

### SET-UP AND WORKING TIME REDUCTION BY TWIN CLAMPING



### **Function description**

Two movable clamping jaws and a fixed middle jaw allow a set-up and working time reducing twin clamping. The movable clamping jaw is placed by turning the spindle with the crank against the workpiece and held with about 1 kN (third-hand function).

Then the crank is turned further, the other movable clamping jaw is placed against the workpiece, fixed and force is built up via the mechanical spindle.

Balance springs compensate dimensional diescrepancies from up to ±3 mm between workpiece I and workpiece II.

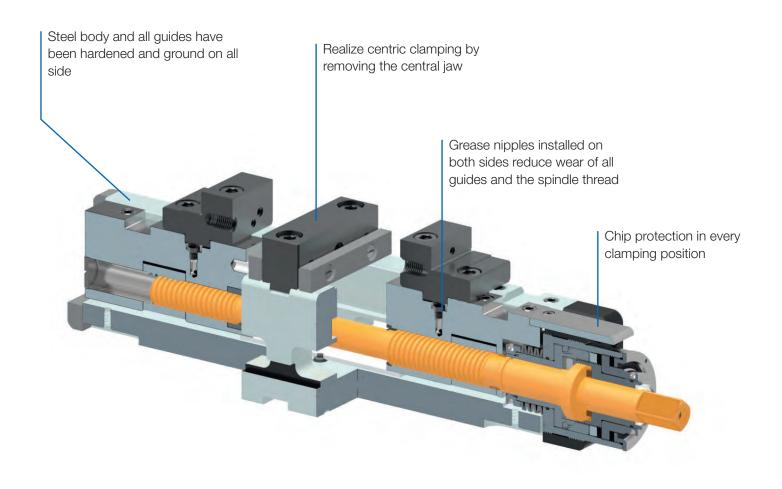


# NC-COMPACT TWIN VICES

Especially for the series production, setting up and cycle times are the critical factors. Due to their twin clamping, the NC-compact twin vices from RÖHM are ideally suited for efficient machining. Two movable clamping jaws and a fixed middle jaw enable a high repeatability of 0.01 mm and constant clamping force during every clamping operation.

### ADVANTAGES AT A GLANCE

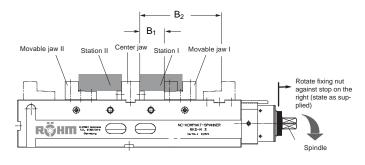
- (a) Maximum flexibility and versatile thanks to the possibility of 3-sided clamping
- ⊕ High repeatability of 0.01 mm as well as consistent clamping force for each clamping process
- Set-up and working time reduction by double clamping





# Clamping versions RKD-M

#### Clamping ranges: Twin clamping



#### Function:

Function:

To adjust mobile jaw I with regard to the workpiece of station I turn the spindle to the right by means of the handle (left-right handed thread). About 1 kN are applied to keep the jaw in the adjusted position (third-hand function). By further turning the lever, mobile jaw II is adjusted with regard to workpiece in station II, locked and power via the mechanical spindle is transmitted.

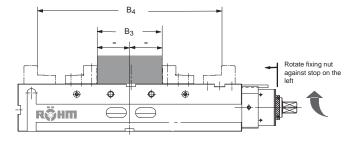
By means of compensating springs, variations between workpiece I and II of up to ± 3 mm are compensated.

#### Both stations must always be equipped with identical workpieces for clamping!

Fixing nut - stop on the <u>right</u> (spindle provides compensation) Jaw stroke: "Z" Station I: 50 mm Station II: 56 mm

Size		92	125
	Groove 1	0 - 48	0 - 48
B <sub>1</sub>	Groove 2	48 - 96	46 - 94
	Groove 3	-	92 - 140
	Groove 1	42 - 79	51 - 88
В2	Groove 2	79 - 127	86 - 134
	Groove 3	-	132 - 180

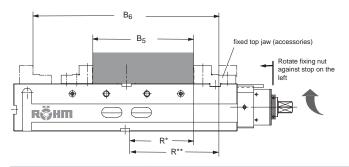
#### Clamping ranges: Centric clamping



Remove central jaw Fixing nut - stop on the <u>left</u> (spindle rigid) Stroke per jaw: "Z" 53 mm

Size		92	125
	Groove 1	30 -132	40 -142
В3	Groove 2	126 - 228	132 - 235
	Groove 3	-	224 - 327
	Groove 1	92 - 195	120 - 222
В4	Groove 2	188 - 290	212 - 315
	Groove 3	-	304 - 407

