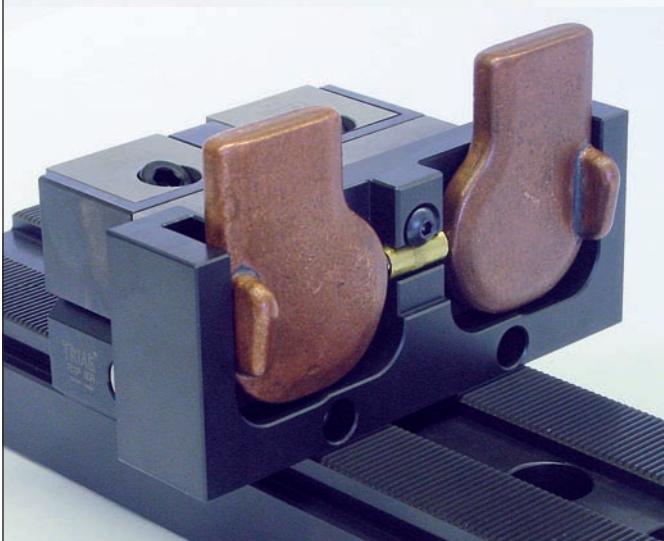
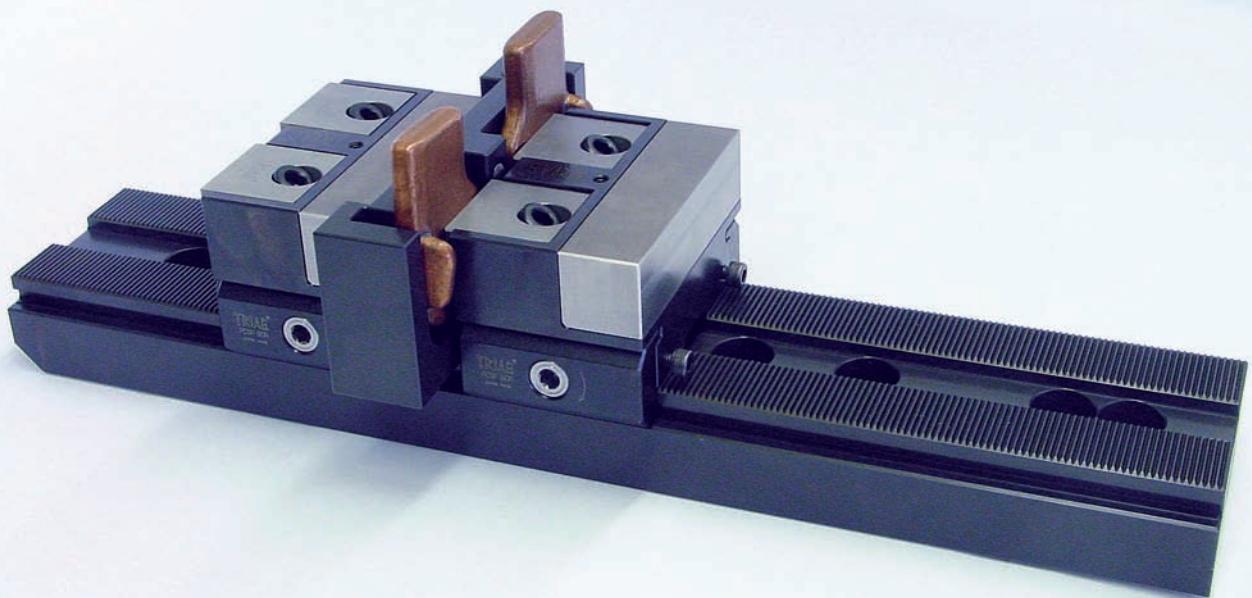
	PCFM 33-22	A	L1	L2	H
①	1x PCFM 33	94		33	34
②	1x PCFF 22	94	22		34

