

Accessories for Workholding Systems EL and NC

Clamping jaws and jaw inserts,
 accessories for mounting, positioning and operation

Clamping jaws / jaw inserts



Important notes

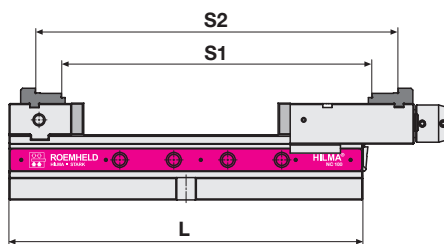
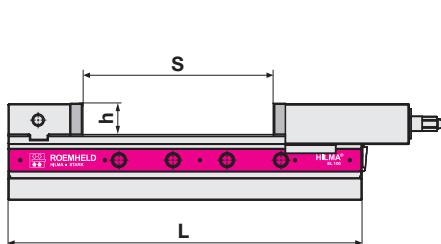
- The clamping jaws of the series EL and NC are designed as exchangeable clamping bars. Workholding systems EL and NC are delivered with standard clamping jaws smooth/serrated.
- The clamping jaws for the series NC can be used for both the mechanically-hydraulically or hydraulically-operated version (NCH).
- The specified clamping ranges S apply to the mechanically-hydraulically operated version. The clamping ranges of the hydraulically-operated version of the series NC are larger by the following values:

NC 100 H = + 4 mm

NC 125 H = + 3 mm

NC 160 H = + 5 mm

Clamping jaws for workholding systems EL and NC



S: Clamping range

with standard clamping jaws

S1: Clamping range

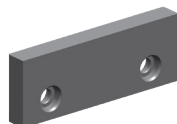
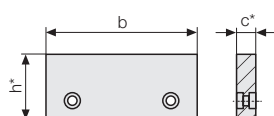
lower step of the top jaws

S2: Clamping range

upper step of the top jaws

h: Height of the standard clamping jaws

L: Base length

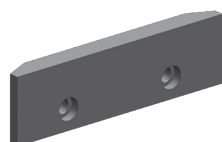
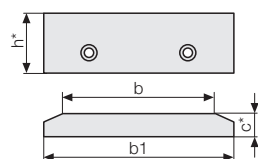


Standard clamping jaws smooth/serrated

Type	Part no.	Dimensions			Base length L	Clamping range S
		b	c	h		
EL/NC 100	5 2058 1003	100	13	34	380	0 – 205
NC 100					540	0 – 365
EL/NC 125	5 2058 1004	125	15	45	430	0 – 225
NC 125					560	0 – 355
EL/NC 160	5 2058 1005	160	18	54	550	0 – 308
NC 160					750	0 – 508

Clamping jaws, extra large

hardened and ground, clamping surface serrated



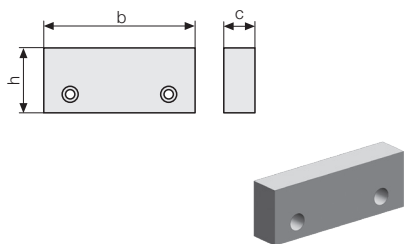
Type	Part no.	Dimensions				Base length L	Clamping range S
		b	b1	c	h		
EL/NC 100	5 2058 1025	100	125	13	34	380	0 – 205
NC 100						540	0 – 365
EL/NC 125	5 2058 1026	125	160	15	45	430	0 – 225
NC 125						560	0 – 355
EL/NC 160	5 2058 1027	160	200	20	54	550	0 – 304
NC 160						750	0 – 504

* Tolerance ± 0.01 mm
 All dimensions in [mm]

Accessories for Workholding Systems EL and NC

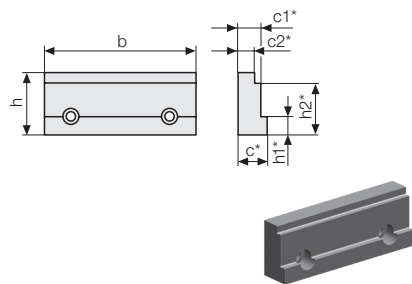
Clamping jaws and clamping ranges

Clamping jaws, soft



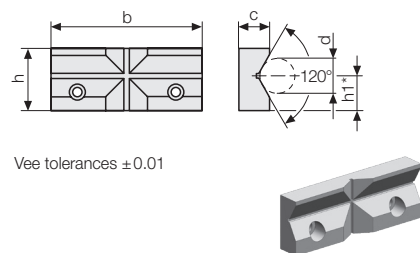
Type	Part no.	Dimensions			Base length L	Clamping range S
		b	c	h		
EL/NC 100	520550097	100	20	36	380	0-191
NC 100					540	0-351
EL/NC 125	520550098	125	25	47	430	0-205
NC 125					560	0-335
NC 125					720	0-495
EL/NC 160	520550099	160	30	56	550	0-284
NC 160					750	0-484

