

Seitenspanner

Side Clamps



Referenz-Nr. Order No.		c	L	b	n	k	k1	k2	L1	d	d1	d2	sw	Spannkraft clamping force kgf	Drehmoment Allowable Screw Torque (N-m)	
2030-14	14	5	90	23	47	47	26	26	65	M12	M12	M12	10	2000	35	3490
2030-16	16															3670
2030-18	18															5000
2030-20	20															5355
2030-22	22															5720
2030-24	24	6190														
2030-28	28	6650														

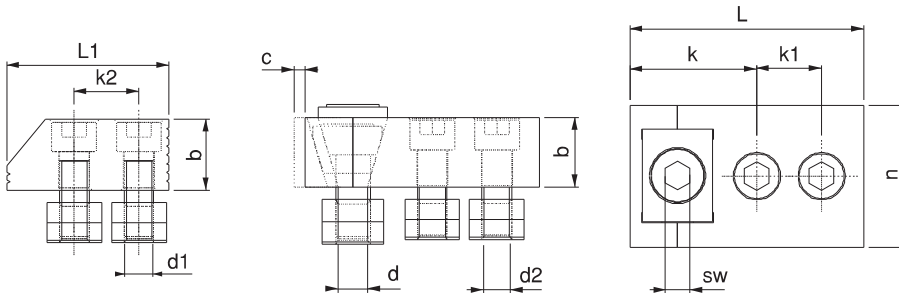


2030

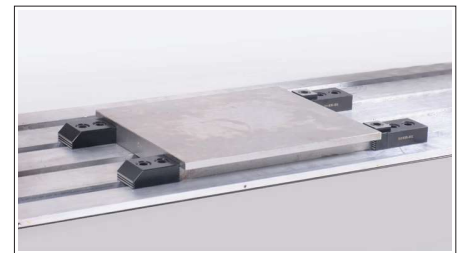
- Wenn das Produkt das Werkstück in spannt, führt dies nicht zu einer Veränderung der ursprünglichen Form des Werkstücks.
- Gehärtet
- Schwarz beschichtet
- Set in Plastikbox

2030

- When the product clamps the work piece in the direction of rest, it does not cause alteration in the genuine structure of the piece.
- Hardened
- Black coating
- Set in the plastic box



Set-Inhalt / The set consists of						
Teil Part						
Menge Quantity	2	2	10	10	1	1



Abgeschrägter Seitenspannbacke

Graded side Wrench Body

Referenz-Nr. Order No.	
2035-14	14
2035-16	16
2035-18	18
2035-20	20
2035-22	22
2035-24	24
2035-28	28



Anschlag für abgeschrägter Seitenspannbacke

Graded side Wrench Pluggable

Referenz-Nr. Order No.	
2040-14	14
2040-16	16
2040-18	18
2040-20	20
2040-22	22
2040-24	24
2040-28	28

Die Winkelauflage ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.
 Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the straight side is used with thick pieces.



Referenz-Nr. Order No.		c	L	L1	L2	L3	b	b1 ±0.01	n	k	k1	k2	d	d1	d2	sw	Spannkraft clamping force Kgf	Drehmoment Allowable Screw Torque (N-m)	
2050-14	14	5	110	90	85	65	41	18	47	47	26	26	M12	M12	M12	6	1000	15	5920
2050-16	16																		6210
2050-18	18																		8090
2050-20	20																		8440
2050-22	22																		8825
2050-24	24																		10080
2050-28	28	10750																	

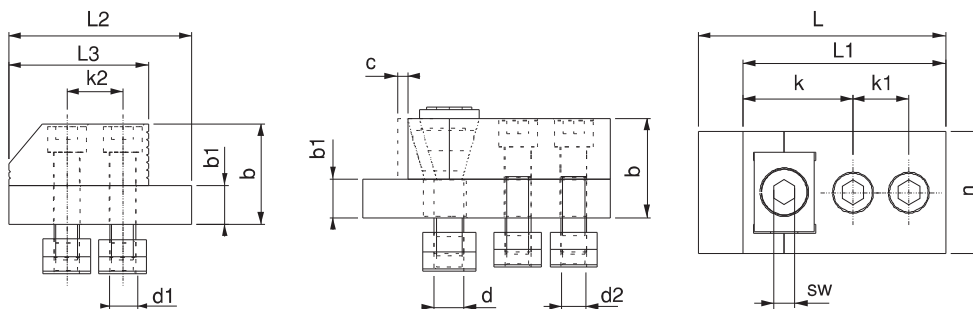


2050

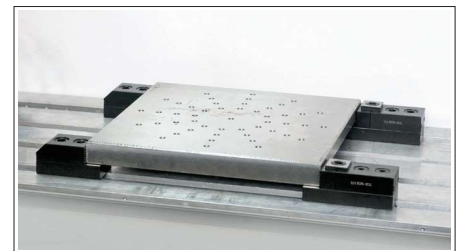
- Wenn das Produkt das Werkstück in spannt, führt dies nicht zu einer Veränderung der ursprünglichen Form des Werkstücks. Aufgrund der Parallelität kann der Bohrprozess auf das bearbeitete Teil angewendet werden.
- Gehärtet
- Schwarz beschichtet
- Set in Plastikbox

2050

- When the product clamps the work piece in the direction of rest, it does not cause alteration in the genuine structure of the piece. Because of being with parallel, hole process can be applied on the machined piece.
- Hardened
- Black coating
- Set is in the plastic box



Teil Part						
Menge Quantity	2	2	10	10	2	1



Abgeschrägter Seitenspannbacke (Parallel)

Graded side Wrench (Parallel) Body

Referenz-Nr. Order No.	
2055-14	14
2055-16	16
2055-18	18
2055-20	20
2055-22	22
2055-24	24
2055-28	28



Anschlag für Seitenspannbacke (Parallel)

Graded side Wrench (Parallel) Pluggable

Referenz-Nr. Order No.	
2060-14	14
2060-16	16
2060-18	18
2060-20	20
2060-22	22
2060-24	24
2060-28	28

Die Winkelaußeße ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.
Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the Straight side is used with thick pieces.



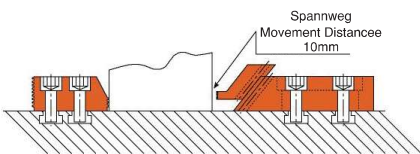
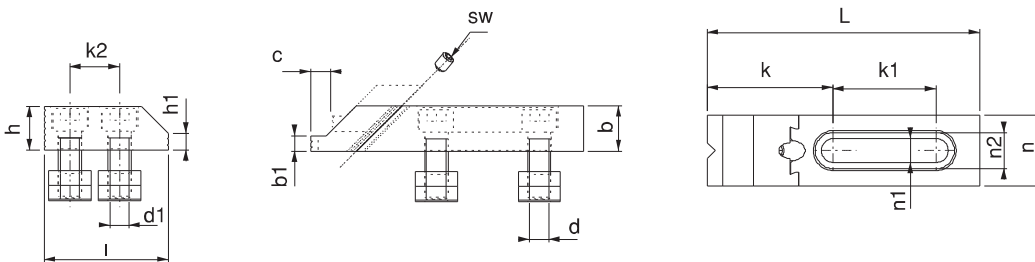
Referenz-Nr. Order No.		c	L	b	b1	n	n1	n2	k	k1	k2	sw	i	h	h1	d	d1	Spannkraft clamping force Kgf	Drehmoment Allowable Screw Torque (N-m)	
2070-14	14	10	142	24	8	37	12.5	18.5	65	54	26	6	65	23	10	M12	M12	850	15	3575
2070-16	16																			3710
2070-18	18	14	145	28	10	48	12.5	18.5	74	56	26	8	65	28	11	M12	M12	1000	35	5215
2070-20	20																			5400
2070-22	22																			5610

2070

- Durch die Gleitstruktur der beweglichen Backe spannt sie das Werkstück in Richtung Auflage und Platte. Die breite Bewegung der Backe bietet Komfort beim Spannen und Entspannen des Werkstücks.
- geeignet für T-Nut DIN 650
- Gehärtete Backen
- Schwarz beschichtet
- Set in Plastikbox

2070

- Because of the sliding structure of the moving jaw it clamps the work piece in the direction of resting and plate. Wide movement of the jaw provides convenience in coupling and dismantling of the workpiece.
- It is in compliance with DIN 650 T-Slot
- Hardness of jaw: Hardened
- Black coating
- Set is in the plastic box



Die Winkelaufstellfläche ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.

Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the Straight side is used with thick pieces.