### Click-Fix

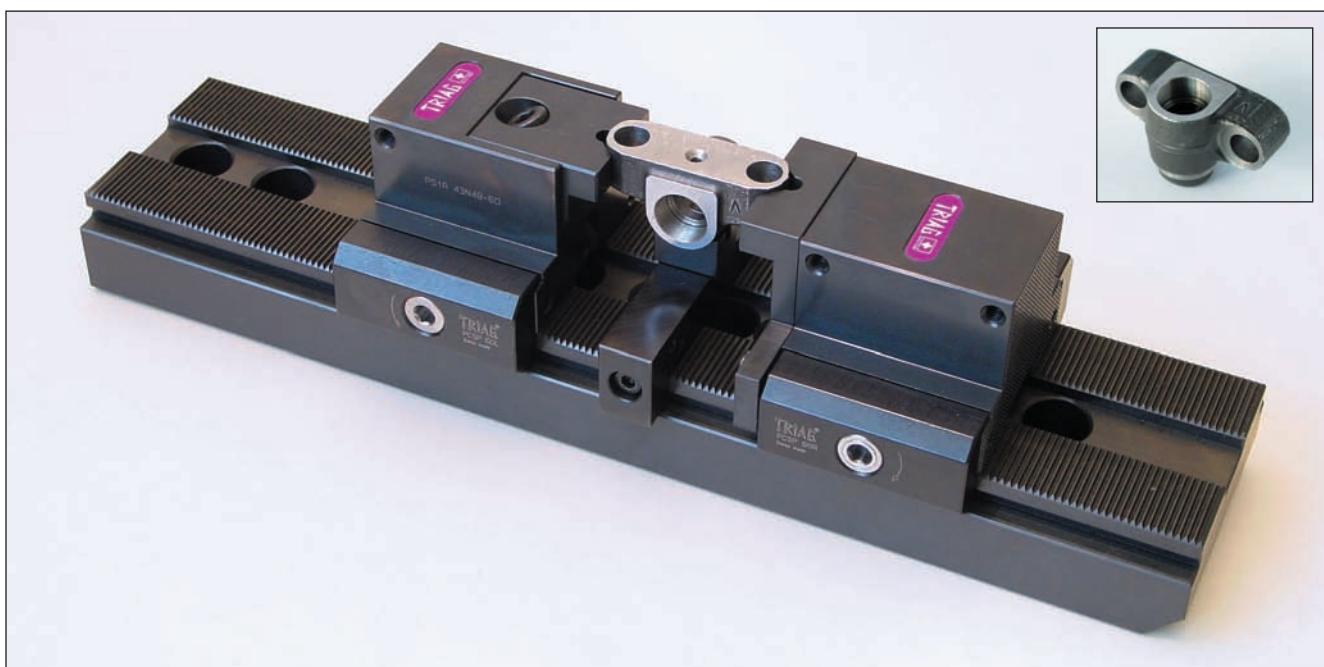
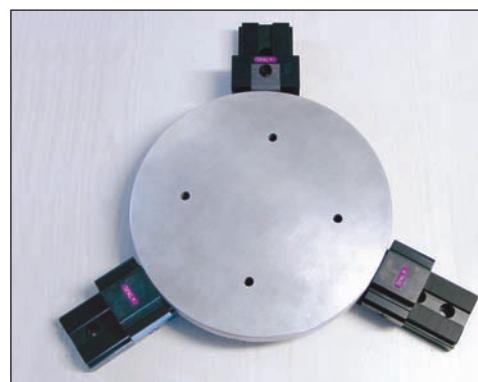
	PCFM 58-22	A	L1	L2	H
①	1x PCFM 58	94		58	34
②	1x PCFF 22	94	22		34

