OK-VISE®

The Only Original Wedge-clamp

Small in Size – Giant in Performance

10 YEAR WARRANTY

OK-VISE®
Clamping Method

COMPANY PROFILE

Founded in 1984, OK-VISE Oy is located in the beautiful lake district of Central Finland, in the Muurame Business Park, a center of the megatronics industry in the northern European Union.

The OK-VISE low-profile clamp was originally designed to solve a specific workholding need in the flowmeter production process of our parent company. This clamping method attracted the interest of other companies due to the obvious benefits it offers, such as the possibility of three-directional machining, extreme clamping force, and ultimate efficiency.

Our products are available through a global distribution network and can reach even the most distant places within a few working days. A wide selection of information as well as the latest updates about our products are easily obtained from our website at: *www.ok-vise.com*

This unique workholding solution is designed to meet the demands of the modern metal-working, plastic, aerospace, and electronics industries. As a result of constant product development and dedicated customer service, our name stands for quality in every respect, and today OK-VISE is a well recognized trademark around the globe.

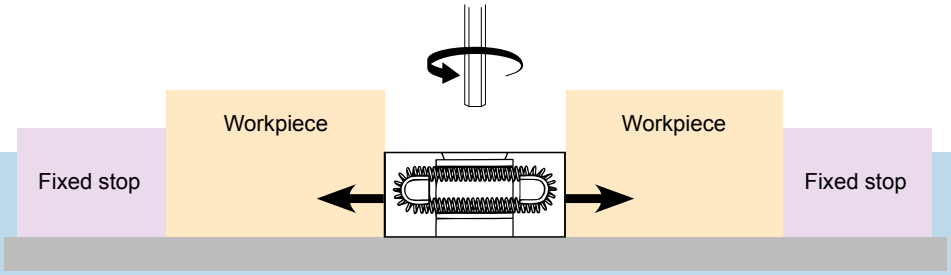
OPERATING PRINCIPLE

OK-VISE low-profile clamps function on the principle that when tightened down they expand, simultaneously pressing the workpieces against the guide and preventing any possibility of play. These clamps are designed to fit between the workpieces and take very little space on the fastening base. Small in size, yet possessing an excellent clamping force up to 150 kN, these clamps guarantee a holding capacity which clearly exceeds the load imposed by machining forces.

Our low-profile clamps can be used on single machines just as successfully as in large Flexible Manufacturing Systems. No additional investments other than fixed stoppers are required.

Standard models come with a hardness of 48-52 HRC and serrated jaws. Smooth jaws are also available on request. Both the wedge and the jaws are made of tool steel and are through hardened. A fastening operation involving one bolt (M5-M16) ensures quick set up times.

OK-VISE low-profile clamps come in two basic models, one with a single-wedge construction and the other with a double-wedge construction that creates a pull-down action. We also offer a line of machinable jaw models for workpieces of irregular shape and a special models for castings and wire EDM applications.



10 YEAR WARRANTY

A CORE COMPONENT OF ANY MODERN WORKHOLDING SYSTEM

OK-VISE low-profile clamps adapt optimally to any system. They fit into grid pattern systems, T-slot tables, serrated rails, and many other platforms. Additionally, the most economical fixtures can be built by using OK-VISE low-profile clamps on machinable plates. OK-Vise clamps are suitable for three-directional machining, 5-axis machining, and many other modern machining methods. When you need fixtures for any modern machining application, OK-VISE clamps are your best choice.

ABSOLUTE STABILITY

The key feature of the OK-VISE low-profile clamp is its cross-wedge structure in both the horizontal and vertical planes, which means that the clamp is locked firmly in every direction as it is tightened down. This eliminates all possibilities of measurement error due to sliding.

EXTREME CLAMPING FORCE

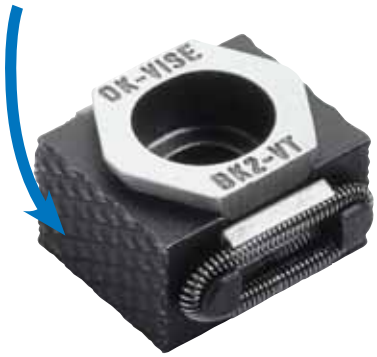
With extreme clamping force up to 150 kN, OK-VISE low-profile clamps guarantee a holding capacity that clearly exceeds the load imposed by machining forces.

