

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

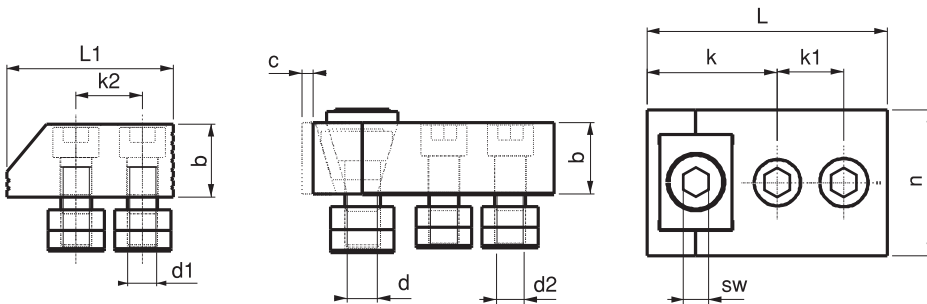


2030

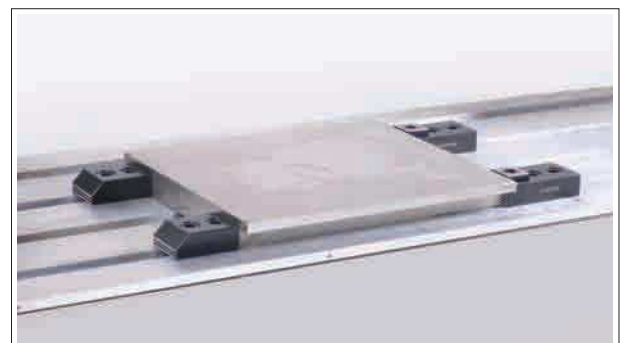
- Wenn das Produkt das Werkstück in spannt, führt dies nicht zu einer Veränderung der ursprünglichen Form des Werkstücks.
- Gehärtet
- Schwarz beschichtet
- Set in Plastikbox

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 is in the plastic box



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



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																	

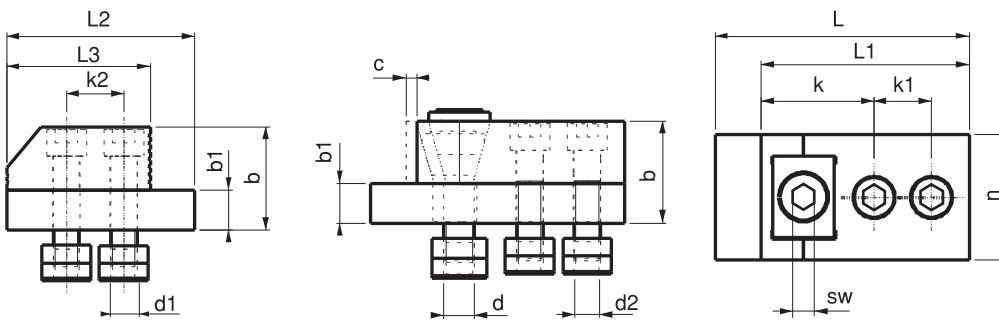


2050

- 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



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



Referenz-Nr. Order No.		c	L	b	b1	n	n1	n2	k	k1	k2	sw	i	h	h1	d	d1	sıkma kuvveti clamping force Kgf	Tork Değeri 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

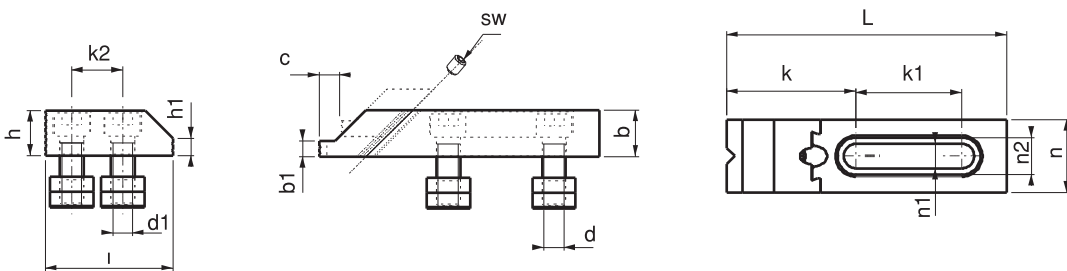
2070

- 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

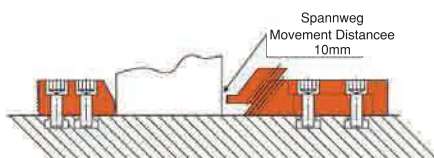


2070

- 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



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



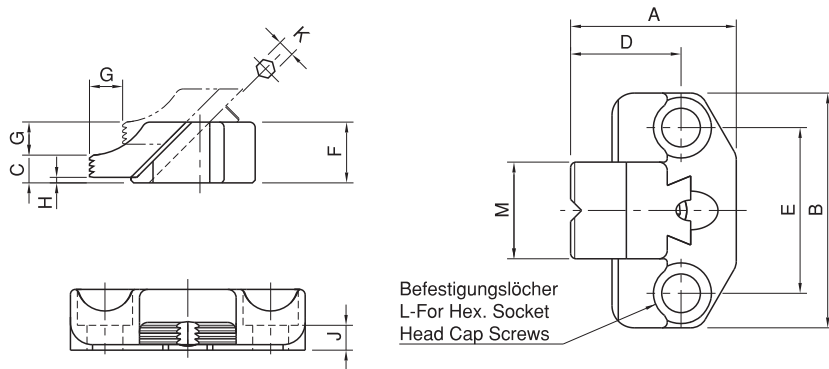
Die Winkelauffläche ist für dünne Werkstücke und die gerade Fläche für dicke Werkstücke.
 Note: Fixed rest can be used as two different ways: Graded side is used for thin pieces and the Straight side is used with thick pieces.



