ROHM Vices

Operation guide

TYPE	RKE				RKE-M				RKE-LV		RKK		
	NC-Compact vices												
Features	- Highest clamping precision - Clamping force presetting - Precise, wear-resistant body				- Highest clamping precision - Without clamping force presetting - Precise, wear-resistant body				- Very good accessibility for 5-axis machining - Clamping force presetting - Large clamping range		- Designed to resist deformation for the highest clamping precision - Greatest repeatability - Clamping force presetting		
Clamping system	mechanical-mechanical size 92: mechanical-hydraulic				mechanical				mechanical-mechanical		mechanical-mechanical		
Force amplification	✔								✔		✔		
Set-up options	3-Side, Duo-Tower Quattro-Tower				3-Side, Duo-Tower Quattro-Tower				Base		3-Side, Duo-Tower Quattro-Tower		
Machining centers with high working accuracy	✔✔				✔✔				✔✔		✔✔		
Universal milling machines with high working accuracy	✔✔				✔✔				✔✔		✔✔		
Universal milling machines standard version	✔				✔				✔		✔		
Jig boring machines	✔✔				✔✔				✔✔		✔✔		
5-axis machining	✔				✔				✔✔		✔		
Grinding machines	✔				✔				✔		✔		
Series production	✔				✔				✔		✔		
For limited space	✔				✔				✔✔		✔		
Jaw width mm	**92** [1]	**125** [1]	**160** [1]	**200** [1]	**92** [1]	**125** [1]	**160** [1]	**200** [1]	**125** [1]	**125** [3]	**135** [2]	**160** [2]	**200** [2]
Clamping range (max.)	208	312	451	451	208	312	451	451	192	225	215	340	340
Length (opened) mm	345	478	633	633	315	442	607	607	372	372	483	618	618
Width mm	94	126	162	162	94	126	162	162	126	126	150	205	205
Height mm	112	140	165	175	112	140	165	175	140	130	148	179	189
Clamping force (max.) kN	25	40	60	60	25	40	60	60	40	40	40	60	60
Weight kg	15	41	79	85	15	41	79	85	29	29	50	107	108
Page	4014				4022				4034		4040		

✔ yes ✔ suitable ✔✔ very suitable

[1] with stepped jaws
[2] with standard jaws
[3] with carrier jaws
[4] with claw-type jaws
[5] with heightend stepped jaws

ROHM Vices

Operation guide

TYPE	RKD-M		RZM				RKZ-M				
	NC-Compact twin vices		NC-Compact self centering vices								
Features	- Double, centric and compact wrench (removable middle jaw) - Greatest repeatability - Low rapid traverse		- Very large clamping stroke due to patented guide system - Open design for optimal chip flow - Overhead spindle for optimal power transmission				- Highest average precision and repeatability - Minimum collision contour				
Clamping system	mechanical		mechanical				mechanical				
Force amplification	*		*				*				
Set-up options	3-Side Duo-Tower, Quattro-Tower		Base				Base				
Machining centers with high working accuracy	✔✔		✔				✔				
Universal milling machines with high working accuracy	✔✔		✔				✔				
Universal milling machines standard version	✔✔		✔				✔				
Jig boring machines	✔✔		✔				✔				
5-axis machining			✔✔				✔				
Grinding machines	✔		✔				✔				
Series production	✔		✔				✔				
For limited space	✔		✔✔				✔				
Jaw width mm	**92** [1]	**125** [1]	**92** [4]	**92** [4]	**125** [4]	**125** [4]	**50** [1]	**70** [1]	**92** [1]	**125** [1]	**125** [5]
Clamping range (max.)	127	180	160	100	142	222	111	153	208	269	269
Length (opened) mm	480	617	230	170	298	218	157	209	283	353	353
Width mm	94	126	94	94	125	125	52	72	94	126	126
Height mm	117	145	174	174	196,5	196,5	75	95	117	145	165
Clamping force (max.) kN	25	40	20	20	25	25	10	15	20	25	25
Weight kg	24	52	11,7	11,5	17,4	20,3	3,5	7	18	32,5	35
Page	4052		4060				4064				

* Constant clamping force for each clamping process and high repeatabilityin combination with a torque wrench