SMALL IN SIZE – GIANT IN PERFORMANCE

Low-profile clamps do not require as much space as traditional machine vises. This leads to efficient use of the machinable area, savings in tool changes, less operator interventions, and ultimately to extended cycle times while reducing machine downtime.
Thanks to their small size, these light-weight clamps are easy to install. Moving them from one application or machine to another is virtually effortless. Their universal design makes easy use a reality in manual as well as CNC machines. With OK-VISE low-profile clamps, it is possible to achieve the highest level of effectiveness.

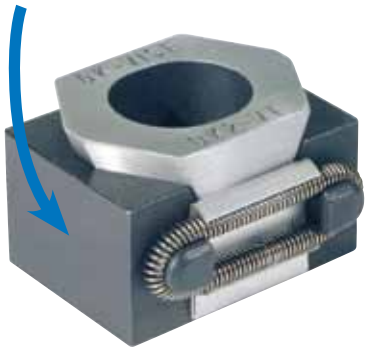
SERRATED JAWS

General-purpose clamp for your workshop. Serration creates high friction, which ensures reliable clamping in any circumstances.



SMOOTH JAWS

When no marks on the workpieces are allowed, smooth jaws are used.



PULL-DOWN MODELS

In addition to holding the workpiece in place, pull-down clamps also generate pull-down action, pressing workpieces down onto the fixture base.

MACHINABLE JAWS

Single-wedge clamps are also available with extended jaws and can be machined to suit the geometry of the workpiece. The smallest model can be machined up to 3 mm and the larger ones up to 5 mm.

ADDITIONAL PIECE MODELS

Additional piece models have machined female threadings (M5) for socket head screws on the side of the jaw, making it quick and easy to use various additional pieces which can also be machined into different shapes.

SELF-ADJUSTABLE MODELS

These clamps have a self-adjustable ball pressure screw inserted into a clamp jaw. The ball bearing at the end is made of steel and equipped with torsion protection, allowing the ball to self-adjust up to 9 degrees. This makes clamping irregular-shaped parts and castings more flexible.

STAINLESS STEEL MODEL

The stainless steel model is designed to meet the demands of wire EDM applications. This model only contains parts made of high quality stainless steel. Available only with smooth-ended jaws.

ECONOMY MODELS

These models meet the demands of workholding when ultra precision and high clamping force are not necessary. They are made of the same raw material as our other models.
Only the bottom of the jaw is ground. Our smallest series is only available as the economy model (AK2-VT-SO).

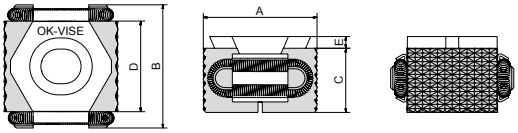
INCH MODELS

D-series clamps are also designed for the half-inch bolt. The center hole of the inch-series wedge is wider in order to fit the half-inch socket head screw.
VTI and WTI in the code stand for inch models.

ACCESSORIES

Several accessories can be utilized with OK-VISE clamps. Take a look at the expanding range of accessories at *www.ok-vise.com/low-profile-clamps/accessories*

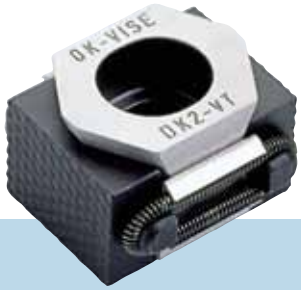
SERRATED BASIC VERSION

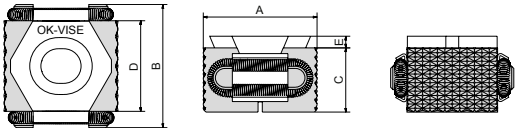


Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT	27	29	31	29	15	21	2.5	M8x20	25	44	55	48-52

BK2-VT

max 2,5 tons!



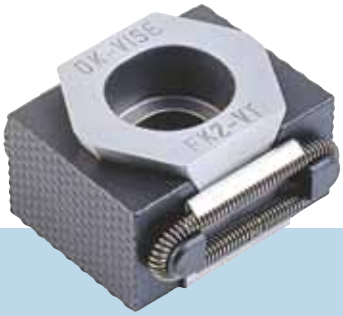


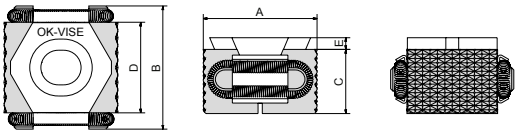
DK2-VTI measures given in inches and ounces.

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max									
DK2-VT	42	45	49	41	22	30	4	M12x30	65	145	180	48-52
DK2-VTI	1.65	1.77	1.92	1.61	0.86	1.18	0.15	1/2-1 1/4	65	145	6.34*	48-52

DK2-VT / DK2-VTI

max 6,5 tons!



