

**Design & Unique Construction**

- Large jaw clamping capacity of AVL-160 is 275mm (10.8") and if both jaw plates set up at the rear part of jaw get on extra clamping capacity to 465 mm (18").
- The height of jaw plates is 30% higher than that of other vises of same size.
- Chips covers protect leadscrew from damage.
- Thrust bearing eliminates friction and increases clamping pressure.



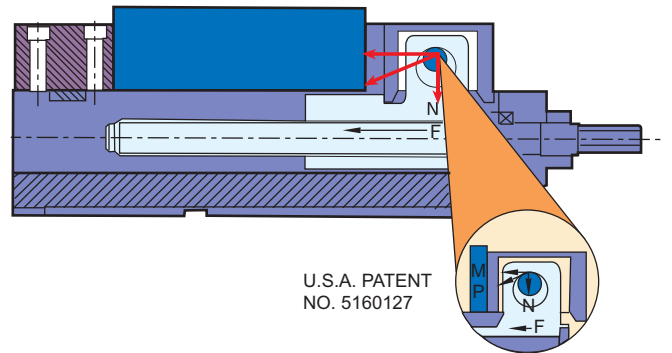
**High & Excellent Rigidity**

- The material is made of FCD. 55kg/cm<sup>2</sup> (80000 PSI) Ductile iron, and the slide ways are hardened to HRC45° minimum. The rigid construction prevents the base from distortion.

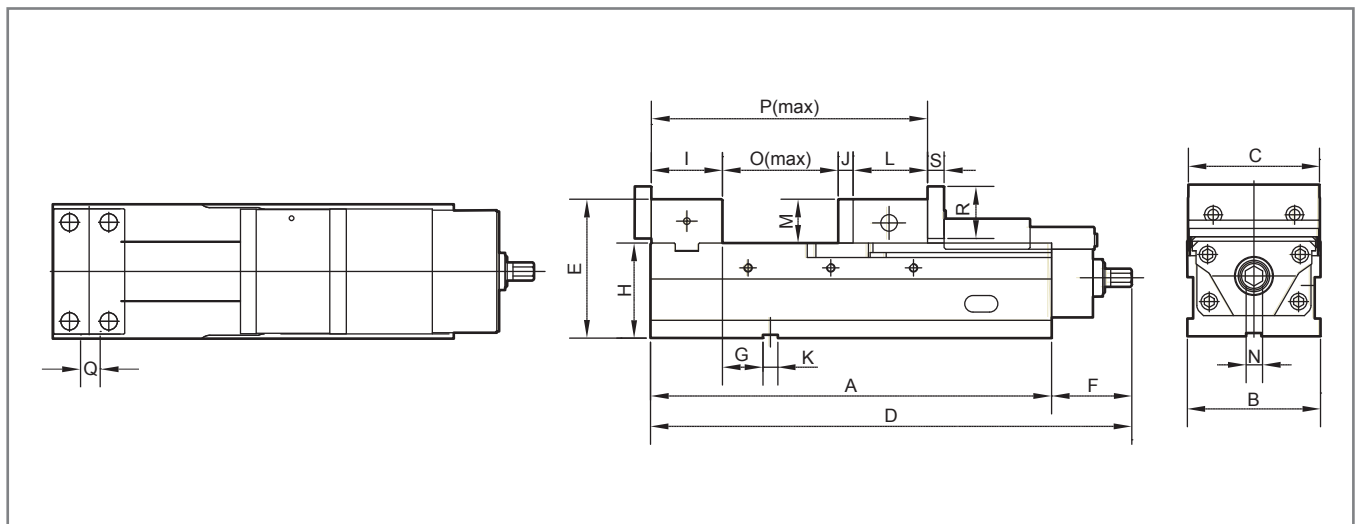
**FEATURE: LOCKWELL® ANTI-LIFT MECHANISM**

Lift can be controlled to the maximum of 0.015mm (0.0006") (see inspection specification)

- Clamping force and ANTI-LIFT mechanism features virtually eliminate any fixed jaw deflection and movable jaw lift.



U.S.A. PATENT NO. 5160127



Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Weight
AVL-100G/HV	324	104	102	437	130	104	32	85	73	15	18	86.5	45	19	140	314.5	20	55	17	27 kg
AVL-125G/HV	390	127	124.7	480	153	105	57	100	78	15	18	87.5	53	19	201	381.5	22.5	63	20	43 kg
AVL-160G/HV	485	161	159.2	625	168	120	67	115	86	18	18	80	53	21	295	479	25	63	20	71 kg

\* G: General, HV: Horizontal & Vertical.