Set-Inhalt / The set consists of						
Teil Part						
Menge Quantity	2	2	8	8	2	1



Gleitender Seitenspannbacke

Sliding Side Wrench Body



Referenz-Nr. Order No.	
2075-14	14
2075-16	16
2075-18	18
2075-20	20
2075-22	22
2075-24	24
2075-28	28

Anschlag für gleitender Seitenspannbacke

Sliding Side Wrench Pluggable

Referenz-Nr. Order No.	
2040-14	14
2040-16	16
2040-18	18
2040-20	20
2040-22	22
2040-24	24
2040-28	28



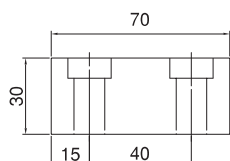
Referenz-Nr. Order No.		Spannkraft Clamping Force	
2070-MBS701214	14	2500	3.14
2070-MBS701216	16	2500	3.14
2070-MBS701218	18	2500	3.14
2070-MBS701220	20	2500	3.14

2070

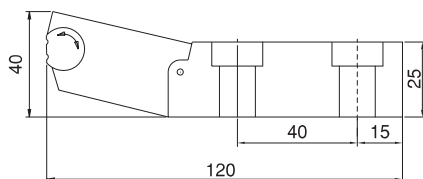
- Durch die bewegliche Konstruktion passt es sich auch den unebenen Flächen an und sorgt für sicheres Einspannen.

2070

- With its articulated design, it makes safe bonding even on uneven surfaces by taking the existing surface shape.



Breite / Width 40 mm.



Breite/ Width 40 mm.



Referenz-Nr. Order No.		
2070-MS701114	14	0.87
2070-MS701116	16	0.87
2070-MS701118	18	0.87
2070-MS701120	20	0.87

2070

- Durch die bewegliche Konstruktion passt es sich auch den unebenen Flächen an und sorgt für sicheres Einspannen.

2070

- With its articulated design, it makes safe bonding even on uneven surfaces by taking the existing surface shape.

Seitenspannbacken-Anschlag

Side Press Body



Referenz-Nr. Order No.		
2070-MD702114	14	0.65
2070-MD702116	16	0.65
2070-MD702118	18	0.65
2070-MD702120	20	0.65

2070

Anschlag für Seitenspannbacke

Side Press Stopper



MIKSAN® ist eine ER-EL Marke

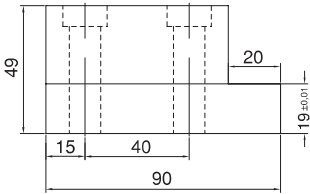
Referenz-Nr. Order No.		Spannkraft Clamping Force	
2070-MBS801114	14	2500	6.15
2070-MBS801116	16	2500	6.15
2070-MBS801118	18	2500	6.15
2070-MBS801120	20	2500	6.15

2070

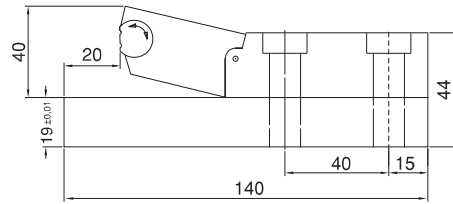
- Mafsallı tasarımıyla düz olmayan yüzeylerde dahi mevcut yüzey şeklini alarak emniyetli bağlama yapar.

2070

- With its articulated design, it makes safe bonding even on uneven surfaces by taking the existing surface shape.



Breite / Width 40 mm.



Breite / Width 40 mm.



Seitenspannbacken-Anschlag

Side Press Body

Referenz-Nr. Order No.		
2070-MS801214	14	1.86
2070-MS801216	16	1.86
2070-MS801218	18	1.86
2070-MS801220	20	1.86

2070

- Mafsallı tasarımıyla düz olmayan yüzeylerde dahi mevcut yüzey şeklini alarak emniyetli bağlama yapar.

2070

- With its articulated design, it makes safe bonding even on uneven surfaces by taking the existing surface shape.




Anschlag für Seitenspannbacke

Side Press Stopper

Referenz-Nr. Order No.		
2070-MD802214	14	1.18
2070-MD802216	16	1.18
2070-MD802218	18	1.18
2070-MD802220	20	1.18

2070



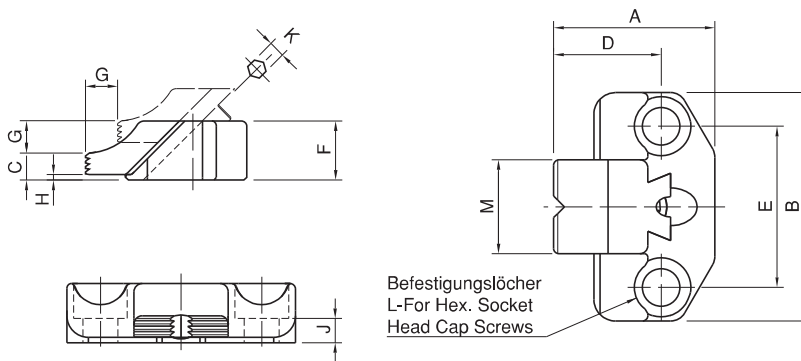
Referenz-Nr. Order No.	A	B	C	D	E	F	G	H	J	K	L	M	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	 (g)
2072-08016	39.5	65	7.5	25	45	16	7	1.5	7	4	M8	25	400	8	160
2072-12022	60	85	10	40	60	22	12	2	9	6	M12	35	900	26	450
2072-16030	77	100	14	50	70	30	14	2	13	8	M16	40	1700	60	900

2072


• Schwarz beschichtet

2072

• Black Coating



Seitenspannbacke

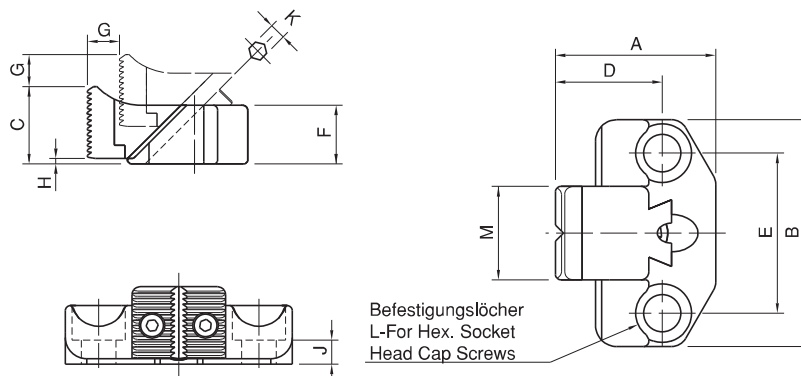
Referenz-Nr. Order No.	A	B	C	D	E	F	G	H	J	K	L	M	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	 (g)
2073-08016	39.5	65	19.5	25	45	16	7	1.5	7	4	M8	25	400	8	180
2073-12022	60	85	29	40	60	22	12	2	9	6	M12	35	900	26	500
2073-16030	77	100	38	50	70	30	14	2	13	8	M16	40	1700	60	1010

2073

• Gehärtete Backen
• Schwarz beschichtet

2073

• Hardness of jaw: Hardened
• Black Coating



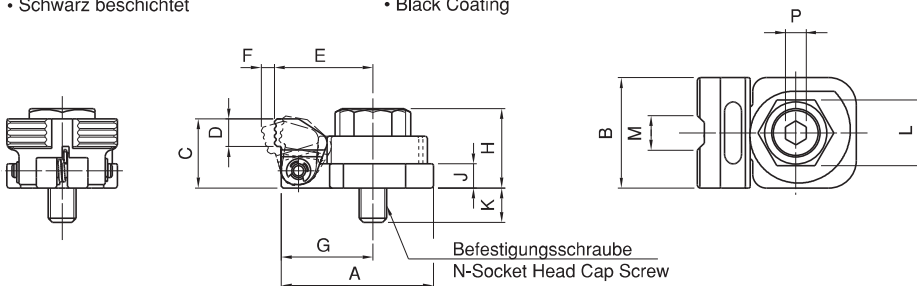
Referenz-Nr. / Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N
2077-08001	44	32	20	8	28,5	4	26,5	23	7	15	19	10	M8x1,25
2077-10001	54	40	25	10	35	5	33	29	9	16	24	12	M10x1,5
2077-12001	62	46	30	12	39,5	5,5	37,5	35	11	17	27	14	M12x1,75

Referenz-Nr. / Order No.	P	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	 (g)
2077-08001	6	350	45	160
2077-10001	8	550	55	310
2077-12001	10	700	70	490



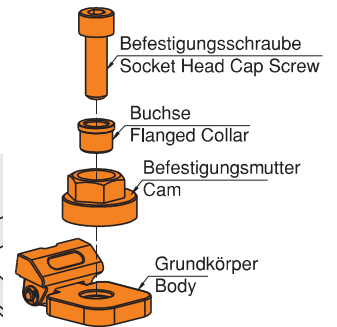
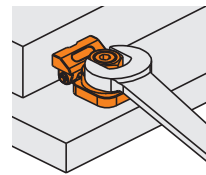
2077
• Schwarz beschichtet

2077
• Black Coating



Verwendung / How To Use

- Zuerst die Seitenspannbacke platzieren und dann mit einem Schraubenschlüssel spannen.
- Secure the body and the flanged collar with a socket head cap screw, and then turn the the cam with a wrench to clamp a workpiece.