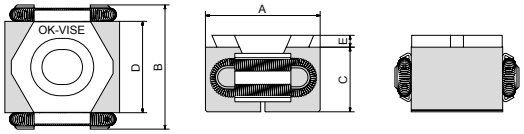


Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
FK2-VT	57	61	65	56	29	42	5	M16x40	110	360	465	48-52

FK2-VT

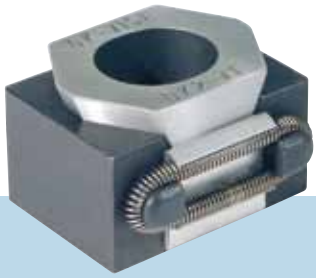
max 11 tons!

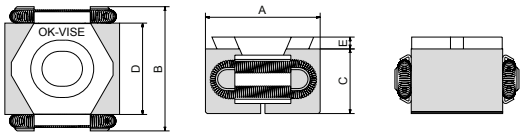
SMOOTH BASIC VERSION



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT-S	27	29	31	29	15	21	2.5	M8x20	25	44	55	48-52

BK2-VT-S

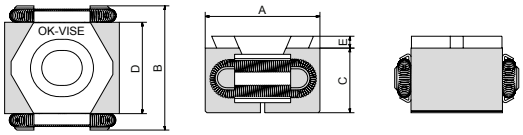




DK2-VTI-S measures given in inches and ounces.

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max									
DK2-VT-S	42	45	49	41	22	30	4	M12x30	65	145	180	48-52
DK2-VTI-S	1.65	1.77	1.92	1.61	0.86	1.18	0.15	1/2-1 1/4	65	145	6.34*	48-52

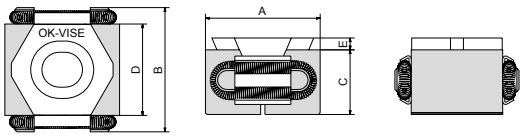
DK2-VT-S / DK2-VTI-S



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
FK2-VT-S	57	60	64	56	29	42	5	M16x40	110	360	465	48-52

FK2-VT-S

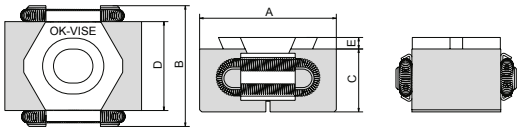
STAINLESS STEEL MODEL



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT-SS	27	29	31	29	15	21	2.5	M8x20	25	44	55	48-52

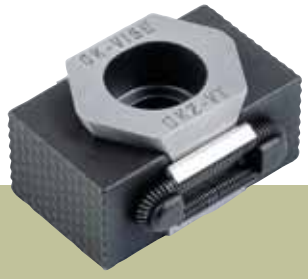
BK2-VT-SS

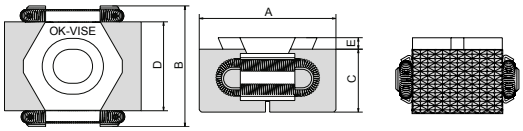
MACHINABLE JAW MODEL



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT+3	33	35	37	29	15	21	2.5	M8x20	25	43	70	30-34

BK2-VT+3

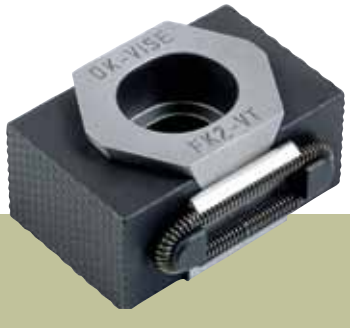


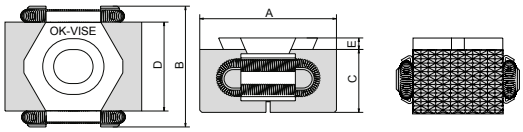


DK2-VTI+5 measures given in inches and ounces.

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max									
DK2-VT+5	52	55	59	41	22	30	4	M12x30	55	145	235	30-34
DK2-VTI+5	2.04	2.16	2.32	1.61	0.86	1.18	0.15	1/2-1 1/4	55	145	8.28*	30-34

DK2-VT+5 / DK2-VTI+5

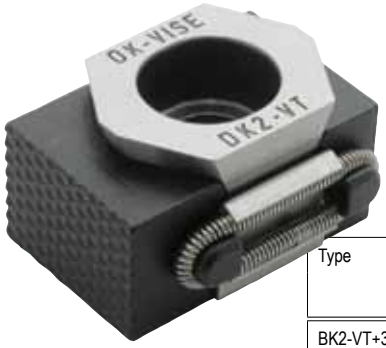


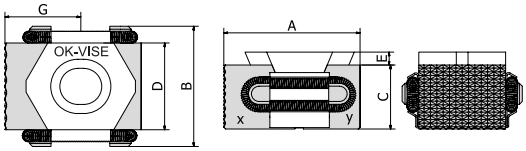


Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
FK2-VT+5	67	70	75	56	29	42	5	M16x40	100	360	550	30-34

