



RESPECT • SUPPORT • INSPIRE



Precision Workholding Technology

DYNOGRIP™ 52-SERIES DIRECT MOUNT VISES



DYNOGRIP™ VISE 52-SERIES DIRECT MOUNT

VISE SYSTEM

Not just any compact quick-change vise system, Mate DynoGrip™ self-centering vises are engineered to shorten setup and reduce process variability. A closer look at the following product highlights shows just how much thought went into designing and building the DynoGrip vise system.

Product highlights:

- DynoGrip direct mount vises provide the same great performance as Mate's M5MVC-120080 vise in a wider body; the 120mm width allows for maximum flexibility for direct bolting to the machine bed, pallet or any other fixture configuration.
- Best-in-class accuracy of vise clamping on center to ±0.015mm (±0.0006")
- Best-in-class repeatability of vise return to center of 0.010mm (0.0004")
- Includes two 10mm counterbores on center, 100mm apart for direct mounting. Wide flanges accommodate additional custom bolt locations.
- Quick change jaws, reversible and interchangeable, no tools required; use standard Mate's 52-Series (80mm wide) vise jaws
- Jaws made from highly-alloyed, tool steel (core hardness 45-50 HRC, surface hardness up to 65HRC)
- Full compatibility with Mate's 52-series zero-point bases when assembled with pull studs*
- Poke-yoke feature on bottom of vise when using Mate DynoLock™ bases
- Black Diamond™ surface treatment on vise body, pushers and jaws for maximum life
- · Patented design
- · Made in USA





- 1. Anti-Lift Design the pusher and jaw exert downward force on the piece part
- 2. Quick change jaws, hardened, interchangeable and reversible, no tools required to attach or remove
- 3. Three-In-One multi-grip jaw design for maximum flexibility-parallel, 45° dovetail, and precision serrated tooth standard with every jaw
- 4. Serrated tooth geometry for superior bite and downward force, with a built-in dovetail design for the most demanding applications
- 5. Designed to accept an optional center jaw to hold two piece parts at one time
- 6. Optional machinable jaw adapter with integrated quick change feature and steel or aluminum jaw blanks (not shown)
- 7. Best in class precision lead screw manufactured from premium tool steel and NC controlled heat treatment, tempering and proprietary TiCN coating
- 8. Synchronized timed threads on both the lead screw and pushers repeatable precision centering, interchangeable replacement components
- 9. Lead screw and center support assembly are easily micro adjustable, fine calibration
- 10. Angled channels and side ports for better swarf and coolant flow
- 11. Mate's QuickSpecs™ QR code tag that is smartphone enabled and 3D graphic supported, with links to full product specs and CAD files
- 12. Black Diamond $^{\text{TM}}$ surface treatment on vise body, pushers and jaws for maximum life

[Dimensions in mm(in)]. Images are proportionate but not to scale.



DYNOGRIP™ VISE 52-SERIES DIRECT MOUNT





M5MVE-120080-01 / M5MVF-120080-01*

Information		Metric	Imperial
Jaw Width		80mm	3.15"
Jaw Grip to Grip Maximum Opening		120mm	4.72"
Jaw Face to Face Maximum Opening		116mm	4.57"
Maximum Torque		60Nm	44 ft-lbs
Maximum Clamping Force		23kN	5200 lbf
Double Part Capable (requires Center Jaw)	Yes		
Machinable Jaw Compatible	Yes		
Lead Screw Diameter		16mm	0.63''
Lead Screw Hex Size External		12mm	
Lead Screw Hex Size Internal		6mm	
Vise Overall Length		142mm	5.59"
Vise Overall Width		120mm	4.72"
Vise Overall Height		65mm	2.56"
Vise Overall Weight		4.3kg	9.5lbs
Vise Rotational Clearance		178mm	7.01"

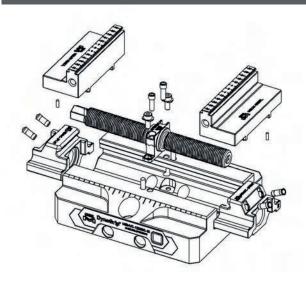
Accessories		Page**	
Standard Jaw (Pair)	M50JP-080STL		56
Pull Stud (Set of 4)	M5MAC-PS		66
Jaw Pusher (Kit of L and R)	M5MAC-JP		66
Lead Screw Assembly	M5MLS-120		66
Hardened Center Jaw	M50JC-080STL		56
Machinable Steel Jaw	M50JW-080ST2		59
Machinable Aluminum Jaw	M50JW-080AL2		59
Machinable Hard Jaw	M50JW-080HS2		63
Machinable Hard Center Jaw	M50JC-080HS2		63
Speed Wrench	M5MAC-SW12		66
Torque Wrench Kit	M5MAC-VT		70
Calibration Pin Kit	M5MAC-CP		66

Assembly - M5MVE-120080-01/ M5MVF-120080-01*



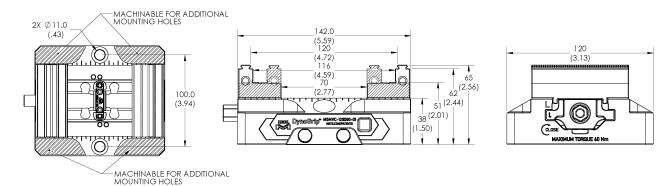
 M5MVE-120080-01 does not include pull studs.
M5MVF-120080-01 does not include pull studs or hardened jaws.

Exploded View



^{**} Refer to page in main catalog (LIT01473) for details.

Key Dimensions



 $\hbox{\it [Dimensions in mm(in)]. Images are proportionate but not to scale.}$





MATE PRECISION TECHNOLOGIES GLOBAL COVERAGE

WORLDWIDE HEADQUARTERS:

1295 Lund Boulevard, Anoka, Minnesota 55303 USA Tel +1.763.421.0230 mate.com

orders@mate.com