Seitenspannbacke

Side Clamps

Referenz-Nr. / Order No.		A	H	L	S	Spannkraft Clamping Force Kgf	 (g)
2080-014	14	61	57	108	5	1500	1850
2080-016	16	61	57	108	5	1500	1850
2080-018	18	61	57	108	5	1500	1850
2080-020	20	61	57	108	5	1500	1850
2080-022	22	61	57	108	5	1500	1850
2080-024	24	61	57	108	5	1500	1850
2080-028	28	61	57	108	5	1500	1850



2080
• Spannen horizontal und vertikal möglich

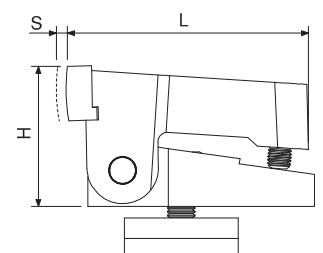
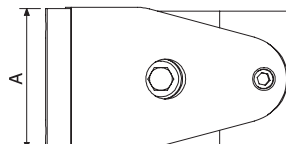
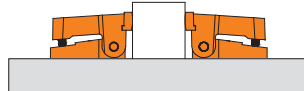
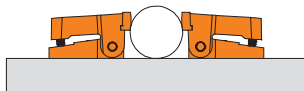
2080
• Vertical down thrust and horizontal clamping force available simultaneously with the operation of leverage screw

Körper

- Statische Lackierung
- Backe**
- Gehärtet

Body

- Statical Painting
- Jaw**
- Hardened



Referenz-Nr. Order No.		c	b	k1	k2	k3	k4	L	h	h1	d	d1	Spannkraft clamping force kgf	 (g)
2090-14	14	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	7925
2090-16	16													8490
2090-18	18													4610
2090-20	20													8850
2090-22	22													9030
2090-24	24													9490
2090-28	28													9800



2090

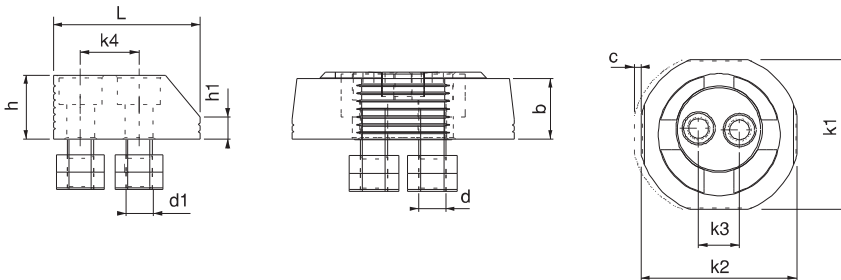
• Ürünün eksantrik çalışma sistemi saat yönünde sıkıldığında iş parçasını dayama ve pleyt yönüne özel dizayn anahtarları ile yüksek kuvvette sıkar.

1. Spannweite 3,5 mm
 2. Werkstückdistanz bis 1,5-2 mm
 3. Befestigung mit 10 mm Allen und Inbusschraube
 4. Befestigung des Werkstücks durch Drehen im Uhrzeigersinn
- geeignet für T-Nut DIN 650
 - Mutter: gehärtet
 - Schwarz beschichtet
 - Set in Plastikbox

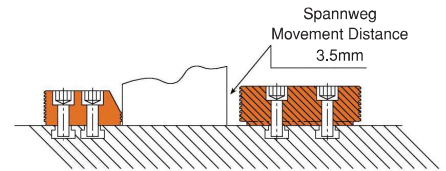
2090

• When the eccentric working system of the product is tightened clockwise, it clamps the work piece with high force in the direction of resting and plate with it's special designed wrench.

- 1-Eccentric movement of Armed Side Clamp 3.5 mm.
 - 2-It brings the product 1.5 - 2mm close to the work piece
 - 3-imbus bolts are fixed with 10mm allen.
 - 4-Fixing of the work piece is implemented by turning the product clockwise with the wrench.
- It is in compliance with DIN 650 T-Slot
 - Hardness of nut: Hardened
 - Black coating
 - Set is in the plastic box



Set-Inhalt / The set consists of							
Teil Part							
Menge Quantity	2	2	1	8	8	1	1



Die Winkelaufgeläche ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.
Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the Straight side is used with thick pieces.

Hebel-Seitenspannbacke

Armed Side Press Body



Referenz-Nr. Order No.	
2090-114	14
2090-116	16
2090-118	18
2090-120	20
2090-122	22
2090-124	24
2090-128	28

Anschlag für Hebel-Seitenspannbacke

Armed Side Press Pluggable



Referenz-Nr. Order No.	
2040-14	14
2040-16	16
2040-18	18
2040-20	20
2040-22	22
2040-24	24
2040-28	28

Die Winkelaufgeläche ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.
Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the Straight side is used with thick pieces.

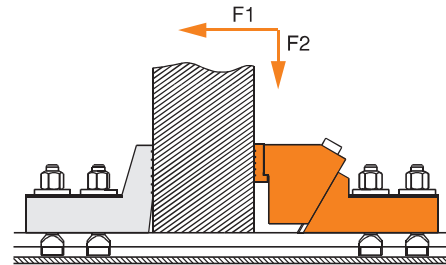
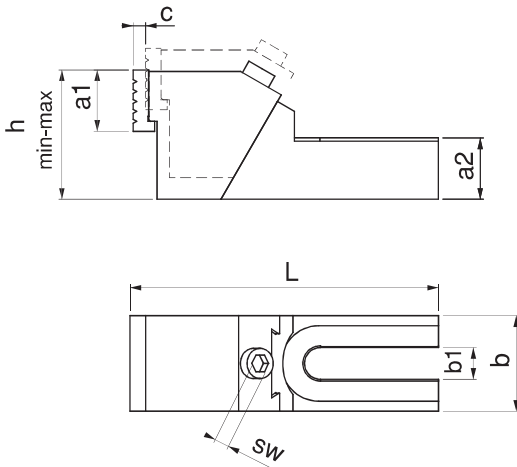
Referenz-Nr Order No.		a1	a2	b	b1	c	h min-max	L	sw	F1 Spannkraft clamping force kgf	F2 Spannkraft clamping force kgf	 (kg)
2095-571	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.68
2095-761	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	7.66

2095

- Er spannt die Werkstücke in Spannauflagen- und Plattenrichtung, er ist speziell für hohe Werkstücke ausgelegt.
- Gehärtete Backen
- Schwarz beschichtet

2095

- It clamps the workpieces in clamp rest direction and plate direction, it is designed especially for high workpieces.
- Hardness of jaw: Hardened
- Black coating



Stabilspannbacken

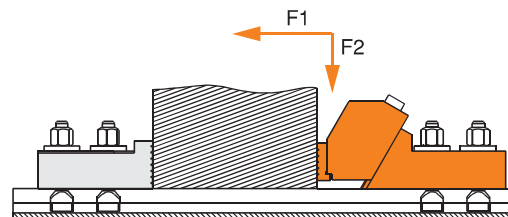
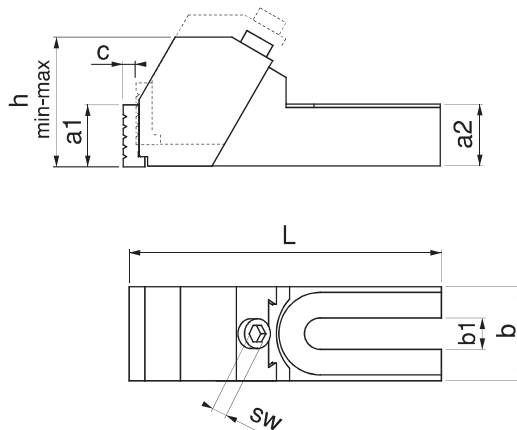
Referenz-Nr Order No.		a1	a2	b	b1	c	h min-max	L	sw	F1 Spannkraft clamping force kgf	F2 Spannkraft clamping force kgf	 (kg)
2095-572	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.6
2095-762	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	6.7

2095

- Er spannt die Werkstücke in Spannauflagen- und Plattenrichtung, er ist zum Spannen großer Platten ausgelegt.
- Gehärtete Backen
- Schwarz beschichtet

2095

- It clamps the workpieces in clamp rest direction and plate direction, it is designed for clamping big plates.
- Hardness of jaw: Hardened
- Black coated