FK2-VT+5

Combo Model: Machinable & Smooth jaw





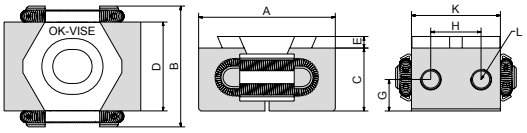
DK2-VTI+5S measures given in inches and ounces.

Type	G min	G opt	G max
BK2-VT+3S	16.5	17.5	18.5
DK2-VT+5S	26	27.5	29.5
DK2-VTI+5S	1.00	1.08	1.16
FK2-VT+5S	33.5	35	37.5

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC X	Hardness of jaws HRC Y
	min	optimum	max										
BK2-VT+3S	30	32	34	29	15	21	2.5	M8x20	22	43	65	30-34	48-52
DK2-VT+5S	47	50	54	41	22	30	4	M12x30	55	145	210	30-34	48-52
DK2-VTI+5S	1.85	1.97	2.12	1,61	0.86	1.18	0.15	1/2-1 1/4	55	145	210*	30-34	48-52
FK2-VT+5S	62	65	70	56	29	42	5	M16x40	100	360	500	30-34	48-52

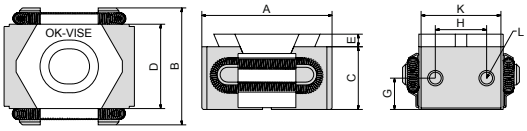
BK2-VT+3S / DK2-VT+5S / DK2-VTI+5S / FK2-VT+5S

ADDITIONAL PIECE MODEL



Type	A			B	C	D	E	G	H	K	L	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max													
BK2-VT-T	33	35	37	29	15	21	2.5	7.5	12	21	4xM5	M8x20	22	43	60	30-34

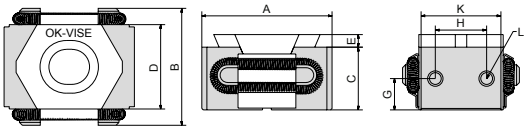
BK2-VT-T



DK2-VTI-T measures given in inches and ounces.

	A			B	C	D	E	G	H	K	L	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max													
DK2-VT-T	46	49	53	41	22	30	4	11	18	28	4xM5	M12x30	55	145	200	30-34
DK2-VTI-T	1.81	1.92	2.08	1.61	0.86	1.18	0.15	0.43	0.7	1.1	4xM5	1/2-1 1/4	55	145	7.05*	30-34

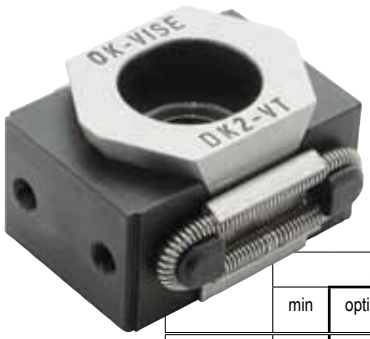
DK2-VT-T / DK2-VTI-T

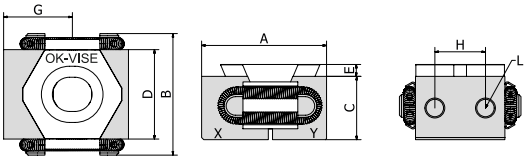


	A			B	C	D	E	G	H	K	L	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max													
FK2-VT-T	61	65	69	56	29	42	5	14.5	26	40	4xM5	M16x40	100	360	480	30-34

FK2-VT-T

Combo Model: additional piece & smooth jaw





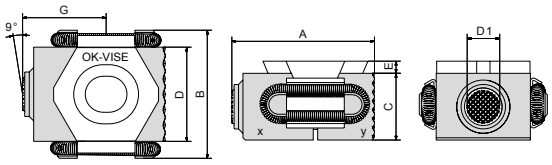
DK2-VT-TS measures given in inches and ounces.