Precision step jaws hardened and ground



Type	Part no.	Dimensions						Base length L	Clamping range		
		b	c	c1	c2	h	h1		h2	Step h1	Step h2
EL/NC 100	520820001	100	19	15	11	35	10	29	380	8-201	16-209
NC 100									540	8-361	16-369
EL/NC 125	520820002	125	25	20	16	45	13	39	430	10-215	18-223
NC 125									560	10-345	18-353
NC 125									720	10-505	18-513
EL/NC 160	520820003	160	25	20	16	54	15	45	550	10-304	18-312
NC 160									750	10-504	18-512

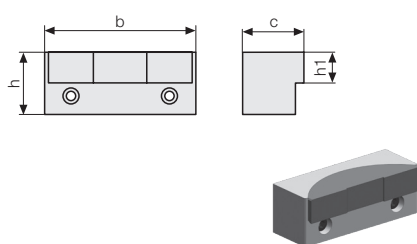
Vee jaws hardened and ground



Vee tolerances ± 0.01

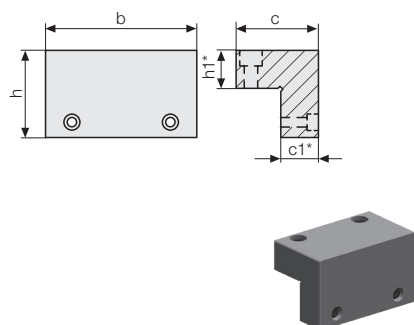
Type	Part no.	Dimensions				Clamping diameter d
		b	c	h	h1	
EL/NC 100	530300002	100	17	34	19	8-35
EL/NC 125	530300003	125	19	45	27	10-50
EL/NC 160	530300004	160	21	54	32	12-60

Pendulum jaws (use only on slide) hardened and ground



Type	Part no.	Dimensions				Base length L	Clamping range S
		b	c	h	h1		
EL/NC 100	837110208	100	35	34	16	380	0-183
NC 100						540	0-343
EL/NC 125	837110308	125	50	45	22	430	0-190
NC 125						560	0-320
NC 125						720	0-480
EL/NC 160	837110408	160	55	54	26	550	0-271
NC 160						750	0-471

Clamping jaws, extra high hardened and ground



Type	Part no.	Dimensions					Base length L	Clamping range S
		b	c	c1	h	h1		
EL/NC 100	932830201	100	60	25	58.0	25	380	0-181
NC 100							540	0-341
EL/NC 125	932830301	125	74	32	75.5	32	430	0-191
NC 125							560	0-321
NC 125							720	0-481
EL/NC 160	932830401	160	100	40	92.5	40	550	0-264
NC 160							750	0-464

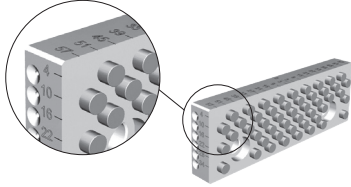
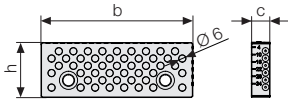
* Tolerance ± 0.01 mm
All dimensions in [mm]

PinFlex clamping jaws

The use of PinFlex clamping jaws enables quick and precise alignment of workpieces. This is supported by horizontal and vertical scaling. Dropping workpiece supports and disturbing workpiece stops are no longer required.

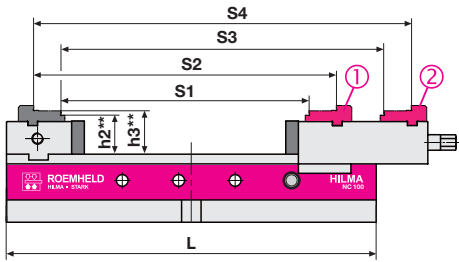
**PinFlex clamping jaws
hardened and ground**

Note: When ordering individually, pay attention to the operating side (left/right)!