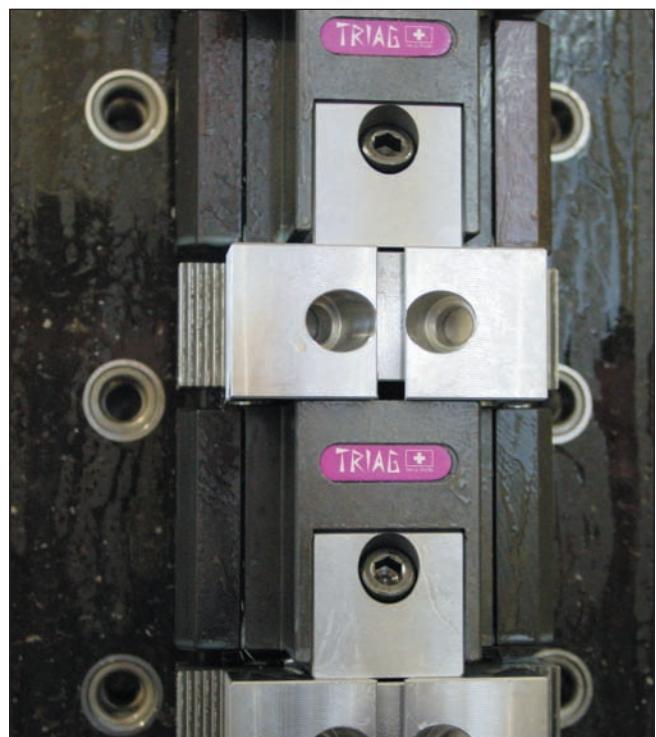
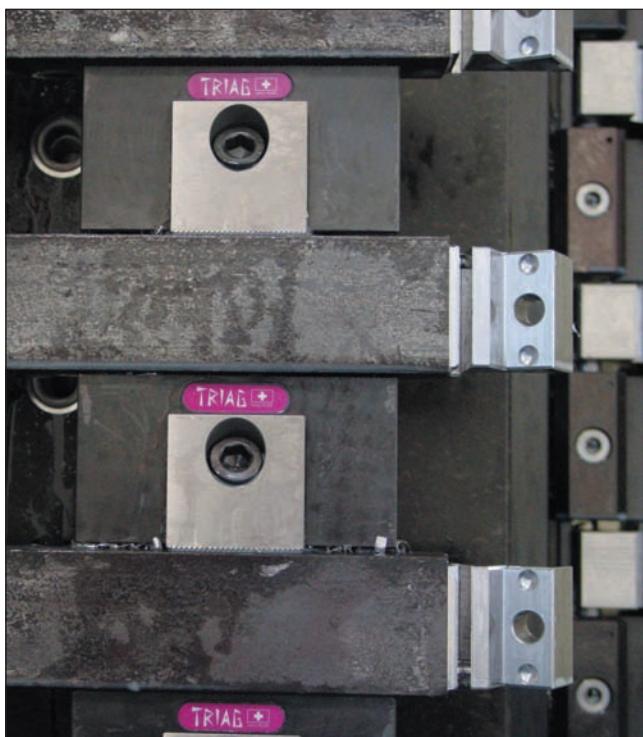
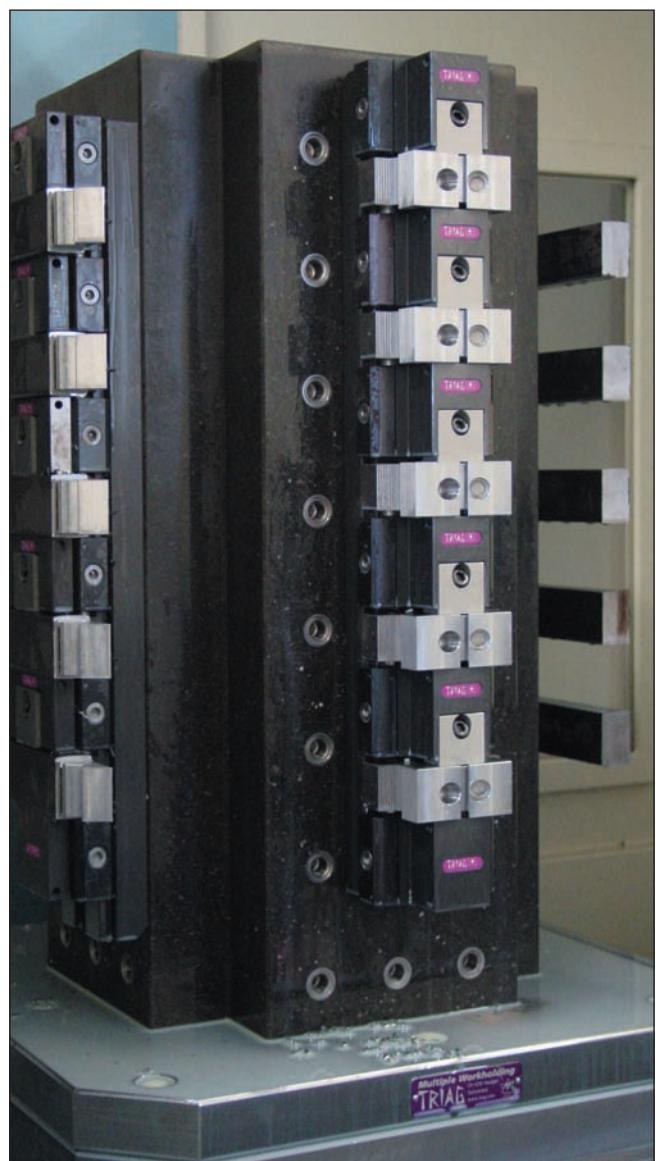


