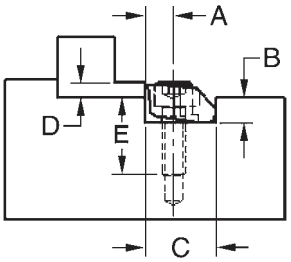
# Lo-Profile Micro™ Clamps

**Problem:** You require a clamping device which can grip low on a work piece, has exceptional horizontal and vertical holding force, and can be mounted below the fixture plate surface.

**Solution:** Jergens new Lo-Profile Micro clamps are the answer!

**Material:**

- Available in tool steel or brass
- Extraordinary horizontal and vertical force
- Extremely low profile – as low as .075
- Very small foot print
- High resistance to pull-out
- Choose among three sizes with inch or metric screws
- Knife and blunt edge styles




## Lo-Profile Micro™ Clamps

| Part Number | Description | A | B | C | D* | E | Clamp Width | Screw Size | Torque (ft/lbs) | Max. Holding Force (lbs) | Total Throw | Clamps Per Package |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13201 | Tool Steel, Knife Edge | .150 | .140 | .375 | .075 | .260 | .375 | 4-40 | 1.30 | 650 | .0075 | 8 |
| 13202 | Tool Steel, Blunt Edge | .150 | .140 | .375 | .075 | .260 | .375 | 4-40 | 1.30 | 650 | .0075 | 8 |
| 13203 | Brass, Blunt Edge | .150 | .140 | .375 | .075 | .220 | .375 | 4-40 | .41 | 200 | .0075 | 8 |
| 13211 | Tool Steel, Knife Edge | .200 | .187 | .500 | .100 | .390 | .500 | 8-32 | 3.70 | 1,500 | .0160 | 8 |
| 13212 | Tool Steel, Blunt Edge | .200 | .187 | .500 | .100 | .390 | .500 | 8-32 | 3.70 | 1,500 | .0160 | 8 |
| 13213 | Brass, Blunt Edge | .200 | .187 | .500 | .100 | .340 | .500 | 8-32 | 2.00 | 400 | .0160 | 8 |
| 13221 | Tool Steel, Knife Edge | .300 | .280 | .750 | .150 | .570 | .750 | 1/4-20 | 14.50 | 3,600 | .0240 | 6 |
| 13222 | Tool Steel, Blunt Edge | .300 | .280 | .750 | .150 | .570 | .750 | 1/4-20 | 14.50 | 3,600 | .0240 | 6 |
| 13223 | Brass, Blunt Edge | .300 | .280 | .750 | .150 | .440 | .750 | 1/4-20 | 4.10 | 950 | .0240 | 6 |
| 13224 | Tool Steel, Knife Edge | .400 | .450 | 1.000 | .250 | .710 | 1.000 | 3/8-16 x 1” | 30.00 | 6,000 | 0.050 | 4 |
| 13225 | Tool Steel, Blunt Edge | .400 | .450 | 1.000 | .250 | .710 | 1.000 | 3/8-16 x 1” | 30.00 | 6,000 | 0.050 | 4 |
| 13226 | Tool Steel, Knife Edge | .600 | .640 | 1.500 | .375 | .710 | 1.500 | 1/2-13 x 1 1/4” | 108.30 | 12,000 | 0.075 | 2 |
| 13227 | Tool Steel, Blunt Edge | .600 | .640 | 1.500 | .375 | .710 | 1.500 | 1/2-13 x 1 1/4” | 108.30 | 12,000 | 0.075 | 2 |

* Combination horizontal and vertical force.