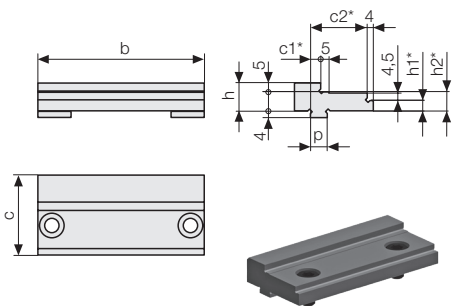
Type	Part no. left	Part no. right	Dimensions			Base length L	Clamping range S
			b	c	h		
EL/ NC 100	93828 2670	93828 2691	100	13	34	380	0–205
NC 100						540	0–365
EL/ NC 125	93828 2660	93828 2682	125	15	45	430	0–225
NC 125						560	0–355
EL/ NC 160	93828 2680	93828 2701	160	18	54	550	0–308
NC 160						750	0–508

Top jaws for workholding systems NC



- S1: Clamping range **lower** step of the top jaw, arrangement ①
- S2: Clamping range **upper** step of the top jaw arrangement ①
- S3: Clamping range **lower** step of the top jaw, arrangement ②
- S4: Clamping range **upper** step of the top jaw, arrangement ②
- h2: Distance between guideway and **lower** step of the top jaw
- h3: Distance between guideway and **upper** step of the top jaw

Top jaws for the workholding systems NC hardened and ground



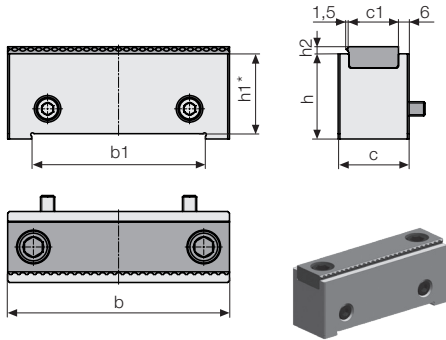
Type	Dimensions							
	b	c	c1	c2	h	h1	h2	p
NC 100	100	47.8	6	34	16.5	6.5	11.5	10 h6
NC 125	125	57.8	6	40	19.0	9.0	14.0	12 h6
NC 160	160	63.8	8	43	22.0	12.0	17.0	18 h6

Type	Part no. Fixed jaw	Part no. Slide	Base length L	Clamping range			
				S1	S2	S3	S4
NC 100	93284 0201	93284 1201	380	48–252	76–280	125–329	181–385
			540	48–412	76–440	125–489	181–545
NC 125	93284 0301	93284 1301	430	62–287	130–355	138–363	206–431
			560	62–417	130–485	138–493	206–561
NC 160	93284 0401	93284 1401	720	62–577	130–645	138–653	206–721
			550	69–404	166–474	194–502	264–572
			750	96–604	166–674	194–702	264–772

* = Tolerance ± 0.01 mm
 ** = Tolerance ± 0.02 mm
 All dimensions in [mm]

Clamping jaws and jaw inserts with grip or coating

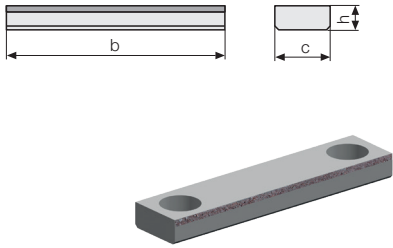
Using clamping jaws or jaw inserts with coating or grip serrated, the retention forces for safe clamping of workpieces can be considerably increased. Only machine vices with clamping force display allow the controlled use of these clamping jaws/inserts.



Clamping bars with jaw insert, grip/smooth hardened and ground

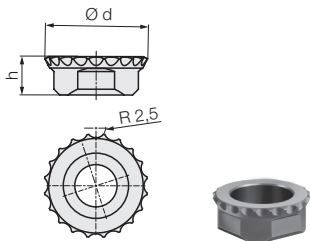
Type	Part no.	b	b1 ^{H7}	c	c1	h	h1	h2	Base length L	Clamping range S
EL/NC100	93286 0201	100	78	34	22	37	34	4	380	9-175
									540	9-335
EL/NC125	93286 0301								430	9-187
									560	9-317
									720	9-477
EL/NC160	93286 0401	160	125	46	34	57	54	6	550	9-264
									750	9-464