Referenz-Nr. Order No.	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



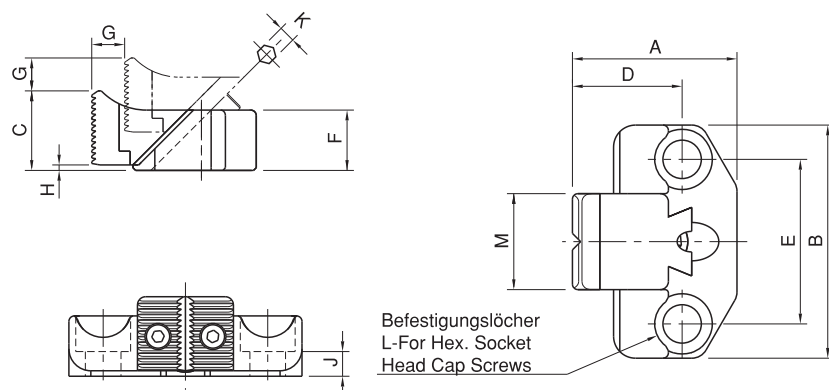
Seitenspannbacke

Side Clamps


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)	
2077-08001	6	350	45	160
2077-10001	8	550	55	310
2077-12001	10	700	70	490

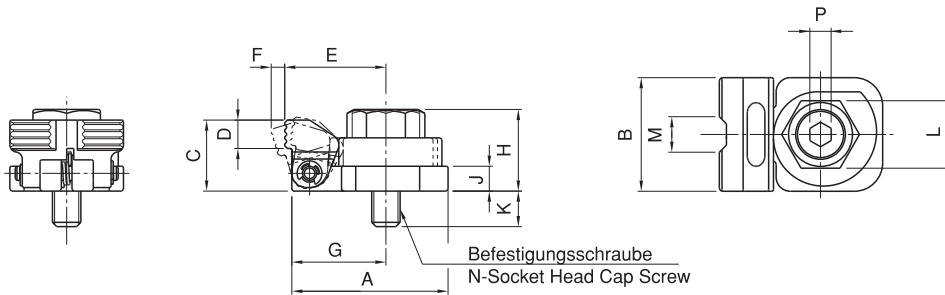


2077

• Schwarz beschichtet

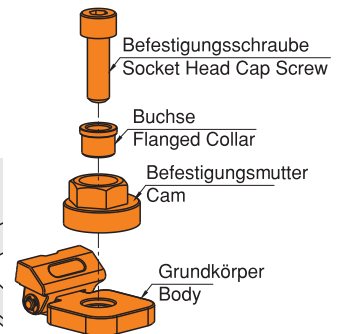
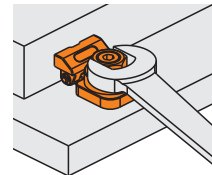
2077

• 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

Referenz-Nr. / Order No.		A	H	L	S	Spannkraft Clamping Force Kgf	
2080-01428	14 - 16 - 18 - 20 - 22 - 24 - 28	61	57	108	5	1500	1850

2080

• Spannen horizontal und vertikal möglich

Körper

• Statische Lackierung

Backe

• Gehärtet

2080

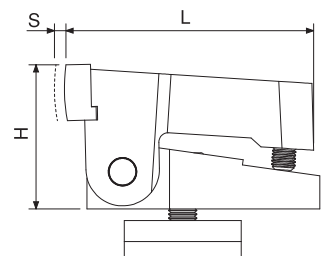
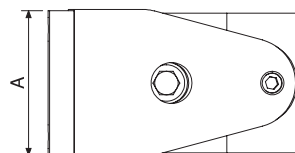
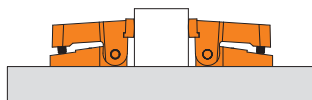
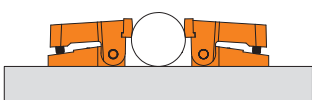
• Vertical down thrust and horizontal clamping force available simultaneously with the operation of leverage screw

Body

• Statical Painting

Jaw

• Hardened



Referenz-Nr. Order No.		c	b	k1	k2	k3	k4	L	h	h1	d	d1	Spannkraft clamping force kgf	
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

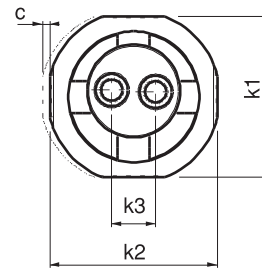
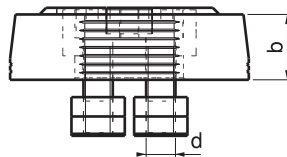
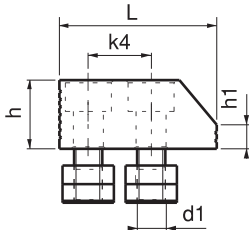