### High Clamping Power and Large Jaw Clamping Capacity

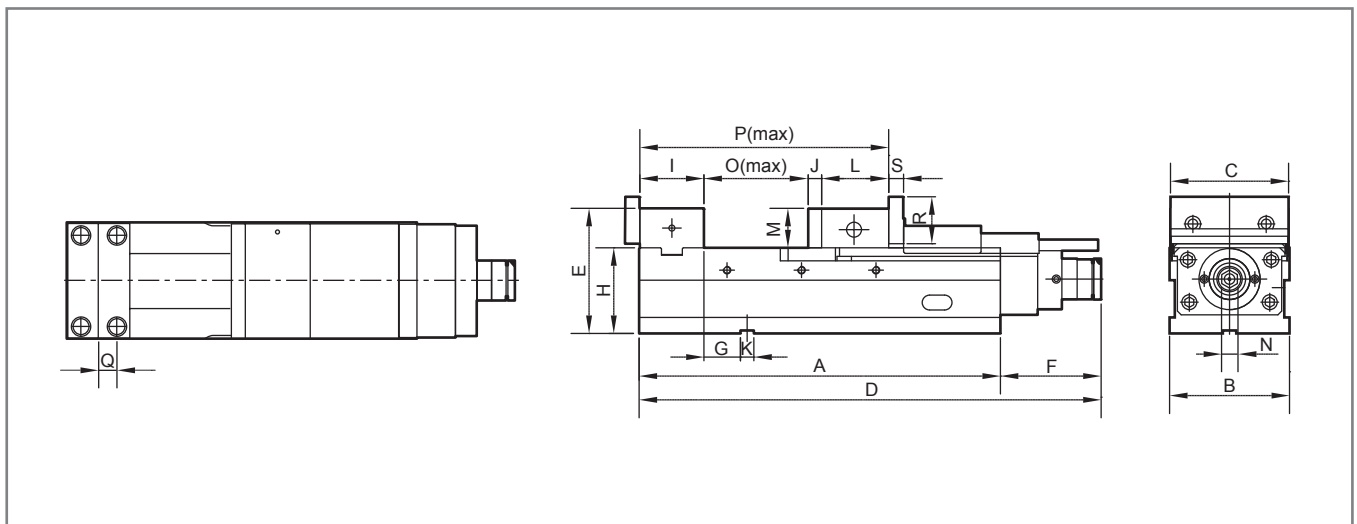
- Tons of pressure can be applied to the workpiece with minimum operator's effort. Using the new "LOCKWELL® POWER VISE", it can not release the workpiece until the operator manually releases it.
- "Mechanical Booster" provides a steady clamping force against shocks and vibrations during the operations, since it clamps the workpiece resiliently with an aid of the "disc-springs" mounted inside.
- Powerful AVQ-160 clamping force can be increased up to 5500kg; AVQ-125, 3500kg; AVQ-100, 3000kg.
- Clamping force freely adjusted with the guidance of graduation lines.



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### The Characteristics of Match Type Machine VISE

- Can be used on Machining Center. Proceeding 2 to 3 workpieces at the same time, Reduces the processing time and difficulties.
- The whole vise is precisely ground and "H & L" tolerance is within  $\pm 0.02/\text{mm}$  ( $\pm 0.008$ "), therefore several vises can be lined up for production.



Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Clamping Force	Weight
AVQ-100G/HV	324	104	102	428	130	104	32	85	73	15	18	86.5	45	14	140	314.5	20	55	17	46 KN	30 kg
AVQ-125G/HV	390	127	125	495	153	105	57	100	78	15	18	87.5	53	14	201	381.5	22.5	63	20	51 KN	46 kg
AVQ-160G/HV	485	161	159.5	605	168	120	67	115	86	18	18	80	53	14	295	479	25	63	20	57 KN	71 kg
AVQ-200G/HV	535	202	200	655	178	128	84	120	101	18	18	95	58	14	320	534	31	73	20	63 KN	100 kg

\* G: General, HV: Horizontal & Vertical.