Jaw insert for clamping bar, HM coated/smooth, grip/smooth hardened and ground



Type	Part no. HM coated	Part no. grip/ smooth	Dimensions b	c ^{H7}	h	Base length L	Clamping range S
EL/NC100	55050 0692	55050 0542	100	22	10	380	12-174
						540	12-334
EL/NC125	55050 0694	55050 0549				430	12-187
						560	12-317
						720	12-477
EL/NC160	55050 0696	55050 0587	160	34	16	550	12-264
						750	12-464

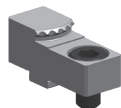
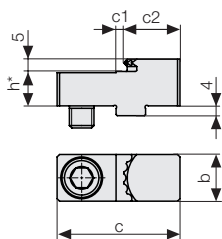
Jaw insert round, grip hardened and ground



Type	Part no.	Dimensions Ø d	h	Base length L	Clamping range Ø
NC 100	55050 0464	27	10	380	40-185
				540	40-345
NC 125	55050 0486	33	12	430	52-202
				560	52-332
				720	52-492
NC 160	55050 0739	39	14	550	60-280
				750	60-480

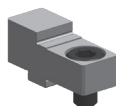
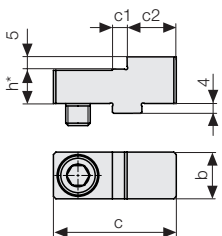
* = Tolerance ± 0.01 mm
** = Tolerance ± 0.02 mm
All dimensions in [mm]

Accessories for workholding systems EL and NC Clamping jaws and jaw inserts with grip or coating



Jaw insert for fixed jaw and slide, grip hardened and ground

Type	Part no.	Dimensions					Base length L	Clamping range	
		b	c	c1	c2	h		S1	S2
NC 100	932856006	15	40	4	17	11.5	380	102-306	179-383
							540	102-466	179-543
NC 125	932856008	19	50	3	23	14	430	124-349	200-425
							560	124-479	200-555
							720	124-639	200-715
NC 160	932856010	28	60	6	22	17	550	171-479	269-577
							750	171-679	269-777



Jaw insert for fixed jaw and slide, HM coated hardened and ground

Type	Part no.	Dimensions					Base length L	Clamping range	
		b	c	c1	c2	h		S1	S2
NC 100	932856007	15	40	5	15	11.5	380	106-310	183-387
							540	106-470	183-547
NC 125	932856009	19	50	6	20	14	430	130-355	206-431
							560	130-485	206-561
							720	130-645	206-721
NC 160	932856011	28	60	7	24	17	550	168-476	266-574
							750	168-676	266-774

* = Tolerance ± 0.01 mm
All dimensions in [mm]

QIS clamping jaws

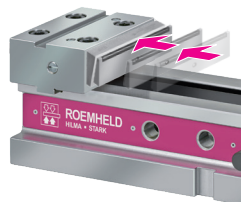
Jaw change in a few seconds with magnetic QIS jaws

The base jaws of the QIS system are equipped with permanent magnets and are screwed to the workholding system. The QIS interchangeable jaws can be easily and quickly attached and fixed to the QIS base jaws.

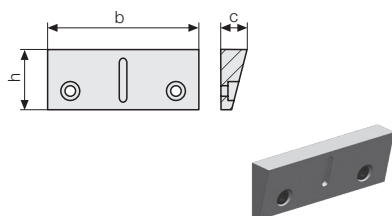
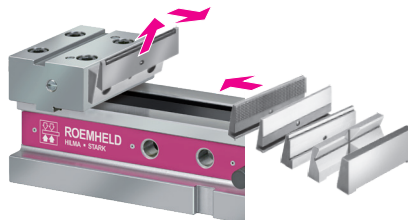
Mount magnetic base jaw



Approach the QIS interchangeable jaw in parallel and insert the jaw guided by a locating pin

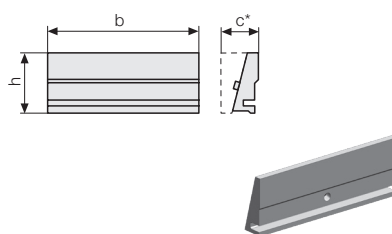


Push up the QIS interchangeable jaw up to the end of the slot and tilt



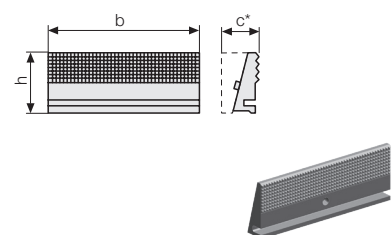
QIS base jaws with permanent magnets ground