2090

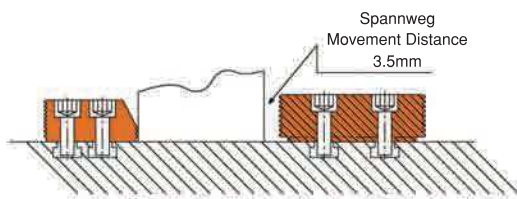
- Ürünün eksantrik çalışma sistemi saat yönünde sıkıldığında iş parçasını dayama ve pleyt yönüne özel dizayn anahtarı ile yüksek kuvvette sıkar.
- 1. Spannweite 3,5 mm
- 2. Werkstückdistanz bis 1,5-2 mm
- 3. Befestigung mit 10 mm Allen und Inbussschraube
- 4. Befestigung des Werkstücks durch Drehen im Uhrzeigersinn
- geeignet für T-Nut DIN 650
- Mutter: gehartet
- 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 Winkelauflegefläche 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.



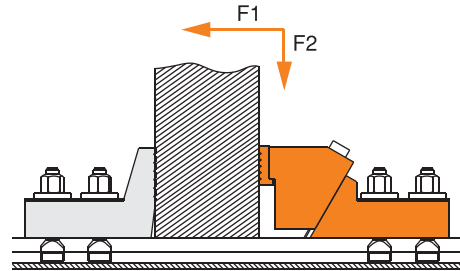
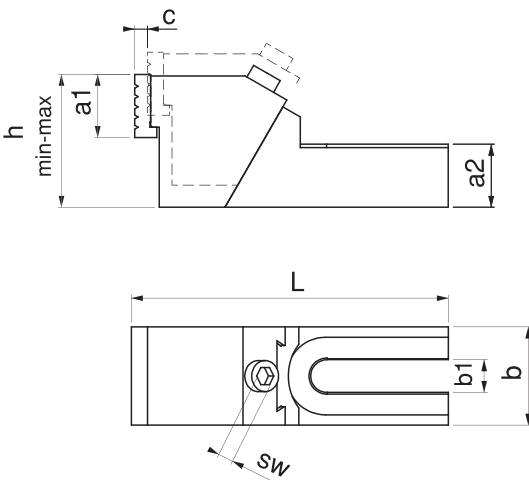
Referenz-Nr Order No.		a1	a2	b	b1	c	h min-max	L	sw	F1 Spannkraft clamping force kgf	F2 Spannkraft clamping force kgf	 (kg)
2095-571	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.68
2095-761	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	7.66

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

Block Side Press

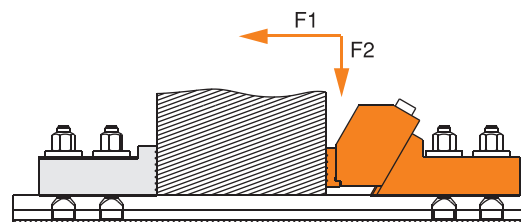
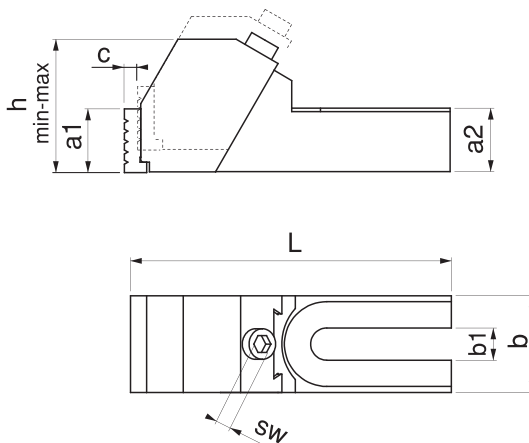
Referenz-Nr Order No.		a1	a2	b	b1	c	h min-max	L	sw	F1 Spannkraft clamping force kgf	F2 Spannkraft clamping force kgf	 (kg)
2095-572	14-16-18	37	37	57	19	8	78-98	185	10	2250	350	3.6
2095-762	20-22-24-28	37	45	76	26	11	98-118	240	14	3000	450	6.7

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

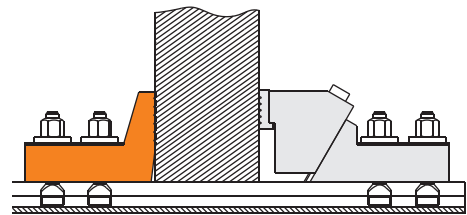
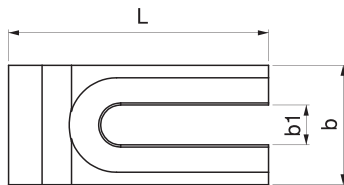
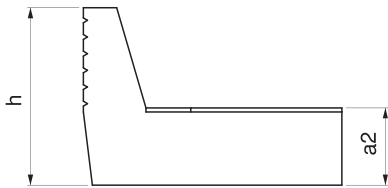