Type	G min	G opt	G max
BK2-VT-TS	16.5	17.5	18.5
DK2-VT-TS	23	24.5	26.5
DK2-VTI-TS	0.90	0.96	1.05
FK2-VT-TS	30.5	32.5	35

	A			B	C	D	E	H	K	L	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC X	Hardness of jaws HRC Y
	min	optimum	max													
BK2-VT-TS	30	32	34	29	15	21	2.5	12	21	4xM5	M8x20	22	43	62	30-34	48-52
DK2-VT-TS	44	47	51	41	22	30	4	18	28	4xM5	M12x30	55	145	192	30-34	48-52
DK2-VTI-TS	1.73	1.85	2.00	1,61	0.86	1.18	0.15	0.7	1.1	4xM5	1/2-1 1/4	55	145	6.8*	30-34	48-52
FK2-VT-TS	59	63	67	56	29	42	5	26	40	4xM5	M16x40	100	360	475	30-34	48-52

BK2-VT-TS / DK2-VT-TS / DK2-VTI-TS / FK2-VT-TS

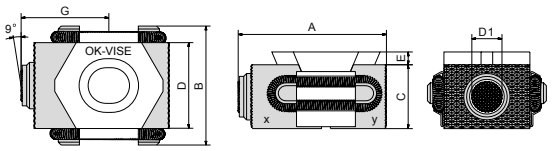
SELF-ADJUSTABLE MODEL



Type	Diameter of serration (D1)	G min	G opt	G max
BK2-VT-B	7.2	19.5	20.5	21.5

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC X	Hardness of jaws HRC Y
	min	optimum	max										
BK2-VT-B	33	35	37	29	15	21	2.5	M8x20	22	43	64	30-34	48-52

BK2-VT-B



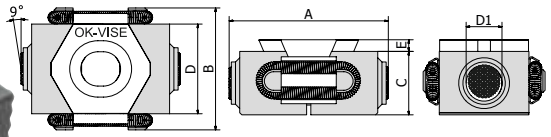
DK2-VTI-B measures given in inches and ounces.

Type	Diameter of serration (D1)	G min	G opt	G max
DK2-VT-B	10.7	31	32.5	34.5
DK2-VTI-B	0.42	1.22	1.27	1.35

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC	Hardness of jaws HRC
	min	optimum	max										
DK2-VT-B	52	55	59	41	22	30	4	M12x30	55	145	212	30-34	48-52
DK2-VTI-B	2.04	2.16	2.32	1.61	0.86	1.18	0.15	1/2-1 1/4	55	145	7.40*	30-34	48-52

DK2-VT-B / DK2-VTI-B

Two self-adjustable jaws



DK2-VT+E measures given in inches and ounces.

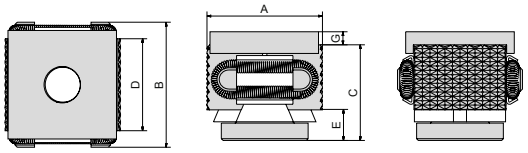
Type	Diameter of serration (D1)
BK2-VT-E	7.2
DK2-VT-E	10.7
DK2-VTI-E	0.42

Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.
	min	optimum	max								
BK2-VT-E	39	41	43	29	15	21	2.5	M8x20	22	43	72
DK2-VT-E	62	65	69	41	44	30	4	M12x40	55	145	242
DK2-VTI-E	2.44	2.56	2.72	1.61	0.86	1.18	0.15	1/2-1 1/4	55	145	8.54*

BK2-VT-E / DK2-VT-E / DK2-VTI-E

SINGLE-WEDGE PULL-DOWN, SERRATED

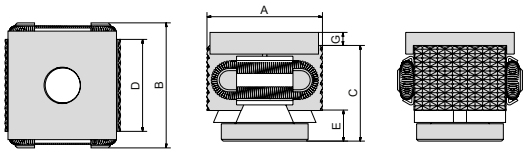
Bolt not included



Type	A			B	C max	D	E	G	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max										
BK2-VT-PD	27	29	31	29	22	21	7	3	M8x20	25	44	68	48-52

BK2-VT-PD

Bolt not included

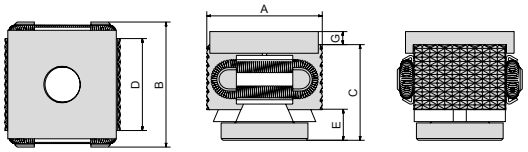


DK2-VTI-PD measures given in inches and ounces.