Type	Part no.	Dimensions		
		b	c	h
EL/NC 100	93771 0203	100	16	34
EL/NC 125	93771 0303	125	20	45
EL/NC 160	93771 0403	160	23	54



QIS interchangeable jaws, smooth hardened and ground

Type	Part no.	Dimensions			Base length L	Clamping range S
		b	c	h		
EL/NC 100	83771 1201	100	21	34	380	0-185
NC 100						0-345
EL/NC 125	83771 1301	125	26	45	430	0-203
NC 125						0-333
EL/NC 160	83771 1401	160	31	54	550	0-282
NC 160						0-482



QIS interchangeable jaws, serrated hardened and ground

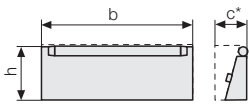
Type	Part no.	Dimensions			Base length L	Clamping range S
		b	c	h		
EL/NC 100	83771 2201	100	21	34	380	0-189
NC 100						0-349
EL/NC 125	83771 2301	125	26	45	430	0-203
NC 125						0-333
EL/NC 160	83771 2401	160	31	54	550	0-282
NC 160						0-482

* Tolerance ± 0.01 mm
 All dimensions in [mm]

Accessories for workholding systems EL and NC

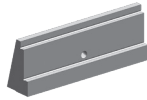
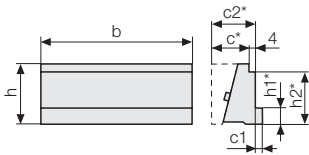
QIS interchangeable jaws

QIS interchangeable jaws, crowned hardened and ground

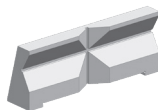
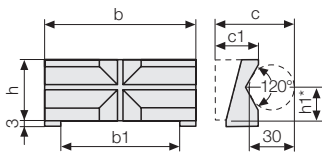


Type	Part no.	Dimensions			Base length L	Clamping range S
		b	c	h		
EL/NC 100	83771 3211	100	23	32.5	380	0–185
NC 100					540	0–345
EL/NC 125	83771 3311	125	27.3	43.0	430	0–201
NC 125					560	0–331
EL/NC 160	83771 3411	160	31.9	51.0	550	0–280
NC 160					750	0–480

QIS interchangeable jaws, stepped hardened and ground



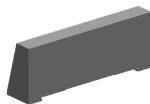
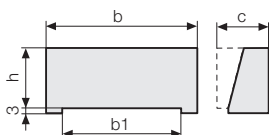
Type	Part no.	Dimensions						Base length L	Clamping range		
		b	c	c1	c2	h	h1		h2	Step h1	Step h2
EL/NC 100	83771 4201	100	21	4	25	34	10	29	380	8–181	16–189
NC 100									540	8–341	16–349
EL/NC 125	83771 4301	125	26	5	30	45	13	39	430	10–195	18–203
NC 125									560	10–325	18–333
EL/NC 160	83771 4401	160	31	5	35	54	15	45	550	10–274	18–282
NC 160									750	10–474	18–482



QIS interchangeable jaws, prismatic hardened and ground

Type	Part no.	Dimensions						Clamping diameter d
		b	b1 ^{H7}	c	c1	h	h1	
EL/NC 100	83771 5201	100	78	53	28.0	34	19	8–35
EL/NC 125	83771 5301	125	98	58	34.2	45	27	10–50
EL/NC 160	83771 5401	160	125	60	37.0	54	32	12–60

QIS interchangeable jaws, soft

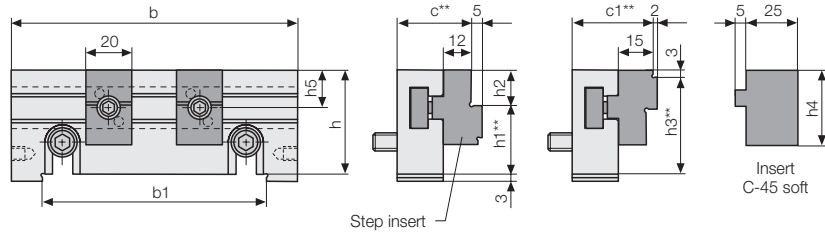
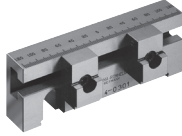
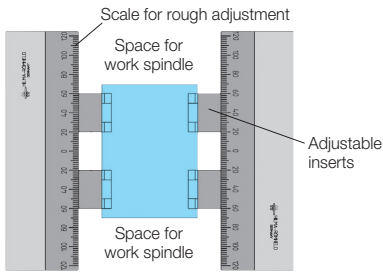