ROHM Vices

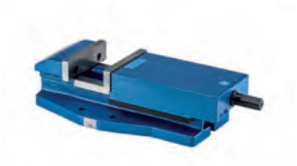
Operation guide

TYPE	RB-K Orange Line					RBAW		
	Machine vices					NC-power vices		
Features	- Great accuracy due to precise jaw guidance - Fast clamping range adjustment using the pin system					- Integrated angular drive - Clamping width presetting		
Clamping system	mechanical-hydraulic					mechanical-hydraulic		
Force amplification	✔					✔		
Set-up options	Base					3-Side		
Machining centers with high working accuracy	✔✔					✔✔		
Universal milling machines with high working accuracy	✔✔					✔✔		
Universal milling machines standard version	✔					✔		
Jig boring machines	✔✔					✔✔		
5-axis machining								
Grinding machines	✔					✔		
Series production	✔					✔		
For limited space	✔					✔		
Jaw width mm	**92**	**113**	**135**	**160**	**200**	**113**	**135**	**160**
Clamping range (max.)	100	170	220	310	350	175	225	310
Length (opened) mm	490	583	679	817	1022	500	578	702
Width mm	160	160	200	240	280	115	137	162
Height mm	91	97	112	133	171	96	111	132
Clamping force (max.) kN	25	30	40	50	100	30	40	50
Weight kg	15,5	24	39	60	112	22	36	62
Page	4076					4082		

✔ yes ✔ suitable ✔✔ very suitable

ROHM Vices

Operation guide


TYPE	MSR				RS					UZ				
	Machine vices													
Features	- Fast clamping range adjustment using the pin system				- Made of special steel casting for flexible application - Entire clamping range can be reached by turning the crank					- Centric clamping - Spindle covered in the working area				
Clamping system	mechanical				mechanical					mechanical				
Force amplification	*				*					*				
Set-up options	Base				Base					Base				
Machining centers with high working accuracy	✔				✔					✔				
Universal milling machines with high working accuracy	✔				✔					✔				
Universal milling machines standard version	✔				✔					✔				
Jig boring machines														
5-axis machining														
Grinding machines	✔				✔					✔				
Series production	✔				✔					✔				
For limited space	✔				✔					✔				
Jaw width mm	**125**	**150**	**150**	**175**	**92**	**113**	**135**	**160**	**200**	**113**	**135**	**160**	**200**	**250**
Clamping range (max.)	150	200	300	400	85	105	125	145	185	110	140	180	300	400
Length (opened) mm	401	487	587	701	362	423	510	575	675	358	408	495	655	767
Width mm	95	125	125	145	160	160	200	240	280	132	152	180	200	220
Height mm	80	100	100	118	79,6	89,6	103,6	119,6	144,6	92,6	105,1	123,6	141,6	147,6
Clamping force (max.) kN	30	50	50	60	18	25	35	45	55	15	22	24	25	28
Weight kg	12,7	25,6	29,5	51,2	12	13,5	25	40	65	12,4	19	31	52	71
Page	4088				4090					4094				

*Constant clamping force for each clamping process and high repeatabilityin combination with a torque wrench

ROHM Vices

Operation guide

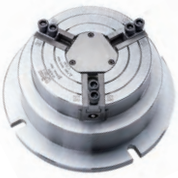
TYPE	KZS-P					KZS-PG			
	Stationary power chucks								
Features	- Optimally suited for automated work sequences - Centric clamping - Jaws with fine serration and cross-tenon interface					- Optimally suited for automated work sequences - Centric clamping - Jaws with fine serration and cross-tenon interface - Large jaw stroke			
Clamping system	pneumatic					pneumatic			
Clamping force	■■■■□					■■■□□			
Set-up options	Base, zero point clamping system					Base, zero point clamping system			
Machining centers with high working accuracy	✔✔					✔✔			
Universal milling machines with high working accuracy	✔					✔			
Universal milling machines standard version	✔					✔			
Jig boring machines	✔					✔			
5-axis machining	✔✔					✔✔			
Grinding machines	✔					✔			
Series production	✔✔					✔✔			
For limited space	✔✔					✔✔			
Size	**64**	**100**	**160**	**200**	**250**	**100**	**160**	**200**	**250**
Jaw stroke mm	2,3	2,3	3,5	4,8	6	7	9,5	12	18,2
Clamping force (max.) kN	4,5	18	45	52	55	8	20	24	21
Weight kg	1,25	3,9	11,2	20,4	32,5	4	11,5	20,8	32,8
Page	4101					4103			