Referenz-Nr. Order No.		a2	b	b1	h	L	 (kg)
2098-571	14-16-18	37	57	19	85	124	2.025
2098-761	20-22-24-28	45	76	26	105	154	4.185

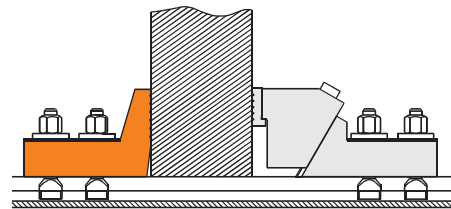
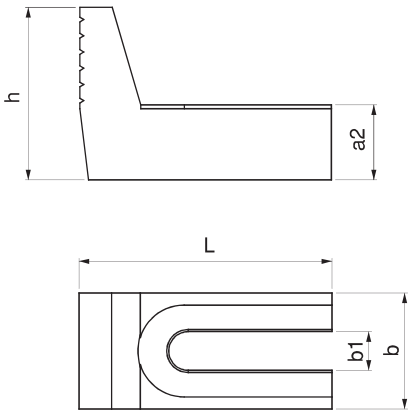


2098

- passend zu 2095-571 und 2095-761
- Schwarz beschichtet

2098

- It is designed as clamp rest for clamps 2095-571 and 761.
- Black coating



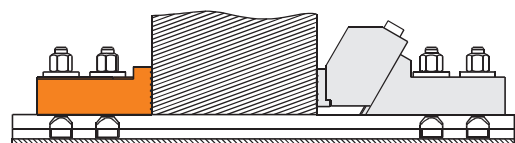
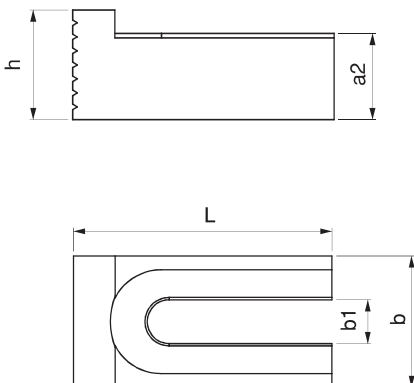
Referenz-Nr. Order No.		a2	b	b1	h	L	 (kg)
2098-572	14-16-18	37	57	19	47	112	2.800
2098-762	20-22-24-28	45	76	26	49	140	4.185



2098

- passend zu 2095-572 und 2095-762
- Schwarz beschichtet

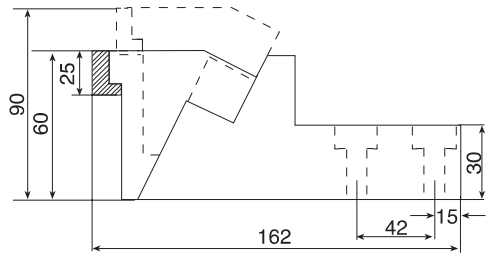
2098

- It is designed as clamp rest for clamps 2095-572 and 762.
- Black coating





Referenz-Nr. Order No.		Spannkraft Clamping Force	
2105-MYB404114	14	3000	2.80
2105-MYB404116	16	3000	2.80
2105-MYB404118	18	3000	2.80
2105-MYB404120	20	3000	2.80
2105-MYB404122	22	3000	2.80
2105-MYB404124	24	3000	2.80

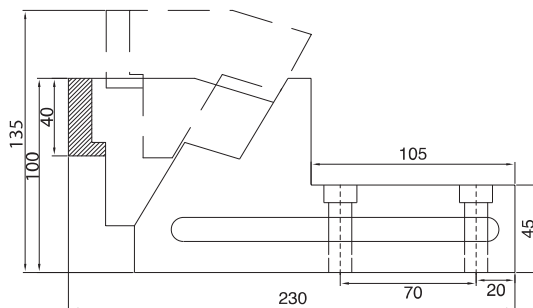
2105





Breite / Width 54 mm.

Referenz-Nr. Order No.		Spannkraft Clamping Force	
2105-MYB901120	20	3000	6.85
2105-MYB901122	22	3000	6.85
2105-MYB901124	24	3000	6.85
2105-MYB901128	28	3000	6.85

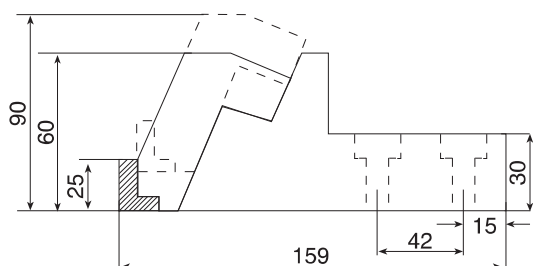
2105



Breite / Width 68 mm.

Referenz-Nr. Order No.		Spannkraft Clamping Force	
2105-MYB303114	14	3000	2.80
2105-MYB303116	16	3000	2.80
2105-MYB303118	18	3000	2.80
2105-MYB303120	20	3000	2.80
2105-MYB303122	22	3000	2.80
2105-MYB303124	24	3000	2.80

2105



Breite / Width 54 mm.



Stabilspannbacken

Block Side Press



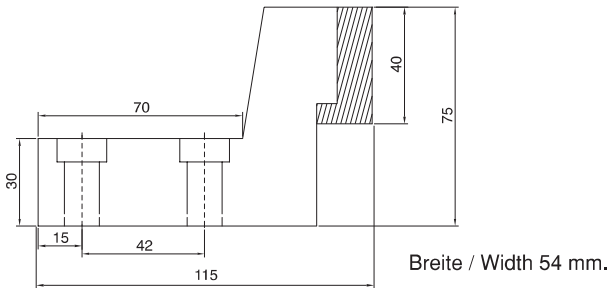
Stabilspannbacken

Block Side Press



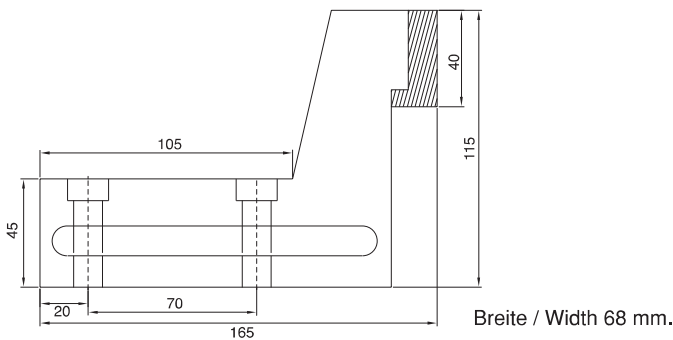
Referenz-Nr. Order No.	a	(kg)
2105-MD404214	14	1.86
2105-MD404216	16	1.86
2105-MD404218	18	1.86
2105-MD404220	20	1.86
2105-MD404222	22	1.86
2105-MD404224	24	1.86

2105



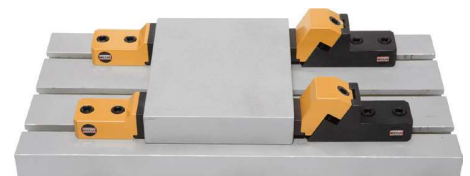
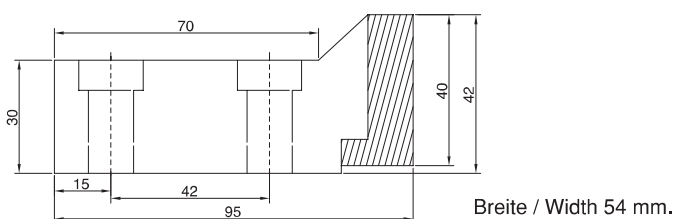
Referenz-Nr. Order No.	a	(kg)
2105-MD902120	20	4.50
2105-MD902122	22	4.50
2105-MD902124	24	4.50
2105-MD902128	28	4.50

2105

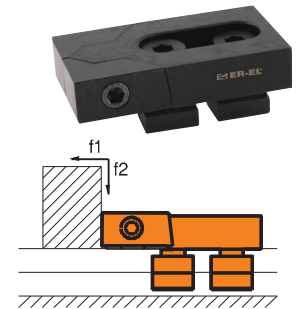


Referenz-Nr. Order No.	a	(kg)
2105-MD303214	14	1.17
2105-MD303216	16	1.17
2105-MD303218	18	1.17
2105-MD303220	20	1.17
2105-MD303222	22	1.17
2105-MD303224	24	1.17

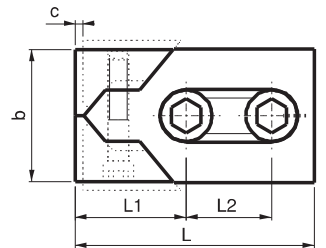
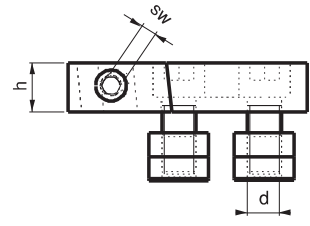
2105