#### Clamping ranges: Single clamping



Remove central jaw and movable mounting jaw I. Install fixed mounting jaw (accessory - not in scope of delivery). Fixing nut - stop on the <u>left</u> (spindle rigid) Stroke of moving jaw: "Z" 53 mm

Size		92	125
	Groove 1	126 - 177	171 - 222
B <sub>5</sub>	Groove 2	174 - 225	217 - 268
	Groove 3	-	263 - 314
	Groove 1	196 - 247	267 - 318
В <sub>6</sub>	Groove 2	244 - 295	313 - 364
	Groove 3	-	360 - 410
	R*	101	141
	R**	140	197

4050





### RKD-M - double clamping, without power transmitter



#### **APPLICATION**

For flexible clamping tasks on machining centers and other production systems. Triple clamping function: Double clamping - Centric clamping - Single clamping.

Clamping system mechanical without power transmitter, manually operated.
With one-sided drive spindle.

#### **CUSTOMER BENEFITS**

- Large clamp stroke (50 mm per jaw)
   The clamping thread of the spindle is protected from dirt and chips in every
- basic jaw position
  With grease nipples installed on both sides, that all guides and the spindle thread can be lubricated quickly and easily
- Horizontal, vertical or side mounting

#### TECHNICAL FEATURES

- Vice with two movable clamping jaws and a stationary center jaw
- Steel basic body as well as all guides hardened and ground on all sides
  Fastening only possible with clamping claws (direct fastening on request)
  Constant clamping force for every clamping operation and high repeatability
  when a torque wrench is used

RKD-M = RÖHM, compact, double clamping, manual

RKD-M, with reversible stepped laws and centre law

Item no.	180468▲	180469
Jaw width A mm	92	125
B1 slot 1 mm	0-48	0-48
B1 slot 2 mm	48-96	46-94
B1 slot 3 mm	-	92-140
B2 slot 1 mm	42-79	51-88
B2 slot 2 mm	79-127	86-134
B2 slot 3 mm	-	132-180
C mm	32	40
D mm	492	630
E mm	117	145
F mm	366	495
G <sub>-0,02</sub> mm	85	105
H <sub>-0,02</sub> mm	30	40
J mm	56	70
K mm	94	126
L mm	10	10
M mm	25	30
N <sub>-0,01</sub> mm	16	20
O mm	36	36
P mm	114	122
R mm	143	201
S mm	31	32
T <sub>.0,02</sub> mm	30	37,5
U mm	20	20
V mm	12	12
W mm	1 x 48	2 x 46
Y mm	12	13
Z mm	50/53	50/53
Key-width SW	17	19
a mm	63	80
b mm	13,6	15,6
c1	M6 x 14	M8 x 14
c2	M5 x 9	M5 x 10
c3	M10 x 16	M10 x 18
d mm	48	60
e mm	8	12
f mm	14	18
g mm	70	95
h mm	20	25
imm	50	45
k x depth	M10 x 18	M12 x 22
I <sub>-0,02</sub> mm	177	237
y±0,01 mm	40	47,5
z mm	72	100
Clamping force kN	25	40
Weight kg	24	52

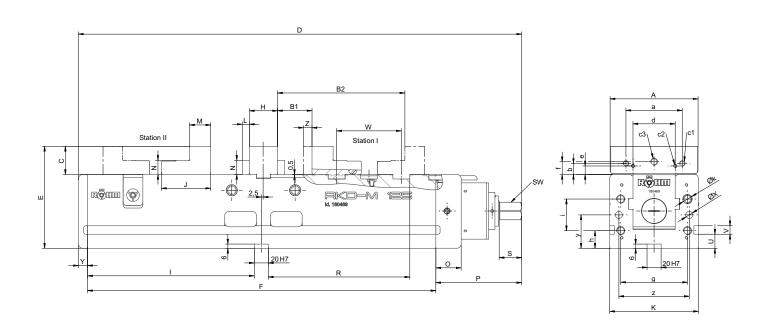
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NC-Compact twin vices

# RKD-M - double clamping, without power transmitter







## Accessories RKD-M

A37
Stepped jaws SB, reversible, with fixing screws

Item no.	Contents of delivery	Size	Width mm	Height mm
161831 ▲	set	92	92	32
162631	set	125	125	40