✔ yes ✔ suitable ✔✔ very suitable

ROHM Vices

Operation guide





TYPE	KZS-H	KZS-HG	SSP
	Stationary power chucks		
Features	- Optimally suited for automated work sequences - Centric clamping - Jaws with fine serration and cross-tenon interface	- Optimally suited for automated work sequences - Centric clamping - Jaws with fine serration and cross-tenon interface - Large jaw stroke	- Optimally suited for automated work sequences - Centric clamping - Without through-hole - Jaws with fine serration
Clamping system	hydraulic	hydraulic	pneumatisch
Clamping force	■■■■□	■■■■□	■■■■■
Set-up options	Base, zero point clamping system	Base, zero point clamping system	Base, zero point clamping system
Machining centers with high working accuracy	✔✔	✔✔	✔✔
Universal milling machines with high working accuracy	✔	✔	✔
Universal milling machines standard version	✔	✔	✔
Jig boring machines	✔	✔	✔
5-axis machining	✔✔	✔✔	✔✔
Grinding machines	✔	✔	✔
Series production	✔✔	✔✔	✔✔
For limited space	✔✔	✔✔	✔✔

Size	**64**	**100**	**160**	**100**	**160**	**200**	**250**	**160**	**200**	**250**	**315**
Jaw stroke mm	2,3	2,3	3,5	7	9,5	12	18,2	4,2	4,2	5	5
Clamping force (max.) kN	5	18	45	16	40	50	50	36/38	55/60	90/96	111/118
Weight kg	1,5	5	14,2	5,1	14,5	24,8	37,9	25	34	54	65
Page	4107			4109				4112			

*Constant clamping force for each clamping process and high repeatabilityin combination with a torque wrench

ROHM Vices

Operation guide

TYPE	BSS		BOF				BSH							DPV				DPV 3-W
	Drilling machine vices																	
Features	- Compact and stable const-ruction - Entire clam-ping range can be reached by turning the crank		- Compact and stable construction - Entire clamping range can be reached by turning the crank - Long guidance of the movable jaws also in the outer clamping range				- Do-it-yourself version			- Robust and stable version				- Covering of the threaded spindle by cover sleeve - Constructional length remains the same - Entire clamping range can be reached by turning the crank				
Clamping system	mechanical manually operated		mechanical manually operated				mechanical manually operated							mechanical manually operated				
Force amplification																		
Set-up options	Base		Base				Base							Base				3-Side
Machining centers with high working accuracy																		
Universal milling machi-nes with high working accuracy																		
Universal milling machi-nes standard version																		
Jig boring machines																		
5-axis machining																		
Grinding machines																		
Series production	✔		✔				✔							✔				
For limited space																		
Jaw width mm	**110**	**135**	**90**	**110**	**135**	**160**	**65**	**80**	**100**	**80**	**100**	**120**	**140**	**80**	**100**	**120**	**150**	**100**
Clamping range (max.) mm	100	160	90	130	160	220	65	85	80	80	95	110	150	70	92	110	125	93
Length (opened) mm	510	587	195	315	365	445	125	150	170	200	215	260	300	154	175	225	238	189
Width mm	175	205	145	175	205	245	105	130	175	140	175	215	220	142	152	180	198	159
Height mm	72,5	80,5	60	72,5	80,5	95,5	43	46	47	70	75	85	85	58	63,5	63,5	65	65
Clamping force (max.) kN	10	10	8	10	12	15												
Weight kg	9,5	13,5	5,5	9,5	13,5	25	1,2	1,7	4,2	5	7	11	12,5	3,6	4,3	6,3	8,1	5,1
Page	4120		4120				4121							4122				4122