Referenz-Nr. Order No.		c	h	b	L	L1	L2	sw	d	Spannkraft Clamping Force		
										f1 Kgf	f2 Kgf	
2110-12	12	3	20	40	80	39	26	6	M10	1600	60	415
2110-14	14									2200	90	425
2110-16	16									3200	120	785
2110-18	18	4	25	50	100	46	34	8	M14	3600	140	810
2110-20	20									3600	140	850
2110-22	22									3600	140	2275
2110-24	24	5	28.5	78	140	65	50	10	M20	3600	140	2360
2110-28	28									4000	160	2500



- 2110**
- Das Produkt spannt das Werkstück in Spannauflagen- und Plattenrichtung. Durch die Struktur der Klemme wird eine kraftvolle Spannung erreicht.
 - Gehärtet
 - Schwarz beschichtet



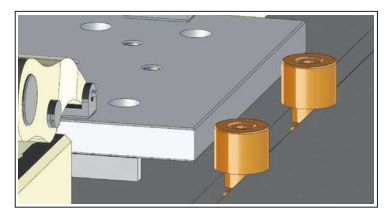
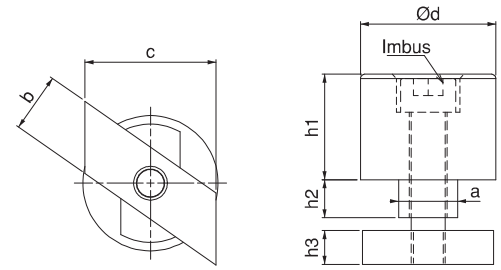
- 2110**
- Product clamps the work piece in the direction of rest and plate. It achieves powerful clamping because of the clamp's structure.
 - Hardened
 - Black coating

Referenz-Nr. Order No.		a h6	b -0.6	c DIN 650	d ±0.01	h1 ±0.01	h1 ±0.02	h2	h3	ISO 4762 		(g)
2120-1450	14	0-0.011	14	24	32	-	50	9	8	M8x60	355	
2120-1825	18	0-0.011	18	30	40	25	-	15	10	M10x40	360	
2120-1850	18	0-0.011	18	30	40	-	50	15	10	M10x65	600	
2120-2225	22	0-0.013	22	38	40	25	-	15	14	M10x50	410	
2120-2250	22	0-0.013	22	38	40	-	50	15	14	M10x75	650	

Anschlagstück
Cylinder Pluggable



- 2120**
- Gehärtet
 - Schwarz beschichtet



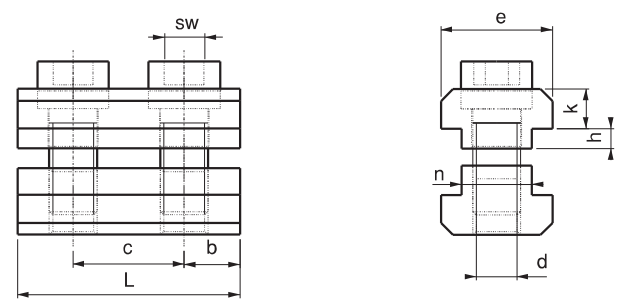
- 2120**
- Hardened
 - Black coating

Referenz-Nr. Order No.		n	e	c	d	b	h	k	L	sw		(g)
2130-14	14	13.7	22	22	M8	11	4	8	44	6	180	
2130-16	16	15.7	25	25	M12	12.5	5	9	50	10	270	
2130-18	18	17.7	28	28	M12	14	5	10	56	10	355	
2130-20	20	19.7	32	32	M16	16	5	12	64	14	570	
2130-22	22	21.7	35	35	M16	17.5	6	14	70	14	770	
2130-24	24	23.7	40	40	M20	20	6	16	80	17	1180	
2130-28	28	27.7	44	44	M20	22	6	18	88	17	1560	


Nutenschlag
Clamp Rest



- 2130**
- Verwendung für Referenzen in der Länge/Breite
 - Gehärtet
 - Schwarz beschichtet



- 2130**
- Clamp Rest is used for reference taking, longitudinal and cross-wise.
 - Hardened
 - Black coating

Referenz-Nr. Order No.	Verwendung ohne Anschlag In Use Without Slip Stopper		Verwendung mit Anschlag In Use With Slip Stopper		 (kg)
	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	
2135-1260	2900	38	6900	90	2.4

inkl. Schraub M12 und 4 Beilagscheiben
4 washers for M12 bolts are included.

2135

Grundkörper

- Material: Stahlguss
- Schwarz beschichtet

Backe

- Gehärtet
- Schwarz beschichtet

Schraube

- Gehärtet: Induktion
- Schwarz beschichtet

2135

Body

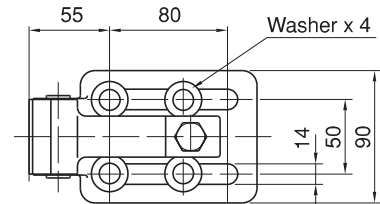
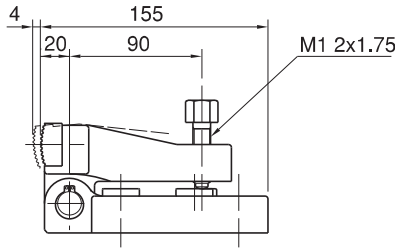
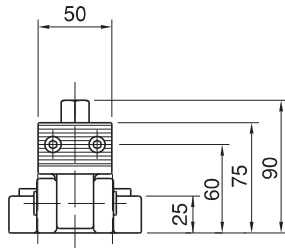
- Material: Cast Iron
- Black coating

Jaw

- Hardened
- Black coating


Bolt

- Hardness: Induction
- Black coating



Seitenspannbacke

Side Clamps

Referenz-Nr. Order No.	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	 (kg)
2137-16060	5800	150	2.9

inkl. 2 Beilagscheiben für Schrauben M12 und M16
2 spherical washers for both M12 and M16 screws are included.

2137

Grundkörper

- Material: Stahlguss
- Schwarz beschichtet

Backe

- Gehärtet
- Schwarz beschichtet

Schraube

- Gehärtet: Induktion
- Schwarz beschichtet

2137

Body

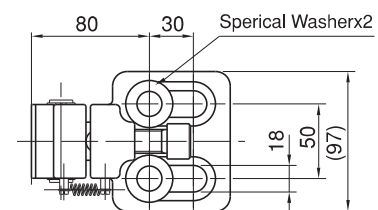
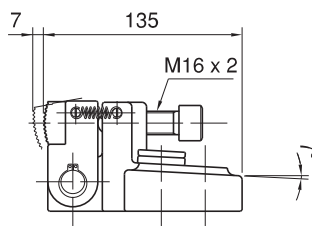
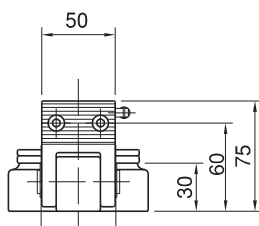
- Material: Cast Iron
- Black coating

Jaw

- Hardened
- Black coating


Bolt

- Hardness: Induction
- Black coating



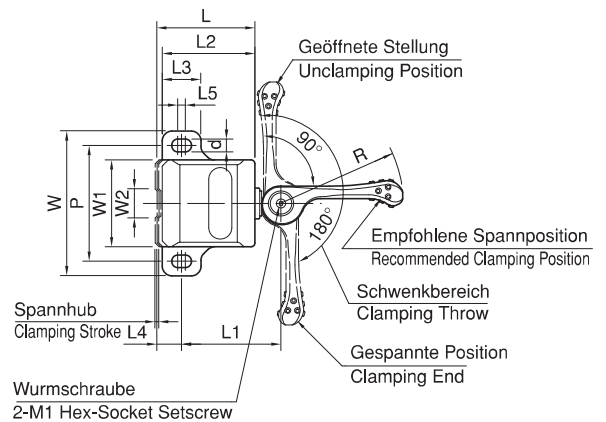
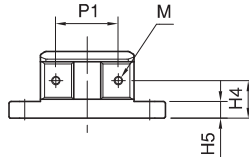
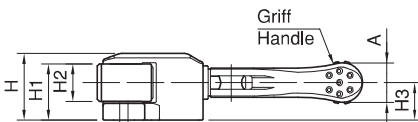
Referenz-Nr. Order No.	W1	W2	H1	H2	M	P1	H4	L4	W	L3	H5	d	L5	P
2139-32150	45	15	27	18	M4x0.7	30	18	13	75	20	8	6.6	3	60
2139-40200	60	20	33	22	M5x0.8	40	22	17	100	26	10	8.6	4	80