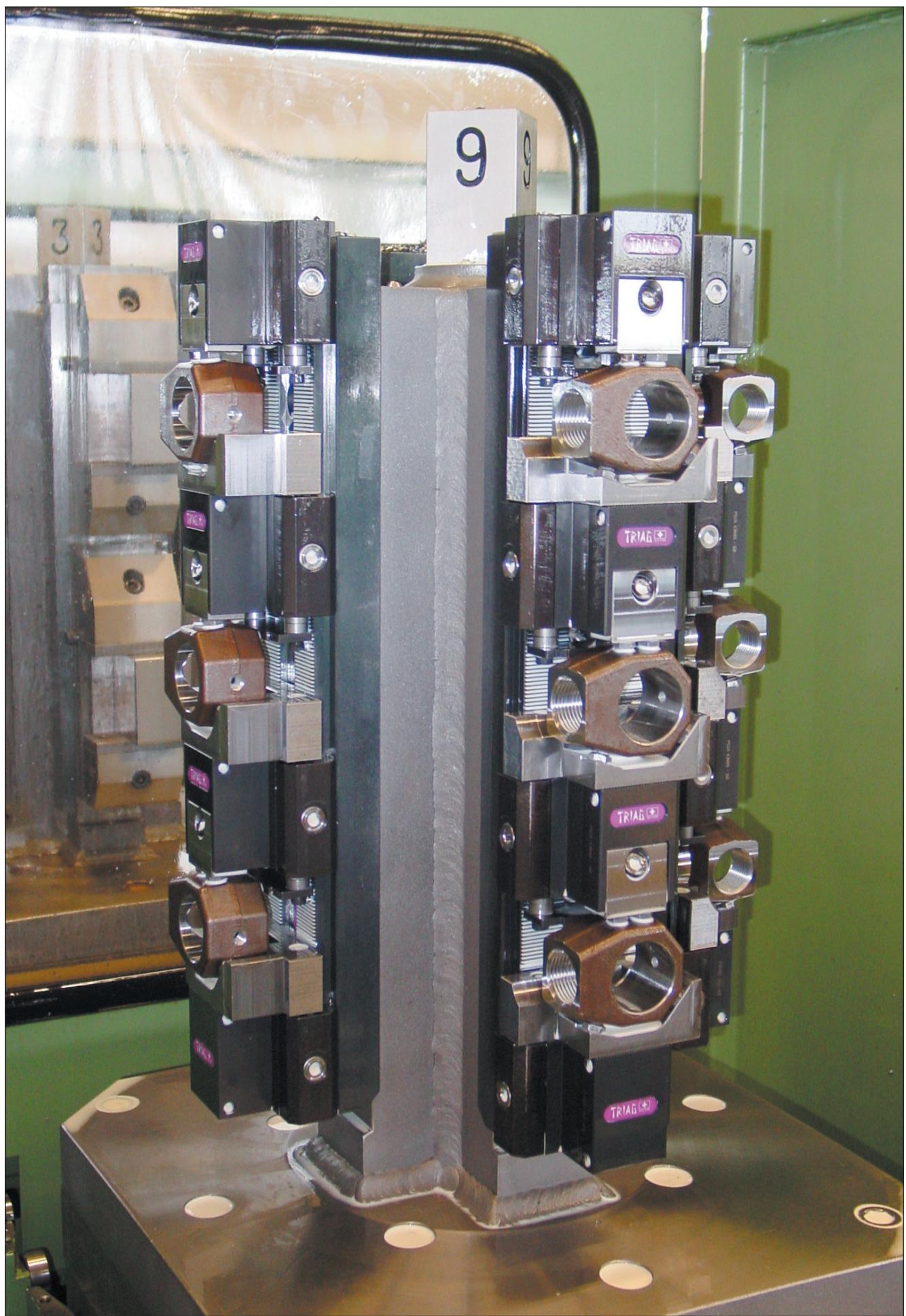
# powerCLAMP

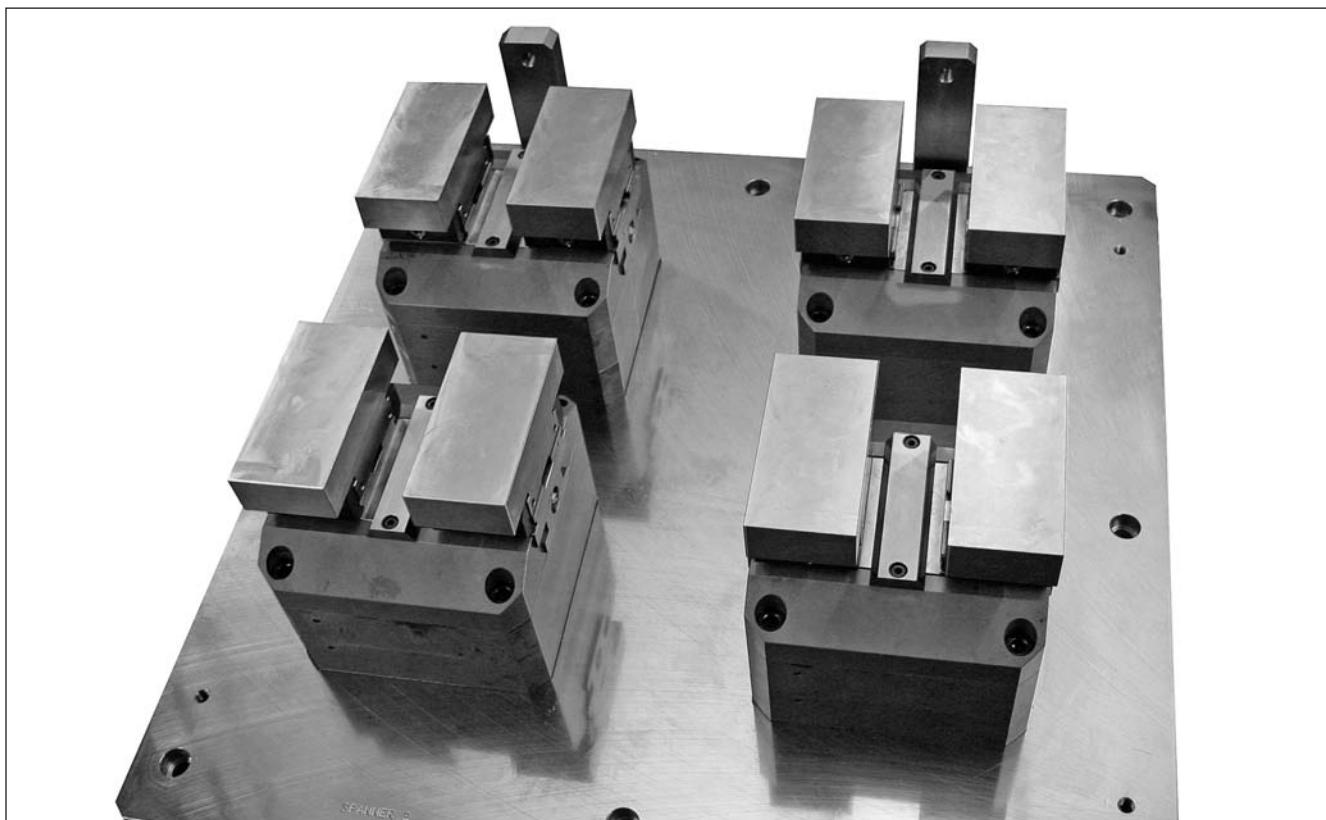


# powerCLAMP











## powerCLAMP

Das schnellverstellbare Mehrfachspannsystem! Die Positionierung erfolgt mittels einer Verzahnung auf der Schiene. Befestigung mit einer Schraube!

## powerCLAMP

*The quickest multiple workholding system for easy set up!*  
*Positioning by means of ground teeth on the base rail. Repositioning by opening one single screw!*

## powerCLAMP

Le système de serrage multiple le plus rapide à régler! Le positionnement du module s'effectue grâce à une denture rectifiée sur le rail de base. Le positionnement du module est garanti par une seule vis.



## compactCLAMP

Das flexible Mehrfachspannsystem! Die Positionierung erfolgt mittels Präzisionsbohrungen in Noniusanordnung. Die Spannelemente werden mit der Basis verstiftet und können daher nicht verschieben.