2098

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

2098

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



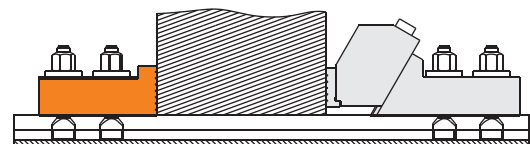
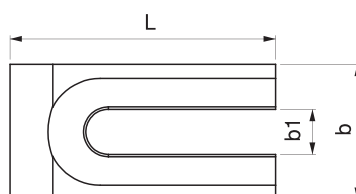
Referenz-Nr. Order No.		a2	b	b1	h	L	 (kg)
2098-572	14-16-18	37	57	19	47	112	2.800
2098-762	20-22-24-28	45	76	26	49	140	4.185

2098

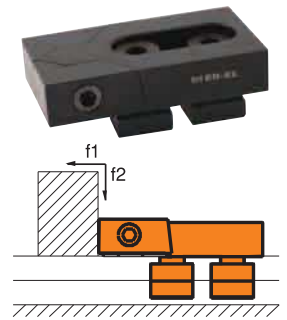
- passend zu 2095-572 und 2095-762
- Schwarz beschichtet

2098

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



Referenz-Nr. Order No.		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

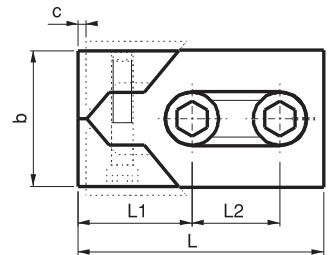
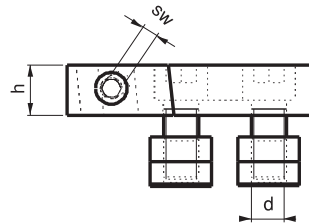


2110

- 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	
2120-1425	14	0-0.011	14	24	32	25	-	9	8	M8x35	200
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

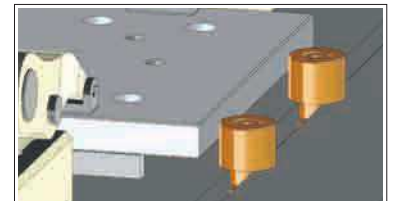
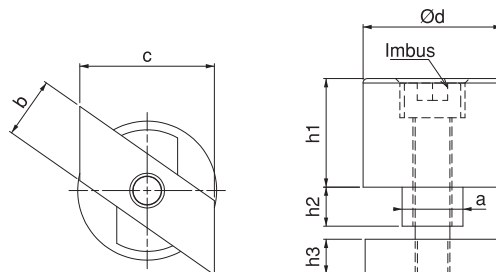


2120

- Gehärtet
- Schwarz beschichtet

2120

- Hardened
- Black coating



Referenz-Nr. Order No.		n	e	c	d	b	h	k	L	sw	
2130-12	12	11.7	18	18	M8	9	3	7	36	6	100
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

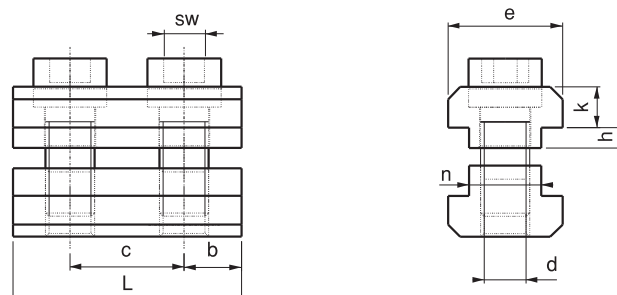


2130

- 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

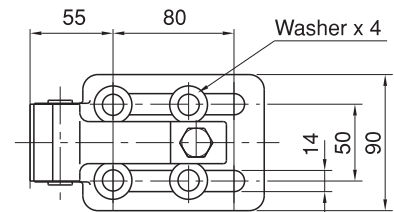
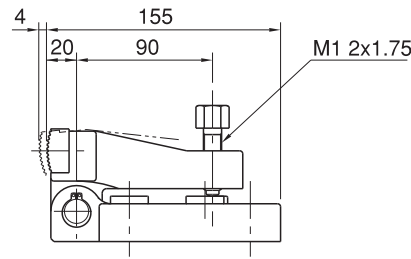
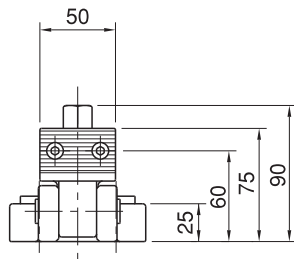
- Material: Cast Iron
- Black coating

Jaw

- Hardened
- Black coating

Bolt

- Hardness: Induction
- Black coating



Seitenspannbacke

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

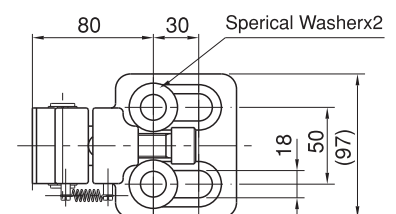
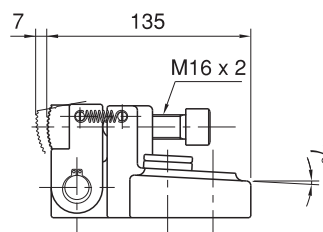
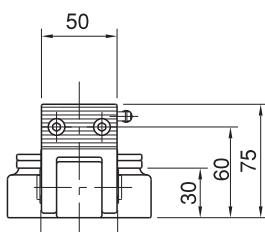
- Material: Cast Iron
- Black coating