Referenz-Nr. Order No.	H	L	L2	R	L1	H3	M1
2139-32150	32	51	48	63	51.5	18	M4x0.7
2139-40200	40	67	63	80	67	22	M5x0.8

Referenz-Nr. Order No.	A	Spannhub Clamping Stroke	Betriebslast Operating Load (N)	Spannkraft Clamping Force Kgf	 (g)
2139-32150	19	1.6	150	200	620
2139-40200	24	2.2	200	300	1360



- 2139**
• Schwarz beschichtet
- 2139**
• Black coating



Eigenschaft

- Spannen mit Griff mit 1-Touch
- Perfektes Spannen bei Bearbeitung
- Perfekter Halt durch den Druck nach unten und nach vorne

Features

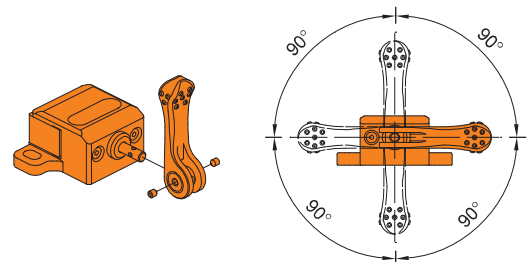
- The cam handle allows fast clamping in single operation.
- Precision-ground jaw is perfect for clamping the workpiece on its finished surface.
- In clamping, the jaw provides downward force to prevent part lift.



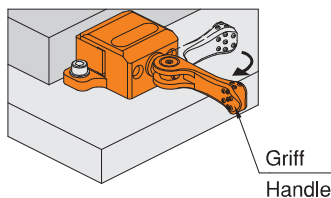
Wechsel der Griffposition
Griff mit 4 Optionen

Changing Handle Position


The handle shaft has 4 countersinks which are provided every 90° for 4 options of handle position



Verwendung
How To Use



Referenz-Nr. Order No.	Spannhub Clamping Stroke	W1	W2	H3	H4	L2	W	L	H2	d	P	H5	L1
2141-00010	1	38	8	6	3	15	45	33.5	10	5.2	36	5	30.5
2141-00015	2	60	12	9	5	22	70	50	15	8.2	55	7	46

Referenz-Nr. Order No.	H	D	H1	R	A	W3	M1	zulässiges Drehmoment Allowable Screw Torque (N m)	Spannkraft Clamping Force Kgf	
2141-00010	30	13	20	63	12	6	M4x0.7	10	400	85
2141-00015	46	19	30	100	18	10	M5x0.8	27	600	290

2141

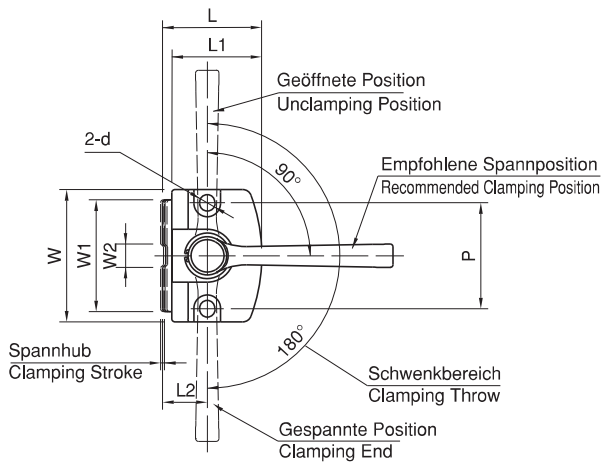
Grundkörper

- Schwarz beschichtet
- Backe**
- Gehärtet
- Schwarz beschichtet

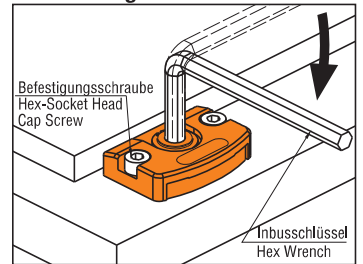
2141

Body

- Black coating
- Jaw**
- Hardened
- Black coating




Verwendung / How To Use



Seitenspannbacke

Side Clamp

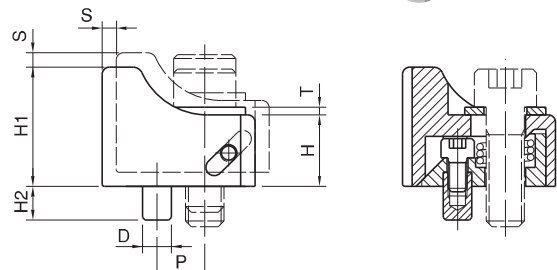
Referenz-Nr. Order No.	S	W	W1	H1	L1	P	D (h7)	H2	M	L	H	T	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	
2143-08015	3	25	10	25	21.5	10	6	7	M8	32	15	1.6	700	25	115
2143-10019	4	30	11	32	26	12	6	7	M10	40	19	2	850	50	225
2143-12023	5	35	12	38	33	16	8	10	M12	50	23	2.3	2000	90	390
2143-16025	6	40	14	45	40	20	10	10	M16	60	25	3.2	3000	150	640

2143

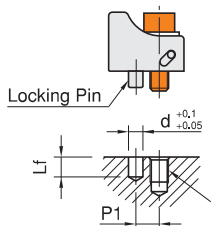
- Gehärtet
- Schwarz beschichtet

2143

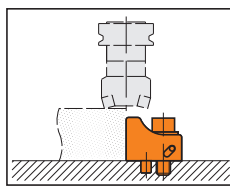
- Hardened
- Black coating



Montage und Verwendung / How To Use and Install

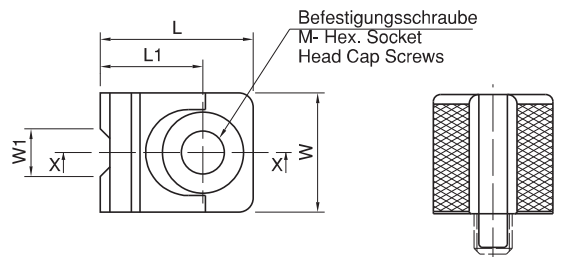


Nr.	M1	d	Lf	P1
CP107-08015	M 8	6	8	10
CP107-10019	M10	6	8	12
CP107-12023	M12	8	11	16
CP107-16025	M16	10	11	20



1 Stift und 1 Schraube erforderlich

Drill a cap-screw hole and a locking-pin hole as specified on the up.



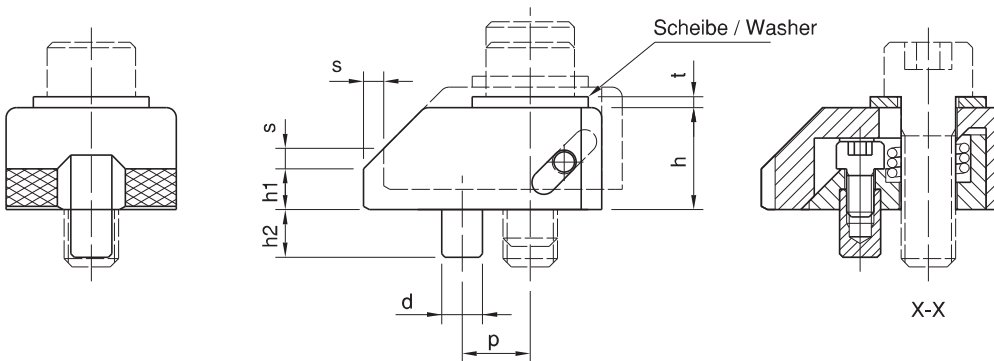
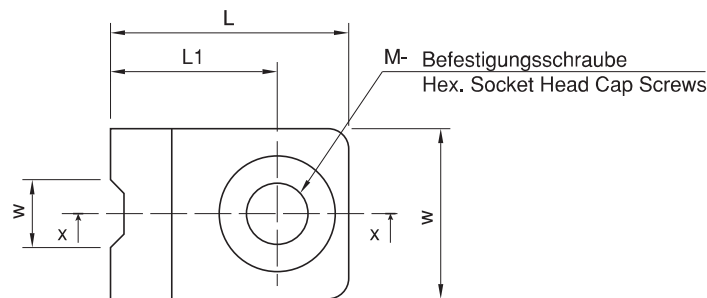
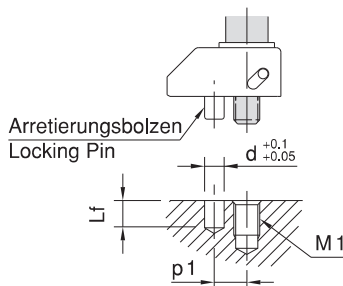
Referenz-Nr. Order No.	s	w	w1	h1	L1	P	d (h7)	h2	M	L	h	t	Spankraft Clamping Force (N)	zulässiges Drehmoment Allowable Screw Torque (N·m)	 (g)
2144-08015	3	25	10	6	24.5	10	6	7	M8	35	15	1.6	7.000	25	100
2144-10019	4	30	11	8	29	12	6	7	M10	43	19	2	8.500	50	185
2144-12023	5	35	12	9	37	16	8	10	M12	54	23	2.3	20.000	90	320
2144-16025	6	40	14	10	45	20	10	10	M16	65	25	3.2	30.000	150	520