Type	A			B	C max	D	E	G	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max										
DK2-VT-PD	42	45	49	41	32	30	10	4	M12x60	65	145	270	48-52
DK2-VTI-PD	1.65	1.77	1.93	1.61	1.26	1.18	0.39	0.16	1/2	65	145	9.54*	48-52

DK2-VT-PD / DK2-VTI-PD

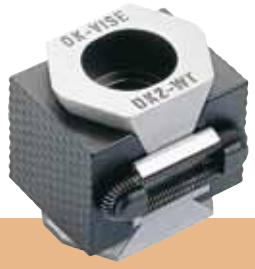
Bolt not included

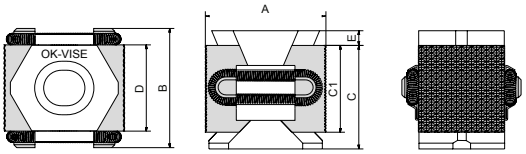


Type	A			B	C max	D	E	G	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max										
FK2-VT-PD	57	61	65	56	40.5	42	11.5	5	M16x60	110	360	620	48-52

FK2-VT-PD

DOUBLE-WEDGE PULL-DOWN, SERRATED

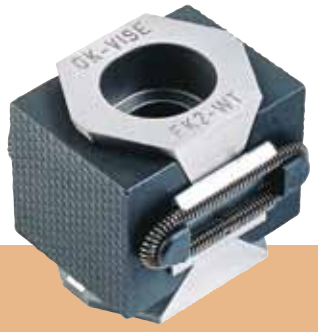


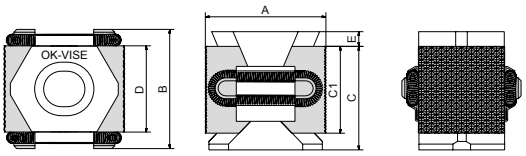


DK2-WTI measures given in inches and ounces.

Type	A			B	C max	C1	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max										
DK2-WT	42	46	49	41	36	30	30	5	M12x40	90	145	275	48-52
DK2-WTI	1.65	1.81	1.92	1.61	1.41	1.18	1.18	0.19	1/2-1 3/4	90	145	9.70*	48-52

DK2-WT / DK2-WTI — max 9 tons!

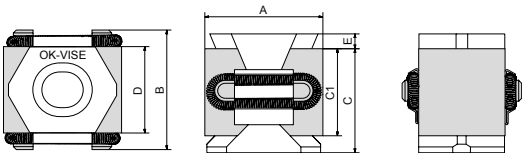




Type	A			B	C max	C1	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max										
FK2-WT-S	58	61	66	56	50	42	52	5	M16x60	150	360	730	48-52

FK2-WT — max 15 tons!

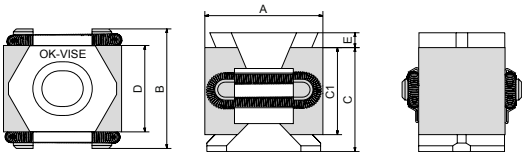
DOUBLE-WEDGE PULL-DOWN, SMOOTH



DK2-WTI-S measures given in inches and ounces.

Type	A			B	C max	C1	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max										
DK2-WT-S	41	45	48	41	36	30	30	5	M12x40	90	145	275	48-52
DK2-WTI-S	1.61	1.77	1.88	1.61	1.41	1.18	1.18	0.19	1/2-1 3/4	90	145	9.70*	48-52

DK2-WT-S / DK2-WTI-S



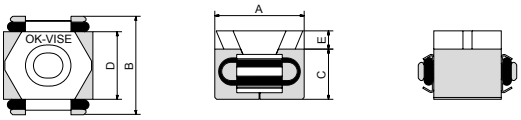
Type	A			B	C max	C1	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g (*oz) approx.	Hardness of jaws HRC
	min	optimum	max										
FK2-WT-S	58	61	66	56	50	42	52	5	M16x60	150	360	730	48-52

FK2-WT-S

ECONOMY SERIES

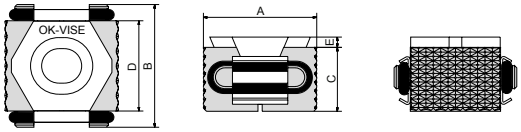
The cost efficient choice!

These models meet the demands of workholding when ultra precision and high clamping force are not necessary. They are made of the same raw material as our other models, and the bottom of the jaws are ground for precise positioning on the fixture base. AK2-VT-SO always comes with Viton o-rings.