Jaw

- Hardened
- Black coating


Bolt

- Hardness: Induction
- Black coating



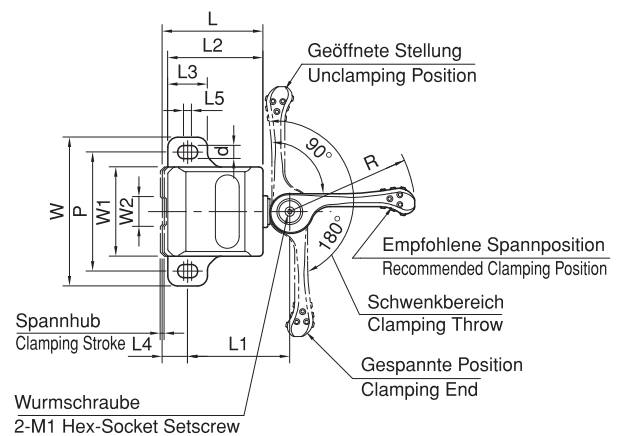
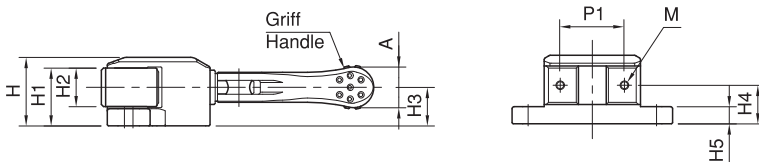
Referenz-Nr. Order No.	W1	W2	H1	H2	M	P1	H4	L4	W	L3	H5	d	L5	P
2139-32150	45	15	27	18	M4x0.7	30	18	13	75	20	8	6.6	3	60
2139-40200	60	20	33	22	M5x0.8	40	22	17	100	26	10	8.6	4	80

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.



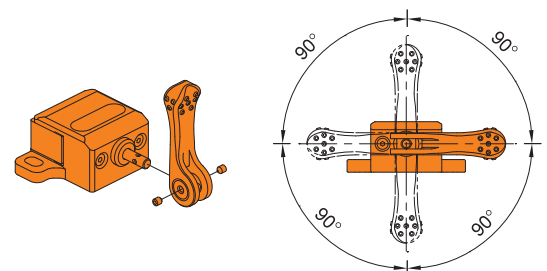
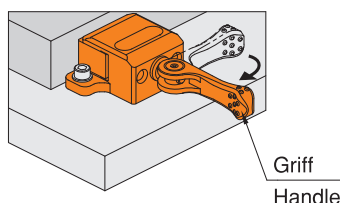
Wechsel der Griffposition

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

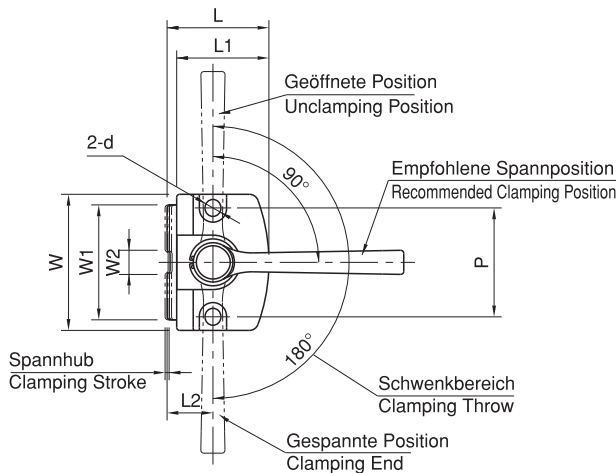
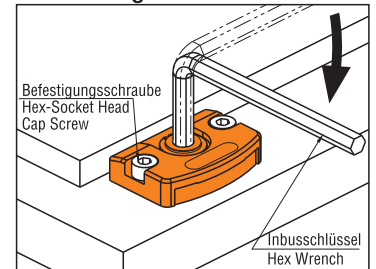
Referenz-Nr. Order No.	H	D	H1	R	A	W3	M1	zulässiges Drehmoment Allowable Screw Torque (N m)	Spannkraft Clamping Force Kgf	
2141-00010	30	13	20	63	12	6	M4x0.7	10	400	85
2141-00015	46	19	30	100	18	10	M5x0.8	27	600	290