✔ yes ✔ suitable ✔✔ very suitable

Operation guide






TYPE	PL-S micro	PL-S	PLF	PL-G	PS-SV	PS-ZD
	Grinding and inspection vice					
Features	- Draw-down effect - Simple clamping and releasing with allen key - Clamping jaw adjustable in steps; engages automatically - No spindle		- Draw-down effect - Made of alloyed tool steel, hardened and finely ground - Horizontal and vertical ground prism - No spindle which could, become dirty during erosion	- Clamping and releasing with threaded spindle - Made of alloyed tool steel, hardened and finely ground	- Made of alloyed tool steel, hardened and finely ground - Bearing and location pins hardened and ground with a precision of 0.001 mm - The clamping device can be positively locked in any angular position	- Positive locking in any desired angular position by locking screws - Made of alloyed tool steel, hardened and finely ground - Can be rotated 360°
Clamping system	mechanical, manually operated		mechanical, manually operated	mechanical, manually operated	mechanical, manually operated	mechanical, manually operated
Force amplification						
Set-up options	Base		Base	Base	Base	Base
Machining centers with high working accuracy						
Universal milling machines with high working accuracy						
Universal milling machines standard version						
Jig boring machines						
5-axis machining						
Grinding machines	✔✔		✔✔	✔✔	✔✔	✔✔
Series production						
For limited space						

Jaw width mm	**34**	**45**	**70**	**90**	**120**	**50**	**73**	**100**	**60**	**73**	**88**	**70**	**90**	**70**	**120**
Clamping range (max.)	25	50	80	120	150	65	100	125	55	100	125	80	120	80	150
Length (opened) mm	75	110	160	210	280	140	190	245	110	210	250	160	210	180	270
Width mm	34	45	70	90	120	50	73	100	60	73	88	70	90	110	160
Height mm	35	45	62	80	90	50	67	90	50	67	88	93	113	137	210
Clamping force (max.) kN	2	2	2,5	3	4	1,6	2	5	2	4	4	6	7	-	-
Weight kg	0,35	1	3	5,8	13,5	1,4	4,1	7,3	1,6	4	7,6	5,3	11	11,1	43
Page	4126					4127			4127			4128		4128	

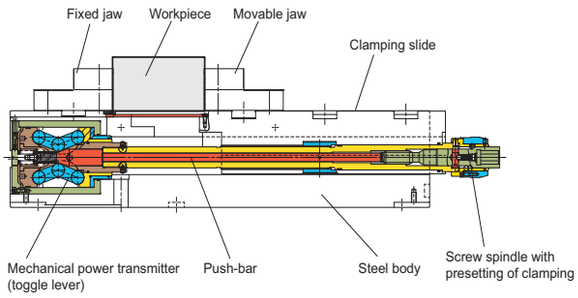
* Constant clamping force for each clamping process and high repeatabilityin combination with a torque wrench

Sectional view toggle lever principle

NC-COMPACT VICES RKE

High-end NC-Compact vice. Mounting of the power transmitter in the steel body. Further designs (iron cast body, hydraulic actuation etc.) on request.

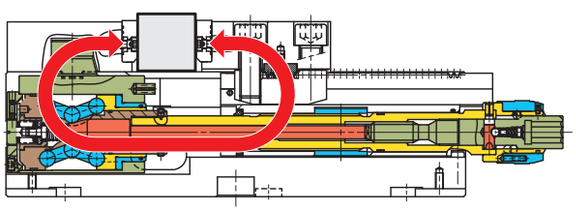
SECTIONAL VIEW RKE



RKK SIZE 3-5

NC-Compact vice for very high clamping precision. Clamping slide with toothing for continuously variable presetting. The power transmitter is mounted in the fixed jaw. This form of support enables high-precision clamping.