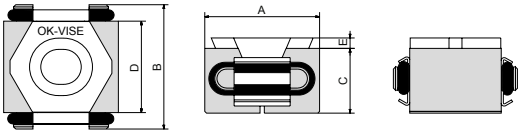
Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
AK2-VT-SO	20	23	25	22	11	15	4.2	M5x25	10	10	22	48-52

AK2-VT-SO



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK-VT-O	28	30	32	29	15	21	4	M8x20	15	25	55	48-52

BK-VT-O



Type	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in g approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT-SO	28	30	32	29	15	21	3.5	M8x20	15	25	55	48-52

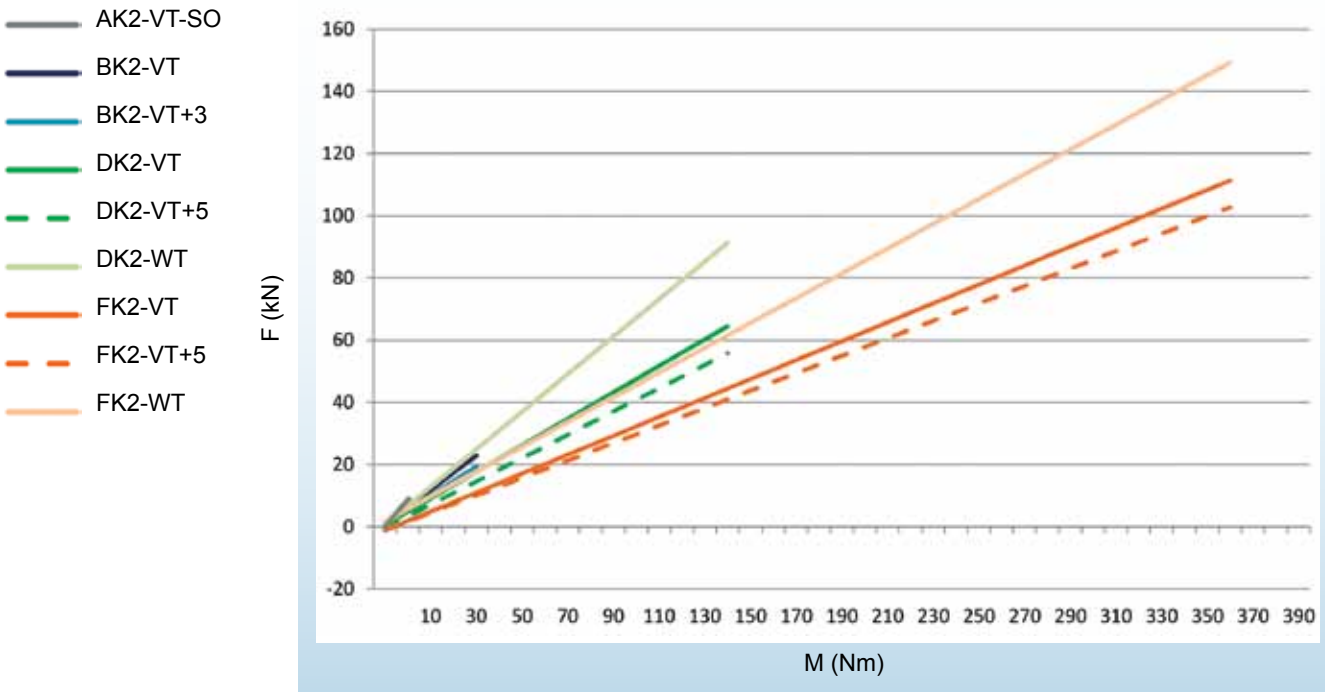
BK2-VT-SO

OK-VISE LOW-PROFILE CLAMP TYPES

SIZE	A	B	D	D *(inch)*	F
Serrated basic version		**BK2-VT**	**DK2-VT**	**DK2-VTI**	**FK2-VT**
Smooth basic version		**BK2-VT-S**	**DK2-VT-S**	**DK2-VTI-S**	**FK2-VT-S**
Machinable jaws		**BK2-VT+3**	**DK2-VT+5**	**DK2-VTI+5**	**FK2-VT+5**
Machinable & smooth combo		**BK2-VT+3S**	**DK2-VT+5S**	**DK2-VTI+5S**	**FK2-VT+5S**
Additional piece model		**BK2-VT-T**	**DK2-VT-T**	**DK2-VTI-T**	**FK2-VT-T**
Additional piece model & smooth combo		**BK2-VT-TS**	**DK2-VT-TS**	**DK2-VTI-TS**	**FK2-VT-TS**
Self-adjustable model		**BK2-VT-B**	**DK2-VT-B**	**DK2-VTI-B**	
Two self-adjustable jaws		**BK2-VT-E**	**DK2-VT-E**	**DK2-VTI-E**	
Single-wedge pull-down, serrated		**BK2-VT-PD**	**DK2-VT-PD**	**DK2-VTI-PD**	**FK2-VT-PD**
Double-wedge pull-down, serrated			**DK2-WT**	**DK2-WTI**	**FK2-WT**
Double-wedge pull-down, smooth			**DK2-WT-S**	**DK2-WTI-S**	**FK2-WT-S**
Stainless steel model		**BK2-VT-SS**			
Economy-series, serrated		**BK2-VT-O**			
Economy-series, smooth	**AK2-VT-SO**	**BK2-VT-SO**			
Metric bolt	M5	M8	M12		M16
Imperial bolt	3/16"	5/16"		1/2"	5/8"
Force up to (kN)	10	25	90	90	150