 $\textbf{Standard jaws SGN}, \ \text{one side smooth, one side grooved, hardened and ground}$ 



Item no.	Contents of delivery	Size	Width mm	Height mm
162363	set	92	92	32
158897	set	125	125	39,7

Standard jaws finely checkered SGNf, one side finely checkered, one side grooved, hardened and ground



Item no.	Contents of delivery	Size	Width mm	Height mm
163223	set	92	92	32
163225	set	125	125	39,7

A37 **V-jaw PB**, horizontal and vertical



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm	Height prism mm	Chucking capaci	ity mm
							horizontal	vertical
162365 ▲	set	92	92	32	16	19,5	12-36	12-36
158641	set	125	125	40	20	24	15-40	18-60

Claw jaws SKB with fine step, 2.5 mm clamping depth



Item no.	Contents of delivery	Width mm	Height mm	Thickness mm
166514	set	92	32	14
166520	set	125	40	16

Including fixing screws

A37
Claw jaws SKB without step, universal for clamping depth > 2.5 mm

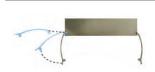


Item no.	Contents of delivery	Width mm	Height mm	Thickness mm			
166661 ▲	set	92	32	14			
166667	set	125	40	16			
1 1 2 6							

Including fixing screws

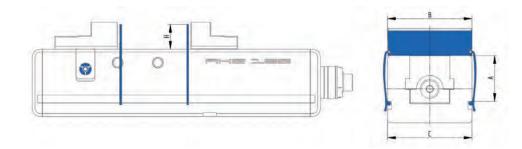
### Accessories RKD-M

A37 **Support rails Cliparc**, set with 10 different pairs of rails and 4 clamps in wooden box



Item no.	Web height A	Jaw width B mm	Rail height H	Spare clamp (Set = 4 pieces)
1295913	8▲ 53	92	10/16/18/20/23/25/26/27/28/29	1295916
1295914	1▲ 73	125	10/15/20/25/28/30/33/35/36/37	1295917





Draw-down jaws RNG, with two permanent magnets



Ċ	Item no.	Contents of delivery	Width mm	Height mm
	155237 ▲	set	92	32
	159227	set	125	39,5

Including fixing screws

A37 Standard insert RNS, held by two permanent magnets

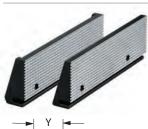


Item no.	Contents of delivery	Width mm	C mm	Y mm
155242▲	set	92	32	21
159232	set	125	40	26





Standard insert finely checkered RNSf, held by two permanent magnets



	Item no.	Contents of delivery	Width mm	C mm	Y mm
ľ	163270	set	92	32	21
	163267▲	set	125	40	26







## Accessories RKD-M

A37
Claw insert RNK, held by two permanent magnets



Item no.	Contents of delivery	Width mm	C mm	Y mm
155247	set	92	32	21
159235 ▲	set	125	40	26

A37 **Drive adapter ATA** 



Item no.	Contents of delivery	Size	Square
162192	piece	92	17-1/2"
161730	piece	125	19-1/2"



A37 Fixed stepped jaw FSB, for single clamping, reversible



Item no.	Contents of delivery	Size	Width mm
178777	piece	92	92
178231	piece	125	125

A37 Center jaws MBA



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm
161833 ▲	piece	92	92	32	30
162632	piece	125	125	40	40

C15 Hand crank HKU, with octagon socket



Item no.	Contents of delivery	Size	Octagon	Key-width SW	L
009153	piece	92	17	Octagon	160
009154	piece	125	19	Octagon	200



## Accessories RKD-M

A37 Single clamp SPE, for mounting vices on end and on the base



Item no.	Contents of delivery	T-slot	Thread
149121	piece	12	M10x50
149122	piece	14	M12x55
149123	piece	16	M12x60
149124	piece	18	M16x60
155722	piece	20	M16x65
151507	piece	22	M16x65

A37 Fixed slot nuts NTS, hardened and ground, with fixing screw



Item no.	Contents of delivery	Size	Length mm
014823	set	20x12	22
014825	set	20x14	25
014827	set	20x16	25
014829	set	20x18	25
014831	set	20x20	22
014833	set	20x22	32

A26 Torque wrench



Item no.	Torque Nm	Length mm	Output	Working accuracy
10004116	20-120	435	12,7=1/2"	3%
10004117	60-320	659	12,7=1/2"	3%