Type	Part no.	Dimensions				Base length L	Clamping range S
		b	b1 ^{H7}	c	h		
EL/NC 100	83771 7201	100	78	30.0	34	380	0–171
NC 100						540	0–331
EL/NC 125	83771 7301	125	98	36.5	45	430	0–182
NC 125						560	0–312
EL/NC 160	83771 7401	160	125	47.0	54	550	0–250
NC 160						750	0–450

* = Tolerance ± 0.01 mm
 ** = Tolerance ± 0.02 mm
 All dimensions in [mm]

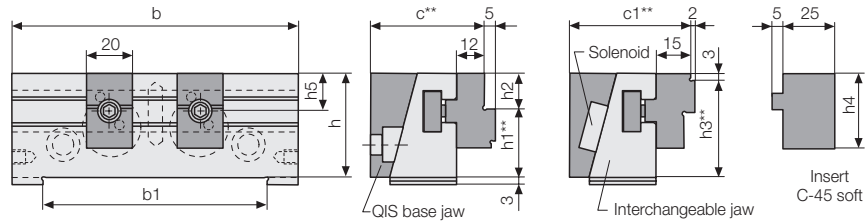
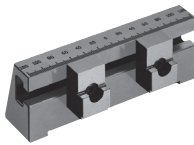
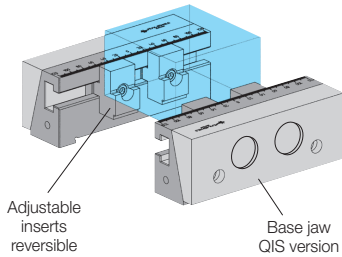
Accessories for workholding systems EL and NC
SlimFlex jaw system

SlimFlex jaw system



SlimFlex jaw system, standard version

Type	Part no. without step jaw inserts	Part no. with step jaw inserts	Part no. insert C45 smooth	Dimensions											Base length L	Clamping range S
				b	b1 ^{H7}	c	c1	h	h1	h2	h3	h4	h5			
EL/NC 100 NC 100	937140202	937140212	550500123	100	78	30	33	34	24	10	31	30	11	380 540	4-165 / 10-171 4-325 / 10-331	
EL/NC 125 NC 125	937140302	937140312	550500099	125	98	32	35	45	30	15	42	40	16	430 560	4-185 / 10-191 4-315 / 10-321	
EL/NC 160 NC 160	937140402	937140412	550500099	160	125	34	37	54	39	15	51	40	16	550 750	4-271 / 10-277 4-471 / 10-477	