## compactCLAMP

*the flexible multiple workholding system! Positioning by bores arranged in vernier type layout. The workholding modules are pinned down to the base and thus can't move.*

## compactCLAMP

Le système se serrage multiple le plus flexible. Le positionnement s'effectue avec des alésages de précision disposés en ordre Nonius. Les modules de serrage sont fixés sur la base avec des goupilles et de ce fait ne peuvent se déplacer.



## microCLAMP

Kleinste Module für den Vorrichtungsbau. Sie haben eine grosse Spannkraft (bis 21'000N), der benötigte Abstand zwischen den Werkstücken ist im Optimalfall nur 15 mm.

## microCLAMP

*Smallest modules for dedicated fixtures. Having a high clamping force (up to 21'000N) the distance between workpieces is only 15mm in optimum set up.*

## microCLAMP

Le plus petit module de serrage pour la construction de gabarits. Les modules de serrage Micro Clamp ont une grande force de serrage (jusqu'à 21.000 N) la distance nécessaire entre les pièces à usiner est dans le cas optimal de 15 mm.



## tripoxyMINERAL

Spanntürme aus Mineralguss. Die Vibrationsdämpfung ist zehn mal besser als bei Grauguss. Das spezifische Gewicht ist hingegen kleiner als bei Aluminium. Erhältlich in vielen verschiedenen Formen.

## tripoxyMINERAL

*Tombstones made of composite concrete. Vibration damping effect is ten times better than with cast iron. Specific weight on the other hand is less than aluminum. Available in many different shapes.*

## tripoxyMINERAL

Les tourelles de serrage en fonte minérale. L'atténuation des vibrations est dix fois supérieure à la fonte grise. Le poids spécifique est plus petit que l'aluminium. Elles sont livrables en diverses formes.



## mivaCLAMP

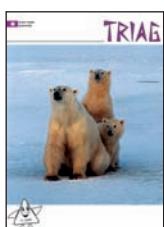
Vakuumspannsystem: Bestens geeignet für plattenförmige Werkstücke (auch nicht magnetische). Es können sowohl Druckstellen als auch Deformatinen an labilen Teilen vermieden werden.

## mivaCLAMP

*Workholding by vacuum: Suited for plateshaped workpieces (also for non magnetic). Pressure marks as well as deformations on soft parts can be avoided.*

## mivaCLAMP

La meilleure solution pour la fixation de pièces plates (aussi non magnétique). Pas de marques ou blessures sur des matières tendres et pas de déformation avec des pièces instables.



## triGEL

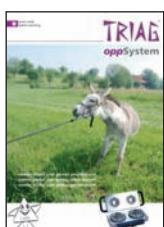
Unser Gefrierspannsystem. Sehr gut geeignet für ungewöhnliche Teile. Das Haftvermögen ist sehr gross, wobei die Gefrier- und Auftauzeiten sehr gering sind.

## triGEL

*Workholding by freezing: Well suited for strangely shaped parts. Holding effects are very strong whereas freezing and defrosting times are very short.*

## triGEL

Notre système de fixation par gel. Recommandé pour des pièces différentes. La force de fixation est très grande et le temps de prise et de dégel est très court.



## oppSystem

Unser Nullpunkt-Palettiersystem ermöglicht ein genaues Positionieren von Mehrfachspannsystemen, Schraubstöcken und Vorrichtungen auf Maschinentischen oder Spanntürmen.

## oppSystem

*Our zero-point palletting system allows exact positioning of multiple workholding systems, vices and dedicated fixtures on machining tables or tombstones.*

## oppSystem

Notre système de palettisation point zéro garanti un positionnement précis du système de serrage multiple, des étaux, gabarits, constructions spéciales sur la table de la machine ou sur la tourelle de fixation.



## SaxesCLAMP

Dieses modulare Spannsystem wurde speziell für 5-Achsen-Maschinen entwickelt. Es ermöglicht ein freies Zutreten der Maschinenspindel zum Werkstück. Sowohl kleine wie grosse Werkstücke können damit problemlos gespannt werden.

## SaxesCLAMP

*This modular workholding system was especially developed for 5-axes machines. It allows the machine spindle to access freely to the workpiece. Both small and large workpieces can be clamped without difficulties.*

## SaxesCLAMP

Ce système de serrage modulaire a été développé spécialement pour les machines à 5 axes. Ce système autorise un libre accès avec la broche de la machine vers la pièce à usiner. Ce système garanti le serrage de petites et de grandes pièces à usiner.