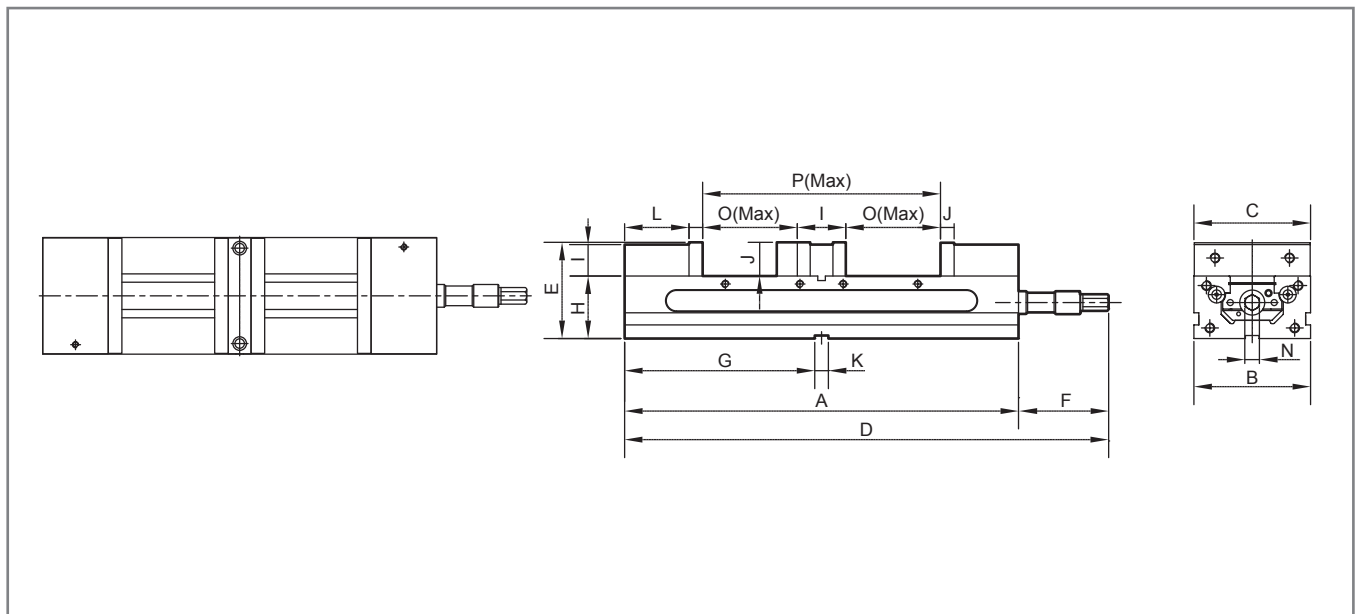
**Design & Unique Construction**

- Double station could clamp two dissimilar workpieces with same force at a time and provides 6 different clamping positions.
- Designed with combination of fixed and movable jaw to increase the efficiency and productivity of machine.
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/shape workpieces and avoid deflection and lift.



**High & Excellent Rigidity**

- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.



Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight
TLD-40G/HV	405	104	103	459	96.5	54	193.5	63.5	55	15	18	69	38	14	90	235	20kg
TLD-60G/HV	520	154	153	536	124.05	16	251	82.55	66	18	18	86.5	44.5	19	125	316	52kg

\* G: General, HV: Horizontal & Vertical.

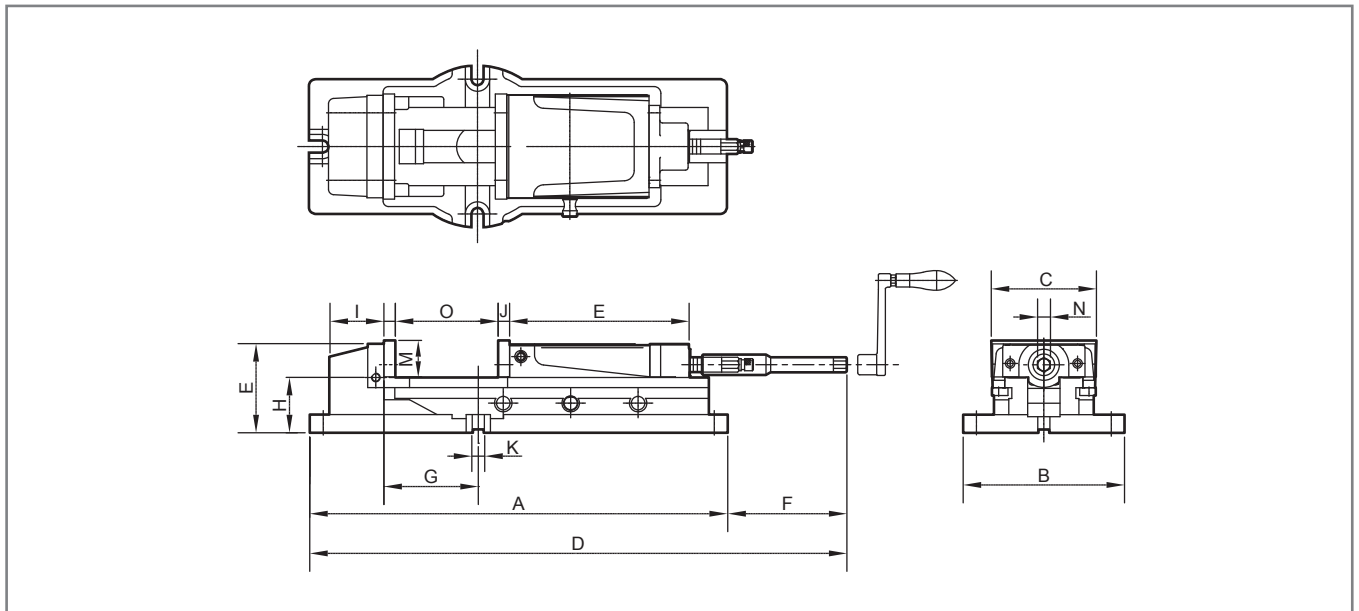
### The Characteristics Of Hydraulic Vise