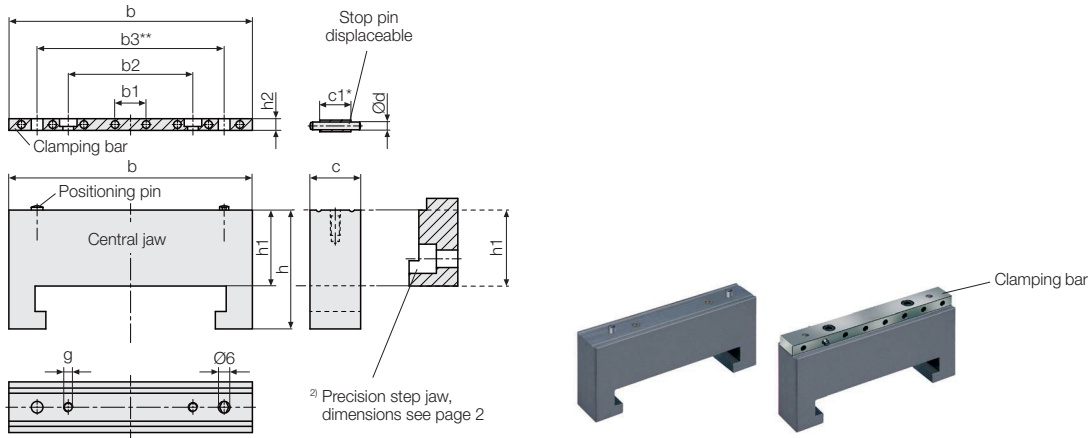


SlimFlex jaw system, QIS version

Type	Part no. without step jaw inserts	Part no. with step jaw inserts	Part no. insert C45 smooth	Part no. QIS base jaw	Dimensions											Base length L	Clamping range S
					b	b1 ^{H7}	c	c1	h	h1	h2	h3	h4	h5			
EL/NC 100 NC 100	937719201	937719211	550500123	937710203	100	78	45	48	34	24	10	31	30	11	380 540	4-135 / 10-141 4-295 / 10-301	
EL/NC 125 NC 125	937719301	937719311	550500099	937710303	125	98	50	53	45	30	15	42	40	16	430 560	4-149 / 10-155 4-279 / 10-285	
EL/NC 160 NC 160	937719401	937719411	550500099	937710403	160	125	55	58	54	39	15	51	40	16	550 750	4-229 / 10-235 4-429 / 10-435	

* = Tolerance ± 0.01 mm
** = Tolerance ± 0.02 mm
All dimensions in [mm]

Floating central jaws

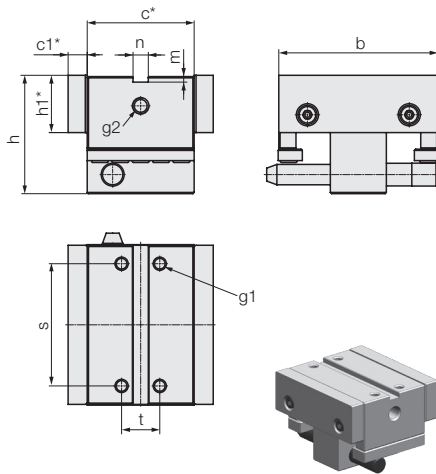


Standard version

Efficient and cost-effective: Workholding systems EL and NC can be retrofitted from single to multiple clamping systems at low costs and with minimum retrofitting work.

Type	Part no. Central jaw with clamping bar	Part no. Clamping bar	Part no. Precision step jaw ²⁾	Dimensions											
				b	b1	b2	b3	c	c1	Ød	g	h	h1	h2	
EL/NC 100	937150211	937151201	520820001	100	13	52	78	20	12	3	M5	48	29	5	
EL/NC 125	937150311	937151301	520820002	125	16	64	96	26	16	4	M5	61	39	6	
EL/NC 160	937150411	937151401	520820003	160	20	80	120	30	20	5	M6	70	45	9	

Displaceable fixed jaws



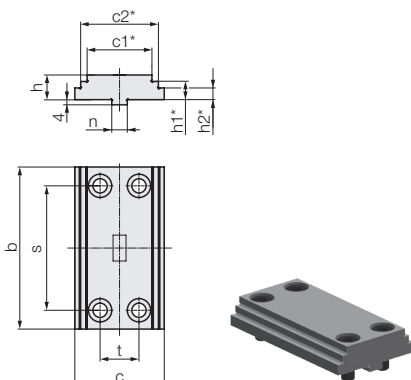
Displaceable fixed jaws hardened and ground

When machining small workpieces, the displaceable fixed jaw can be moved towards the operating side and fixed via the socket pin. When used as floating jaws, several workpieces can be clamped simultaneously.

Important note: After the clamping process, the workpieces must be touched before the production process.

Type	Part no.	Dimensions										
		b	c	c1	h	h1	m	n ^{H7}	s	t	g1	g2
NC100	937160211	100	65	13	72	34	4.2	10	80	26	M8x12	M12x18
NC125	937160311	125	84	15	93	45	4.35	12	96	30	M10x13	M12x18
NC160	937160411	160	100	18	111	54	4.35	18	130	48	M12x17	M20x27

Top central jaws



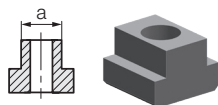
Top central jaws for displaceable fixed jaw hardened and ground

Type	Part no.	Dimensions									
		b	c	c1	c2	h	h1	h2	n ^{H6}	s	t
NC100	932842201	100	57	44	50	16.5	11.5	6.5	10	80	26
NC125	932842301	125	69	50	60	19	14	9	12	96	30
NC160	932842401	160	89	70	80	22	17	12	18	130	38