SECTIONAL VIEW RKK SIZE 3 - 5



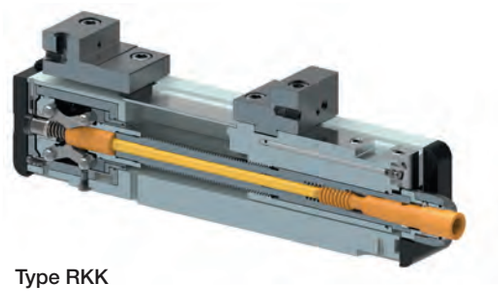
Functional description

CLAMPING SYSTEM MECHANICAL-MECHANICAL WITH TOGGLE LEVER

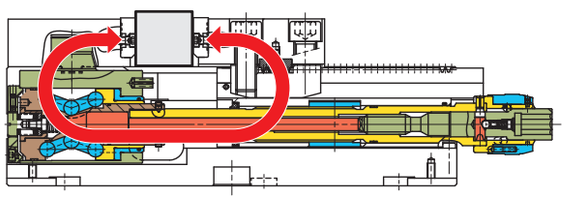
SINGLE CLAMPING

a) Clamping with power transmission
Mechanical pretensioning is achieved by turning the hand-crank. The threaded spindle with the large incline brings the movable clamping jaw into contact with the workpiece, whereby resistance can be noted on the hand-crank. Continuing to turn the crank in clockwise direction triggers automatic disengagement and switch to mechanical transmission. Further turning of the crank moves a pressure pin axially, which generates the high clamping force through spreading of the toggle lever.
b) Presetting of different clamping forces
To avoid damage to sensitive workpieces caused by excessive clamping force, different clamping forces can be preset. The presetting can be performed simply by turning the adjustment collar on the end of the spindle.
c) Mechanical clamping without power transmission
For consecutive clamping of multiple workpieces having uneven contact surfaces, greater pretensioning is required. Turning the adjustment collar to “0” deactivates the mechanical power transmission. The workpieces can then be mechanically pretensioned until the yield in the workpieces is eliminated. The adjustment collar can then be set to the desired clamping force, and the high clamping force introduced.

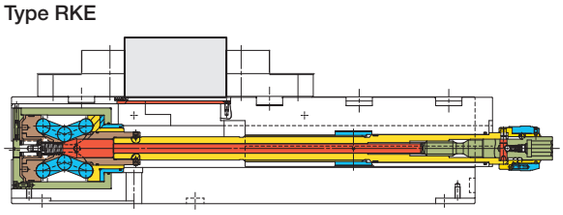
RKK: The power transmission guarantees that the body remains free from deformation; a very high clamping accuracy is achieved.



Type RKK

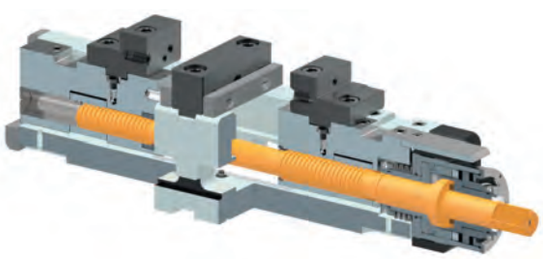


Type RKE



TWIN CLAMPING RKD-M

The anchoring nut on the drive spindle is turned to the right (delivery condition). The moveable clamping jaw 1 is adjusted up to the workpiece in station 1 by turning the spindle in a clockwise direction with the hand crank and held with ca. 1 kN (third manual function). By continuing to turn the hand crank in a clockwise direction as far as it goes, clamping jaw 2 is also placed on the workpiece on station 2. The build-up of force acts on the clamping jaws via the mechanical spindle. The balance springs compensate for dimensional differences of up to ±3 mm from workpiece 1 to workpiece 2. When clamping, both clamping positions must be filled with the same workpieces. To induce the exact clamping force repeatedly, the exact, specified torque must be induced via a torque wrench (see clamping force chart in the BDA).



Type RKD-M

CENTRIC CLAMPING RKD-M

The anchoring nut on the drive spindle is turned to the left. The spindle is rigid. The centre jaw is removed. The moveable clamping jaws 1 and 2 are adjusted up to the workpiece by turning the spindle in a clockwise direction with the hand crank. The build-up of force acts on the clamping jaws. The position of the centre of the workpiece is always the same with respect to the transverse groove. To achieve the exact clamping force repeatedly, the exact, specified torque must be induced via a torque wrench (see clamping force chart in the BDA).

SINGLE CLAMPING RKD-M

The anchoring nut on the drive spindle is turned to the left. The spindle is rigid. A stepped jaw must be used here (not in delivery contents), and moveable clamping jaw 1 removed. Also remove the centre jaw. The moveable clamping jaw 2 is adjusted up to the workpiece in station 1 by turning the spindle in a clockwise direction with the hand crank. The build-up of force acts on the clamping jaws uniformly via the mechanical spindle. To induce the exact clamping force repeatedly, the exact, specified torque must be induced via a torque wrench (see clamping force chart in the BDA).