2141
Grundkörper

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

2141
Body

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


Verwendung / How To Use

Seitenspannbacke

Side Clamp

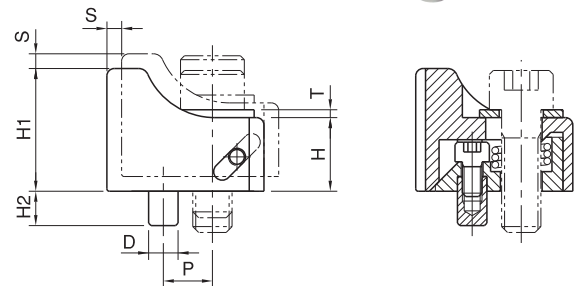
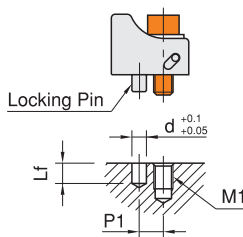
Referenz-Nr. Order No.	S	W	W1	H1	L1	P	D (h7)	H2	M	L	H	T	Spannkraft Clamping Force Kgf	Drehmoment Allowable Screw Torque (N-m)	
2143-08015	3	25	10	25	21.5	10	6	7	M8	32	15	1.6	700	25	115
2143-10019	4	30	11	32	26	12	6	7	M10	40	19	2	850	50	225
2143-12023	5	35	12	38	33	16	8	10	M12	50	23	2.3	2000	90	390
2143-16025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

2143

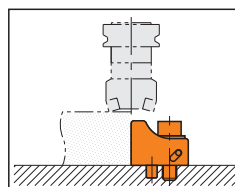
- Gehärtet
- Schwarz beschichtet

2143

- Hardened
- Black coating

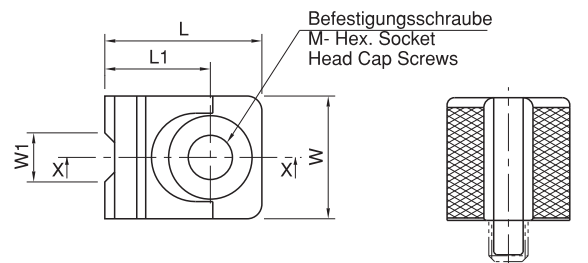

Montage und Verwendung / How To Use and Install


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



1 Stift und 1 Schraube erforderlich

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



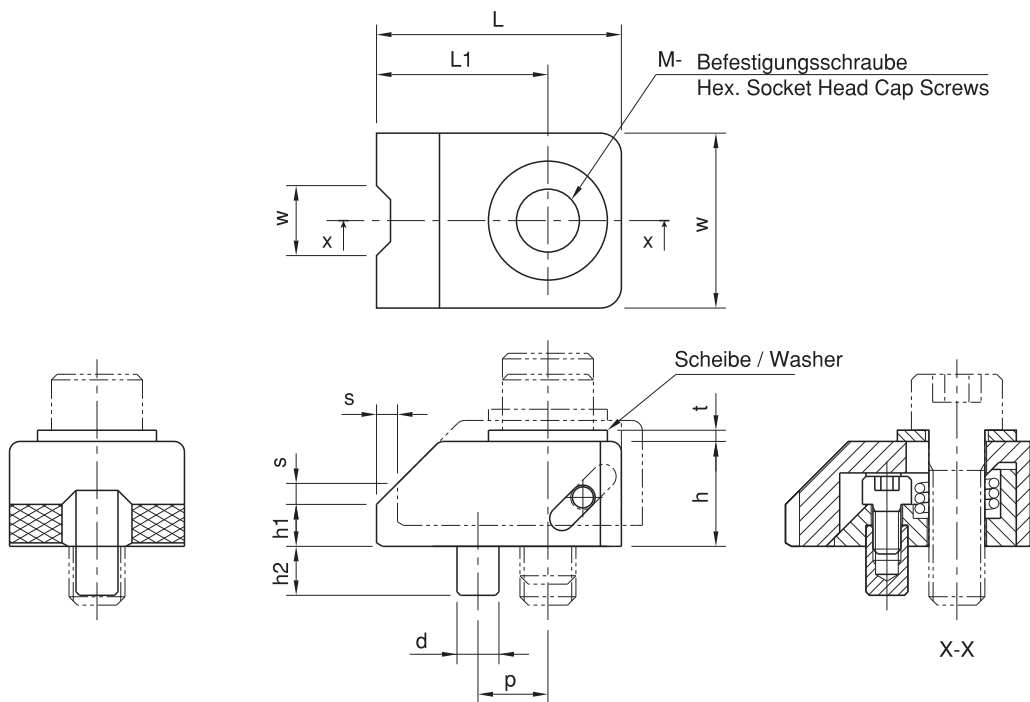
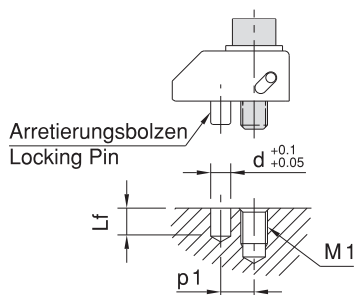
Referenz-Nr. Order No.	s	w	w1	h1	L1	P	d (h7)	h2	M	L	h	t	Spankraft Clamping Force (N)	zulässiges Drehmoment Allowable Screw Torque (N·m)	(g)
2144-08015	3	25	10	6	24.5	10	6	7	M8	35	15	1.6	7.000	25	100
2144-10019	4	30	11	8	29	12	6	7	M10	43	19	2	8.500	50	185
2144-12023	5	35	12	9	37	16	8	10	M12	54	23	2.3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