- Can be used on Machining Center. Processes 2 to 3 workpieces at the same time, Reduces the processing time and difficulties.
- Able to clamp various work pieces, easy to handle, saves time and reduces processing costs.



### Hydraulic Booster System

Hydraulic Booster provides a steady clamping force against shocks and vibrations during the operations, since it fastens the work piece resiliently with an aid of the discsprings mounted inside.



Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Clamping Force	Weight
HP-40	435	160	104	525	93	90	53	58	76	11	16	153	36	14	170	25 KN	18 kg
HP-50	538	185	130	670	117	132	82	72	82	15	16	175	46	19	220	35 KN	28 kg
HP-60	620	240	154	800	132	180	140	82	81	17	16	208	54	19	300	44 KN	40 kg
HP-80	700	280	206	900	160	200	118	100	101	21	18	245	62	19	300	66 KN	82 kg

**New Design & Unique Construction**

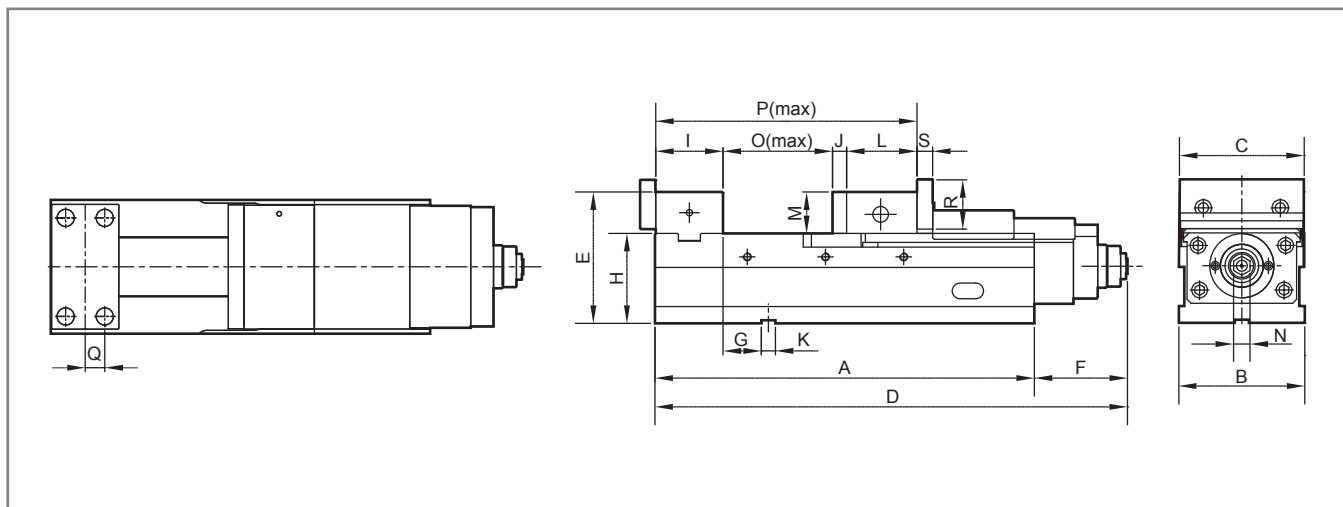
- MC Mechanical Long Power vise with large opening and Lockwell Anti-Lift Mechanism.
- Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.



Max. Openly  
-ALQ160:320  
-ALQ200:345


**High & Excellent Rigidity**

- Unique Out-jaw design increase the clamping capacity.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Used for VMC & HMC.