OK-VISE CLAMPFORCES

Horizontal forces of OK-Vise low profile clamps

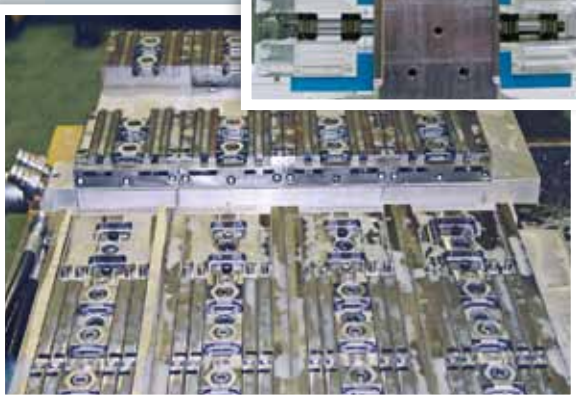


VMC applications

HMC applications

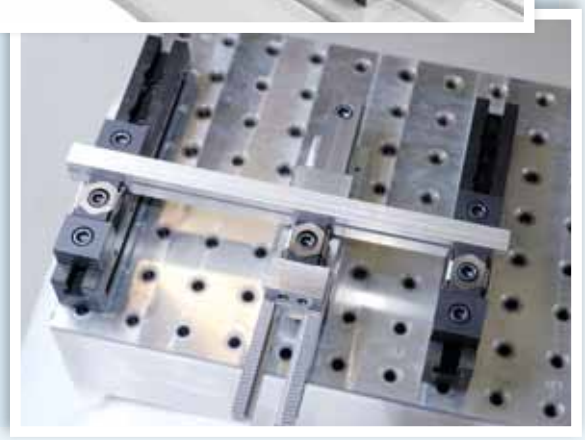
RPS applications

Hydraulic applications

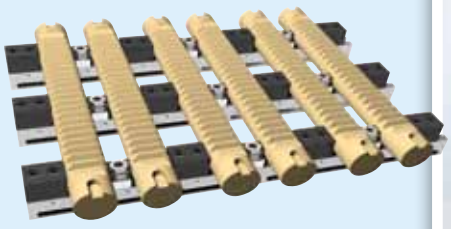


T-slot applications

Combo-Rail applications

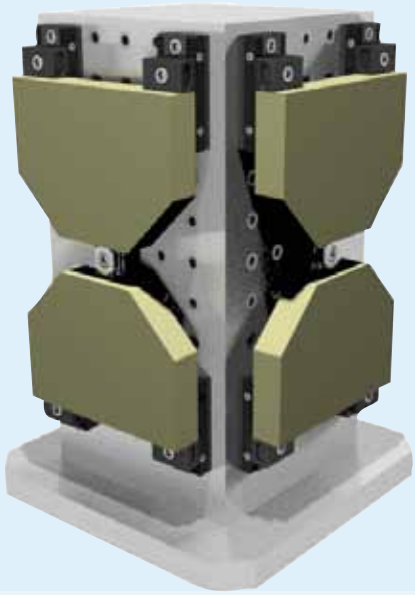


Multi-Rail RH applications



Multi-Rail RM applications

Grid applications



Blank plate applications

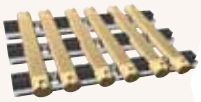
OK-VISE FIXTURING CONCEPT

All platforms, all workpieces

GENERIC FIXTURING COMPONENTS

Multi-Rail RM System

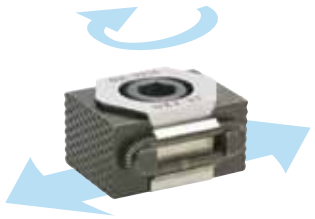
Multi-Rail RH System



Combo-Rail

Grid Fixturing System

LOW-PROFILE CLAMPS



OK-VISE®
Clamping Method

COMPONENTS FOR DEDICATED FIXTURING

Blank Fixturing System

The original OK-VISE low-profile clamps are known worldwide as a core component of any modern workholding system. In the machining industry, OK-VISE name means quality.

The mother company of OK-VISE OY is Kytola Instruments. The company is known for manufacturing precision instruments. **www.kytola.com**

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