* = Tolerance ± 0.01 mm
 ** = Tolerance ± 0.02 mm
 All dimensions in [mm]

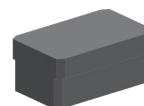
Accessories for workholding systems EL and NC
for mounting, positioning and operation

T-nut
DIN 508, 1 set = 4 off



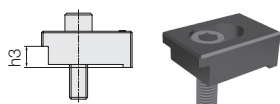
Type	Part no.	Thread	Width a
EL/NC	93777 3211	M12	14
EL/NC	93777 3231	M12	18
EL/NC	93777 3311	M16	18

Set of key blocks DIN 6323
for precise alignment of the clamping device
on the machine table, set 2 off



Type	Part no.	Table slot a
NC	93917 4121	14 h6
NC	93917 4141	18 h6

Clamping claws
1 set = 4 off, incl. screws



Type	Part no.	Thread	h3 [mm]
EL/NC	93777 2011	M12	24
EL/NC	93777 3011	M12	27
EL/NC	93777 3021	M16	27

6-stage clamping force preselection
retrofittable for hydro-mechanical vices



Type	Part no.
EL/NC 100	93762 0100
EL/NC 125	93762 0125
EL/NC 160	93762 0160

Precision workpiece stop
pivoting, rapid fixation
and adjustment in 2 levels



Type	Part no.	Thread
EL/NC 100/125	93291 0201	M12
EL/NC 160	93291 0401	M20

Load cell
for regular checks of the clamping force
of hydraulic and mechanical
clamping systems



Type	Part no.	Display range [kN]
EL / NC	29501 0001	0 – 60

Oil filling nipple



Type	Part no.
EL/NC	53090 0006

Oil injection press



Type	Part no.
EL/NC	27016 0001

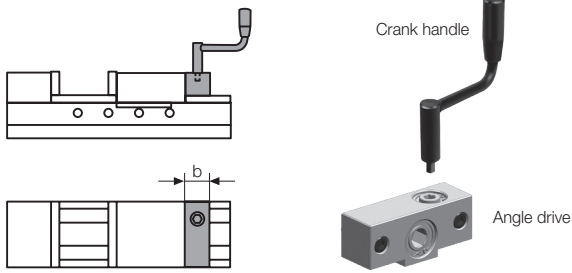
Allen wrench
for fixing screws and jaw inserts



Type	Part no.	SW
EL/NC 100	16911 0001	5
EL/NC 125	16911 0002	6
EL/NC 160	16911 0003	8

Accessories for workholding systems EL and NC
for mounting, positioning and operation

Angle drive with crank handle, retrofittable
when normal operation is difficult or even impossible

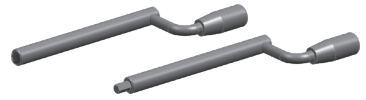


Type	Part no.	SW	b	Crank radius
EL/NC 100	932940505	10	39	125
EL/NC 125	932940605	10	43	125
EL/NC 160	932940705	10	46	125

Crank handle for angle drive



Type	Part no.	SW
EL/NC	420560031	10



Crank handle
for hydro-mechanical design

Type	Part no.	SW
EL/NC 100	420560020	14
EL/NC 125	420560019	17
EL/NC 160	420560021	19

for hydraulic design

Type	Part no.	SW
NC 100 H	420560022	8
NC 125 H	420560022	8
NC 160 H	420560023	10

Extension for crank handle
for hydro-mechanical design



Type	Part no.	SW	for base length [mm]
NC 100	520570021	14	540
NC 125	520570028	17	560
NC 125	520570022	17	720
NC 160	520570023	19	750

for hydraulic design

NC 100 H	520570024	8	540
NC 125 H	520570027	8	560
NC 125 H	520570025	8	720
NC 160 H	520570026	10	750

Accessories for workholding systems EL and NC

Hydraulic power unit

Power units

for the hydraulic version of series NC (data sheet WS 1.3080).



Hydraulic power units (examples)

Flow rate	[l/min.]	0.82	0.82	0.82
Operating pressure	[bar]	350	350	350
Number of valves (clamping circuits)		–	1	2
Pressure monitoring		yes	yes	yes
Remote control (manual switch)		–	1	2
Variants of application	without valves, operation by valve(s) with turning knob	1-circuit version (standard)	2-circuit version (alternating operation)	
Part no.		6810565	6810566	6810567

Clamping pumps and other power units on request.