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Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Clamping Force	Weight
ALQ-100G/HV	324	104	102	434	130	110	32	85	73	15	18	86.5	45	14	140	314.5	20	55	17	36 KN	30 kg
ALQ-125G/HV	390	127	125	500	153	110	57	100	78	15	18	87.5	53	14	207.5	388	22.5	63	20	43 KN	46 kg
ALQ-160G/HV	515	161	159.5	635	168	120	67	115	86	18	18	80	53	19	320	514	25	63	20	57 KN	76 kg
ALQ-200G/HV	585	202	200	713	178	128	84	120	101	18	18	95	58	19	345	581.5	31	73	20	67 KN	108 kg

\* G: General, HV: Horizontal & Vertical.

**New Design & Unique Construction**



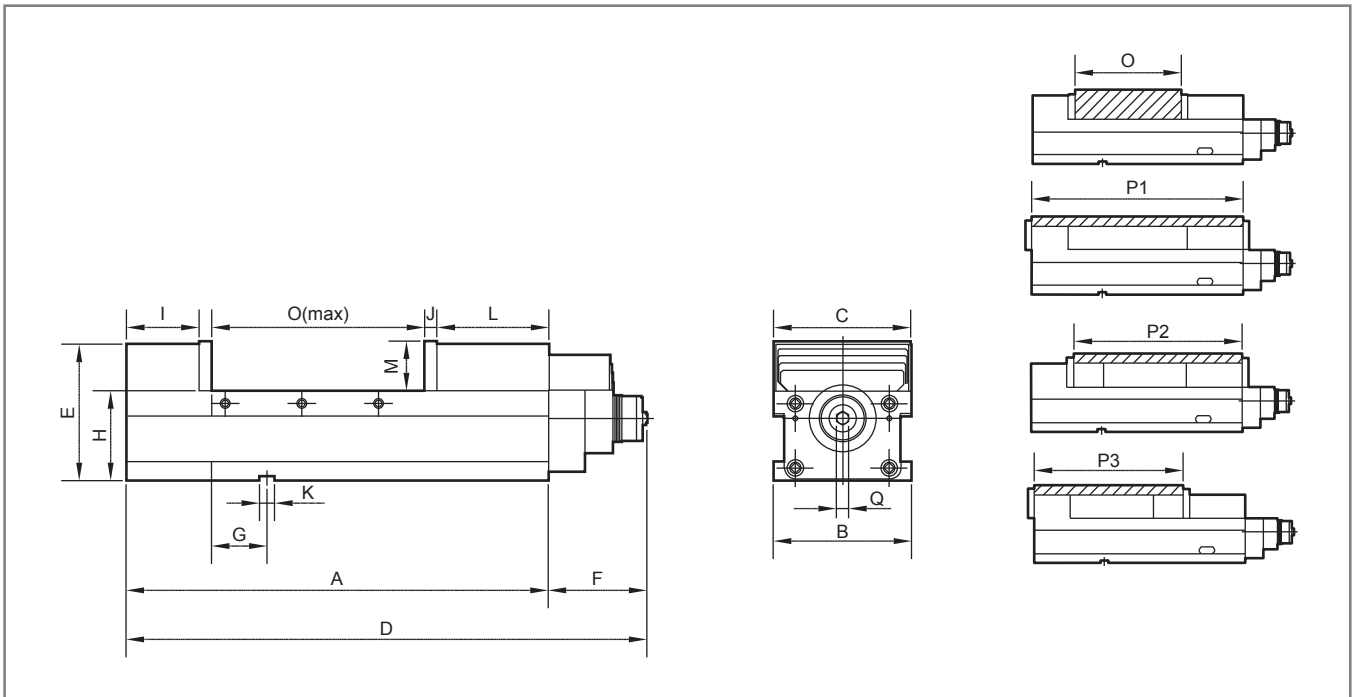
- Wellock MC Mechanical Power Vise is most suitable for VMC & HMC.
- Patented Force Adjustable System makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Wellock Semi-spherical segment eliminate deflection and lift.

**High & Excellent Rigidity**

- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- 4 different clamping positions.
- Unique design facilitates the evacuation of chips.



*always better*



Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P1	P2	P3	Clamping Force	Weight
AVM-160G/HV	495	161	160	610	160	115	65	105	85	15	18	130	58	19	250	250-480	250-370	250-330	57 KN	55 kg
AVM-200G/HV	580	201	200	708	170	128	85	110	90	18	18	150	63	19	290	290-550	290-430	290-370	67 KN	78 kg

\* G: General, HV: Horizontal & Vertical.