2144

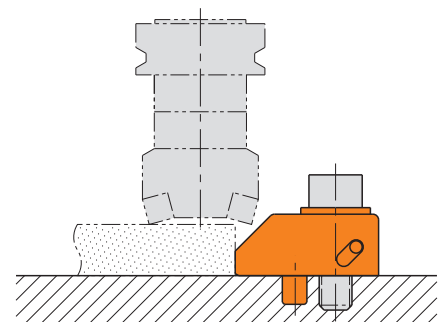
- Gehärtet
- Schwarz beschichtet

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	(g)
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

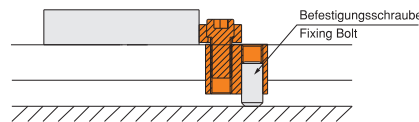
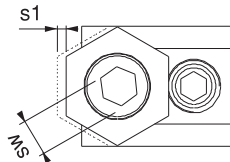
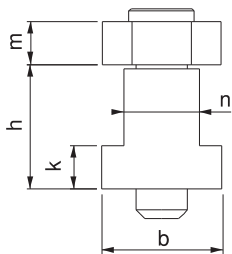


2150

- 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

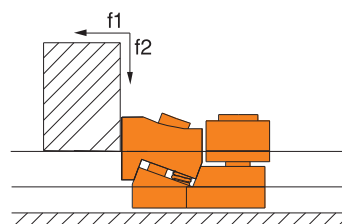
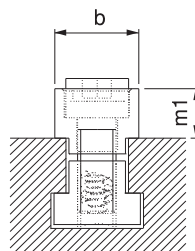
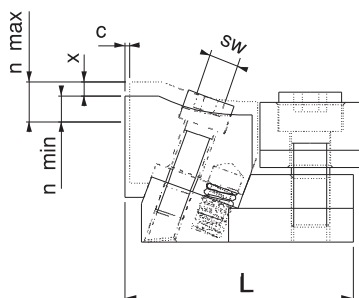


2170

- 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



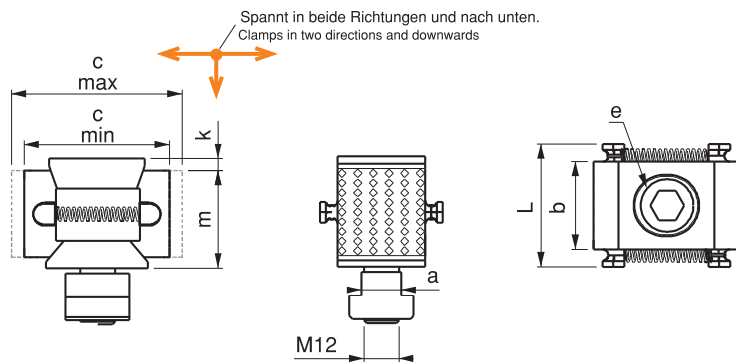
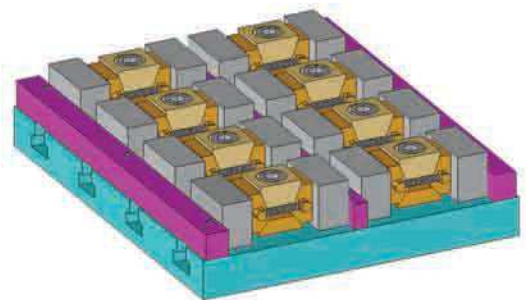
Referenz-Nr. Order No.	c			m	k	b	L	e ^e DIN 912	Sikma Kuvveti Clamping Force kgf	
	min	max								
2190-5055	50	55	14-16-18-20-22	35	4	30	42	M12	1750	390

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



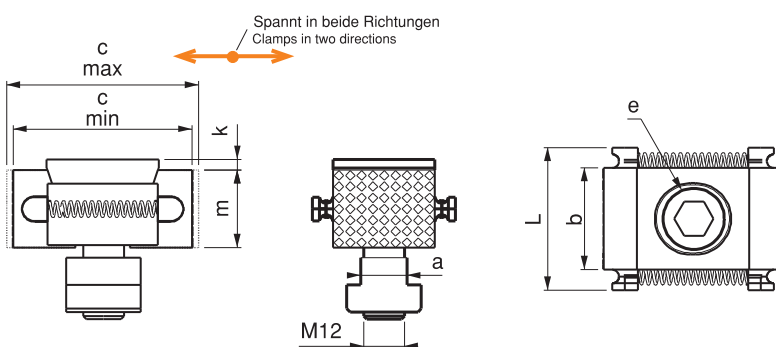
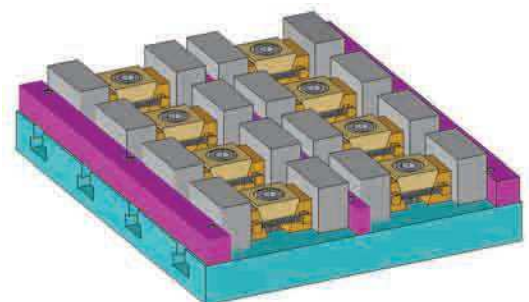
Referenz-Nr. Order No.	c			m	k	b	L	e ^e DIN 912	Spannkraft clamping force kgf	
	min	max								
2210-4954	49	54	14-16-18-20-22	23	4	30	42	M12	1500	280