2144

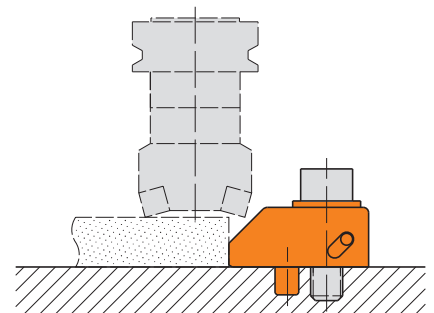
- Gehärtet
- Schwarz beschichtet

2144

- Hardened
- Black coating


Anwendungsbeispiel / Application Examples


Referenz-Nr. Order No.	M1	d	Lf	p1
2144-08015	M 8	6	8	10
2144-10019	M10	6	8	12
2144-12023	M12	8	11	16
2144-16025	M16	10	11	20



Referenz-Nr. Order No.		s1	m	sw	L	h	k	n	b	Spannkraft Clamping Force kgf		
										f1	f2	
2150-08	8	1,4	5	4	23	9,5	6	7,7	13	310	25	
2150-10	10	1,4	5	4	23	14	6	9,7	15	310	35	
2150-12	12	1,2	7	5	28	15	7	11,7	18	340	60	
2150-14	14	1,7	7	7	30	22	8	13,7	22	800	95	
2150-16	16	1,7	10	8	30	22	9	15,7	25	1500	130	
2150-18	18	2	10	8	35	28	10	17,7	28	1500	190	
2150-20	20	2,5	13	10	40	32	12	19,7	32	2000	290	
2150-22	22	2,5	13	12	45	38	14	21,7	35	2000	390	

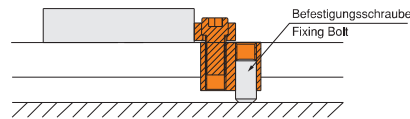
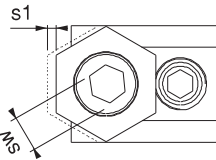
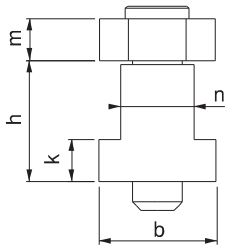


2150

- Die T-Nut des Produkts tritt vollständig in die Nut der Tischplatte ein. Da nur der exzentrische Kopfstück auf der Tischoberfläche verbleibt, ist ein einfaches Spannen der dünnen Teile möglich.
- geeignet für T-Nut DIN 650
- Gehärtet
- Schwarz beschichtet

2150

- T-Slot of the product enters in the slot of the bench completely. Since only the eccentric headpiece remains on the surface of the table, this provides easy clampings of the thin pieces.
- It is in compliance with DIN 650 T-Slot
- Hardened
- Black coating



Flachspanner

Jaw Clamp

Referenz-Nr. Order No.		c	n		x	L	b	m1	sw	Spannkraft clamping force		
			min	max						f1 kgf	f2 kgf	
2170-12	12	2	2	6	4	46	21	10	5	500	60	120
2170-14	14	2,5	2,5	7,5	5	51	26	10	6	550	70	200
2170-16	16	3	2,5	8,5	6	61	27,5	12	6	800	90	290
2170-18	18	3	2	8	6	67	35	13	8	900	100	420
2170-20	20	4	2,5	11	8,5	78	38	13	10	1200	140	640
2170-22	22	4,5	2,5	12	9,5	87	39	16,5	10	1600	190	830

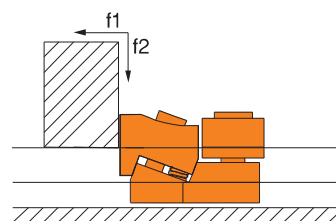
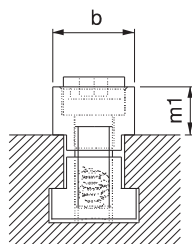
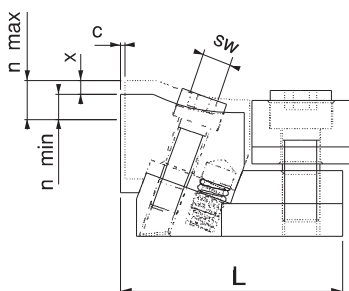


2170

- Spannt das Werkstück gegen die Anlagefläche und Richtung Platte
- Arbeiten in T-Nut verschafft Höhenvorteil
- DIN 650 T-Nut konform
- Gehärtet
- Schwarz beschichtet

2170

- This product clamps the workpiece in the direction of resting and plate
- It's working in T-Slot provides height advantage
- It is in compliance with DIN 650 T-Slot
- Hardened
- Black coating



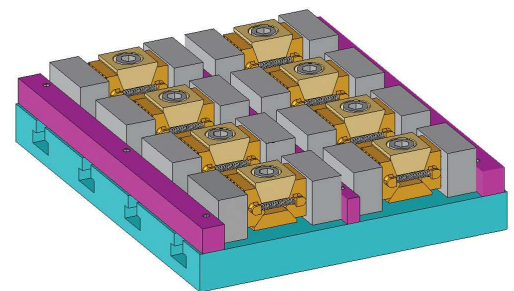
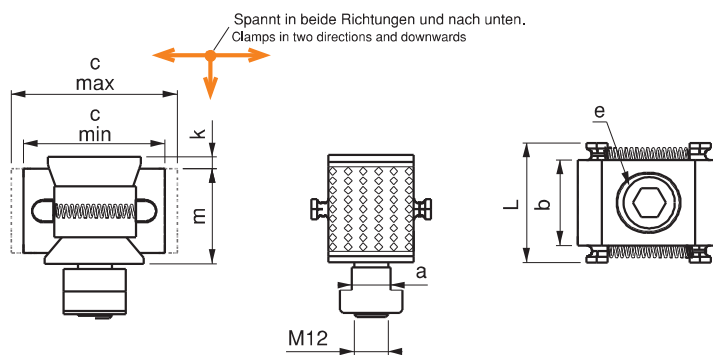
Referenz-Nr. Order No.	c			m	k	b	L	e DIN 912	Sikma Kuvveti Clamping Force kgf	 (g)
	min	max								
2190-5055	50	55	14-16-18-20-22	35	4	30	42	M12	1750	390

2190

- Spannen von einem Punkt in beide Richtungen und Plattenrichtung
- passend zu M12 Gewinde auf Platten und (a) 14-16-18-20-22
- Verwendung für T-Nuten
- Gehärtet
- Schwarz beschichtet

2190

- This product makes press process from one point to two directions and towards the direction of the plate.
- It is used in M12 thread plates and (a) 14-16-18-20-22
- T-Slot measurings
- Hardened
- Black coating



Referenz-Nr. Order No.	c			m	k	b	L	e DIN 912	Spannkraft clamping force kgf	 (g)
	min	max								
2210-4954	49	54	14-16-18-20-22	23	4	30	42	M12	1500	280

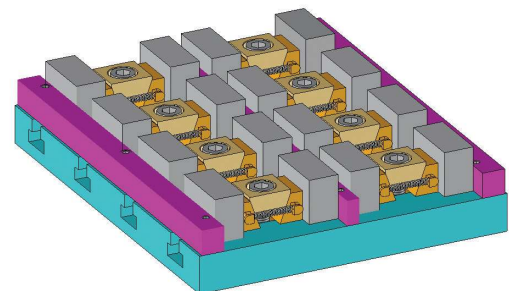
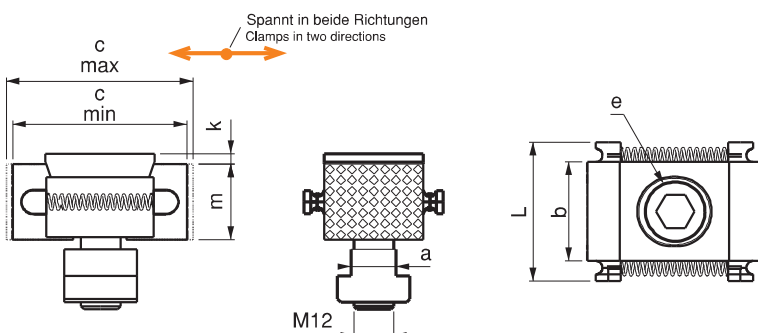
2210