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



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				

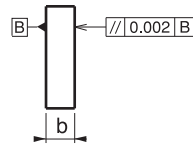
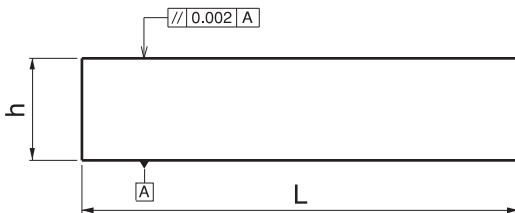


2230


- 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

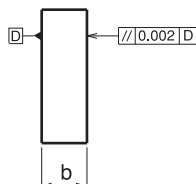
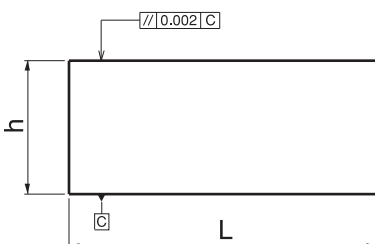



2250

- 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



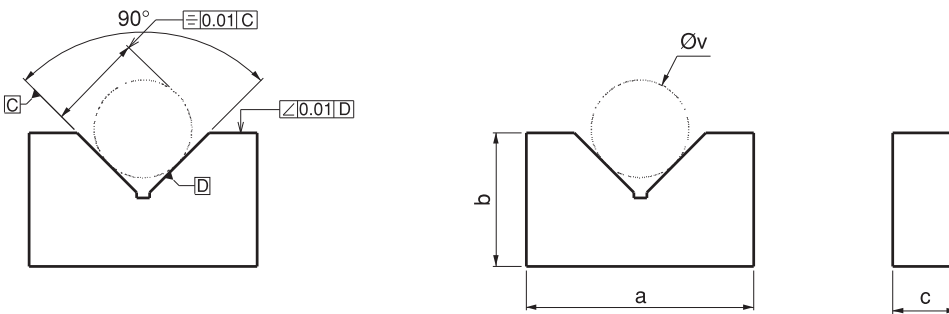
Referenz-Nr. Order No.	a	b	c	Øv		 (g)
				min	max	
2270-140	140	82	40	20	110	1980
2270-204	204	115	66	15	150	6150


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



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

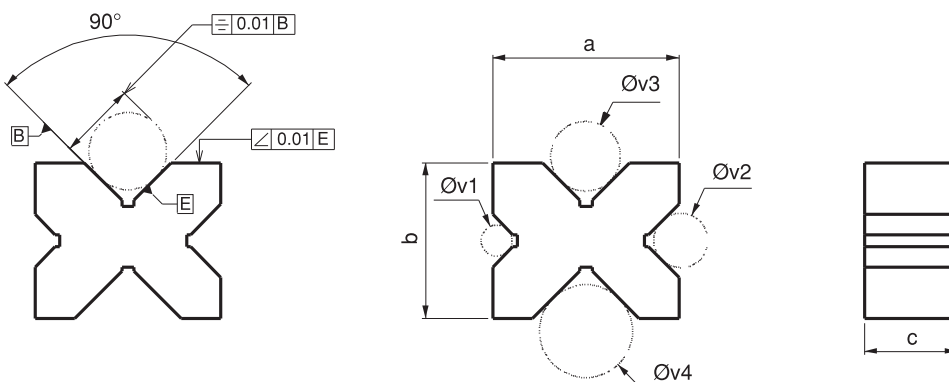
- Material: Guss
- Verwendung als Unterlage beim Spannen der Zylinderwerkstücke und Feinbearbeitung. Aufgrund X-Form kann man alle 4 Flächen verwenden.
- 2-er Set


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

“X V” Spannblock

XV-Clamping Block



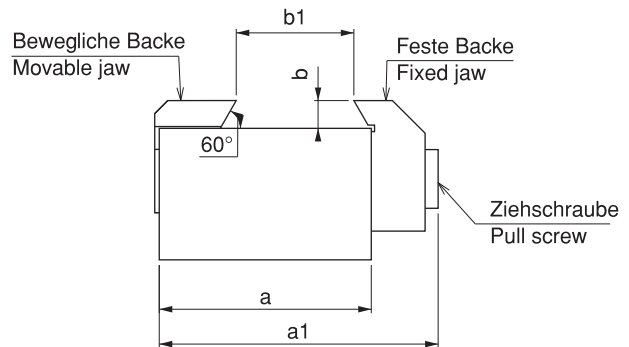
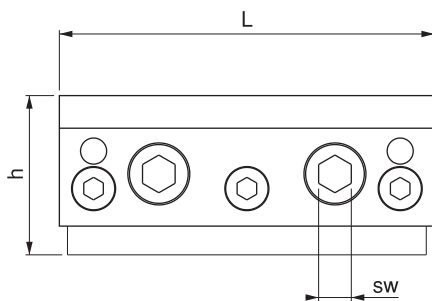
Referenz-Nr. Order No.	L	h	a	a1	b	b1	sw	 (g)
2295-090	90	39	55	73	7	21-35	8	1480
2295-115	115	49	65	82.5	8.5	31-42	10	2690
2295-130	130	56	75	98	10	37-48	12	4160


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