- Spannen von einem Punkt in beide Richtungen und Plattenrichtung
- passend zu M12 Gewinde auf Platten und (a) 14-16-18-20-22
- Verwendung für T-Nuten
- Gehärtet
- Schwarz beschichtet

2210

- This product makes press process from one point to two directions.
- It is used in M12 thread plates and (a) 14-16-18-20-22
- T-Slot measurings
- Hardened
- Black coating

Keilspanner beidseitig



Referenz-Nr. Order No.	h x b x L	toleranz tolerance h	toleranz tolerance b	 (kg)	Stück Piece
2230-028	14x10x150	±0.01	±0.01	10.8	2
	16x10x150				2
	18x10x150				2
	20x10x150				2
	22x10x150				2
	24x10x150				2
	26x10x150				2
	28x10x150				2
	30x10x150				2
	32x10x150				2
	35x10x150				2
	40x10x150				2
	45x10x150				2
50x10x150	2				

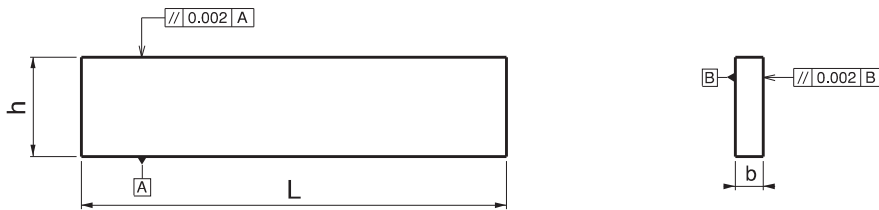


2230


- Als Unterlage beim Parallel- Spannen und Feinbearbeitung
- 28 Stück.
- Gehärtet
- Set in Holzkiste

2230

- This product is used for parallel coupling of the workpieces and as the base for sensitive machinings of the work pieces.
- 28 pieces.
- Hardened
- Set is in the wooden box



Parallelunterlagen-Set

Referenz-Nr. Order No.	h x b x L	toleranz tolerance h	toleranz tolerance b	 (kg)	Stück Piece
2250-016	20x6x100	±0.01	±0.01	10.6	2
	23x8x100				2
	28x10x100				2
	36x12x150				2
	42x14x150				2
	48x16x150				2
	58x18x150				2
	65x22x150				2

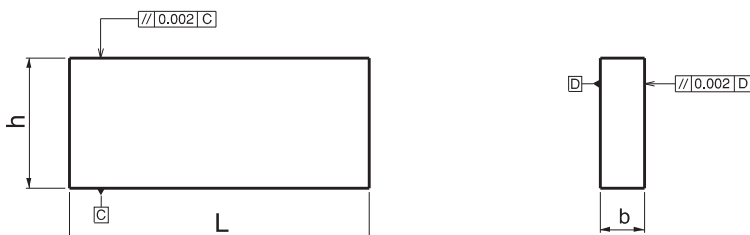



2250

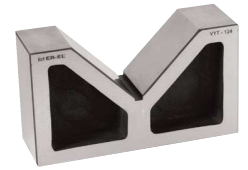
- Als Unterlage beim Parallel- Spannen und Feinbearbeitung
- 16 Stück.
- Gehärtet
- Set in Holzkiste

2250

- This product is used for parallel coupling of the workpieces and as the base for sensitive machinings of the work pieces.
- 16 pieces.
- Hardened
- Set is in the wooden box



Referenz-Nr. Order No.	a	b	c	Øv		 (g)
				min	max	
2270-140	140	82	40	20	110	1980
2270-204	204	115	66	15	150	6150

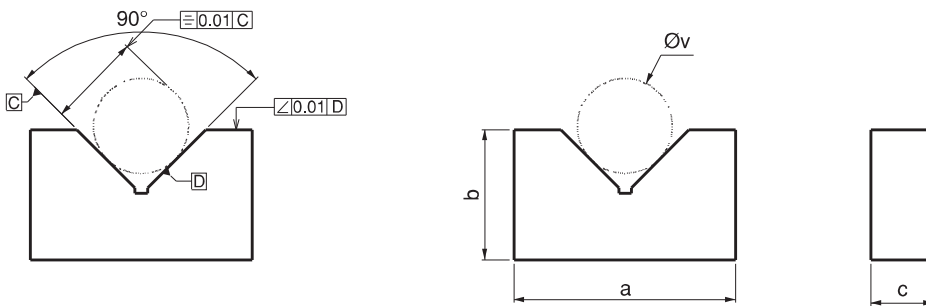


2270

- Material: Guss
- Verwendung als Unterlage bei Spannen zylindrischer Werkstücke und Feinbearbeitung
- 2-er Set


2270

- Material: Casting
- This product is used in parallel couplings of cylindrical pieces and it is also used as the base for sensitive machinings of the workpieces.
- Set of two pieces



“X V” Spannblock

XV-Clamping Block

Referenz-Nr. Order No.	a	b	c	Øv1		Øv2		Øv3		Øv4		 (g)
				min	max	min	max	min	max	min	max	
2290-120	120	100	60	12	40	12	60	12	75	12	90	2840
2290-150	152	132	74	15	80	15	95	15	110	15	120	4975



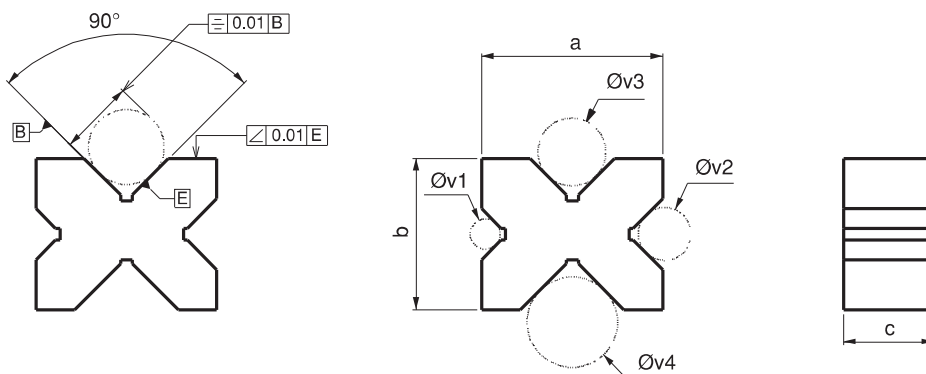
2290

- Material: Guss
- Verwendung als Unterlage beim Spannen der Zylinderwerkstücke und Feinbearbeitung. Aufgrund X-Form kann man alle 4 Flächen verwenden.

- 2-er Set

2290

- Material: Casting
- This product is used in parallel couplings of cylindrical pieces and it is also used as the base for sensitive machinings of the workpieces. It provides using advantage in 4 different surfaces because of being in X form.
- Set of two pieces



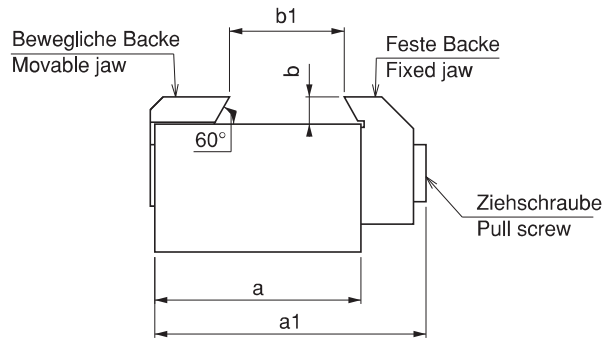
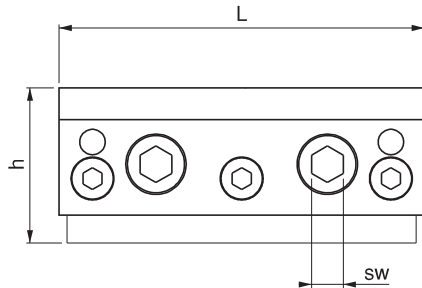
Referenz-Nr. Order No.	L	h	a	a1	b	b1	sw	 (g)
2295-090	90	39	55	73	7	21-35	8	1480
2295-115	115	49	65	82.5	8.5	31-42	10	2690
2295-130	130	56	75	98	10	37-48	12	4160

2295

- Durch Einfräsung eines, Vogelnestes kann das Werkstück gespannt werden.
- Gehärtet
- Schwarz beschichtet

2295

- Apparatus is connected at workpiece, swallow nest opening.
- Hardened
- Black coating



Referenz-Nr. Order No.	a	h	L	d	 (g)
2297-090	55	58	87	M10	2110
2297-115	65	68	110	M12	3750
2297-130	75	80	126.5	M12	5830

2297

- Gehärtet
- Schwarz beschichtet

2297

- Hardened
- Black coating