## Metric Lo-Profile Micro™ Clamps

| Part Number | Description | A | B | C | D* | E | Clamp Width | Screw Size | Max. Holding Force (N) | Torque (Nm) | Total Throw | Clamps Per Package |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13251 | Tool Steel, Knife Edge | 3.81 | 3.55 | 9.52 | 1.90 | — | 9.52 | M2.5 | 2,800 | 1.8 | .190 | 8 |
| 13252 | Tool Steel, Blunt Edge | 3.81 | 3.55 | 9.52 | 1.90 | — | 9.52 | M2.5 | 2,800 | 1.8 | .190 | 8 |
| 13253 | Brass, Blunt Edge | 3.81 | 3.55 | 9.52 | 1.90 | — | 9.52 | M2.5 | 875 | .56 | .190 | 8 |
| 13261 | Tool Steel, Knife Edge | 5.08 | 4.75 | 12.70 | 2.54 | — | 12.70 | M4 | 6,600 | 5.6 | .406 | 8 |
| 13262 | Tool Steel, Blunt Edge | 5.08 | 4.75 | 12.70 | 2.54 | — | 12.70 | M4 | 6,600 | 5.6 | .406 | 8 |
| 13263 | Brass, Blunt Edge | 5.08 | 4.75 | 12.70 | 2.54 | — | 12.70 | M4 | 1,750 | 2.8 | .406 | 8 |
| 13271 | Tool Steel, Knife Edge | 7.62 | 7.11 | 19.05 | 3.81 | — | 19.05 | M6 | 16,000 | 22.5 | .610 | 6 |
| 13272 | Tool Steel, Blunt Edge | 7.62 | 7.11 | 19.05 | 3.81 | — | 19.05 | M6 | 16,000 | 22.5 | .610 | 6 |
| 13273 | Brass, Blunt Edge | 7.62 | 7.11 | 19.05 | 3.81 | — | 19.05 | M6 | 4,200 | 5.6 | .610 | 6 |
| 13274 | Tool Steel, Knife Edge | 10.16 | 11.43 | 25.40 | 6.350 | 18.03 | 25.40 | M10 x 25mm | 26,000 | 40.6 | 1.270 | 4 |
| 13275 | Tool Steel, Blunt Edge | 10.16 | 11.43 | 25.40 | 6.350 | 18.03 | 25.40 | M10 x 25mm | 26,000 | 40.6 | 1.270 | 4 |
| 13276 | Tool Steel, Knife Edge | 15.24 | 16.26 | 38.10 | 9.520 | 19.56 | 38.10 | M12 x 30mm | 50,000 | 145.0 | 1.900 | 2 |
| 13277 | Tool Steel, Blunt Edge | 15.24 | 16.26 | 38.10 | 9.520 | 19.56 | 38.10 | M12 x 30mm | 50,000 | 145.0 | 1.900 | 2 |

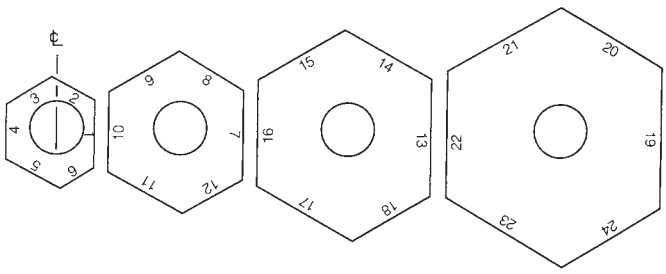
* Combination horizontal and vertical force.

# Adjustable Micro™ Clamps

Measured from the centerline, each face of these low profile clamps increases 1mm (.0394) from the smallest to the largest face.

Adjustable Micro Clamps decrease design and set-up times for modular fixtures, work cubes, and standard fixtures. Without changing hole locations, clamping range from 12mm to 35mm can be achieved.

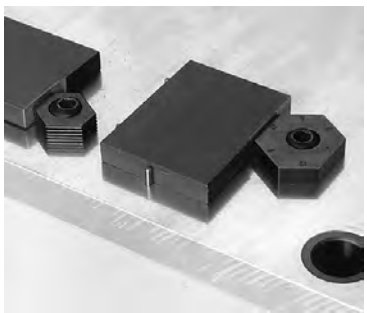
The clamps are available with either smooth or serrated faces which make them ideal for clamping machined parts, castings, and rough cut stock. The clamps work with a cam action, always following the contour of the workpiece for maximum surface contact.

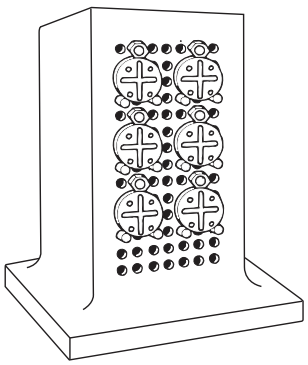



- Cam action
- Low profile
- Available in four sizes
- Heat treated and plated
- Serrated or smooth edges
- Adjustable clamps and stops
- Includes Cam Screw*

| Face # | Distance From Center Line | Face # | Distance From Center Line | Face # | Distance From Center Line | Face # | Distance From Center Line |
|---|---|---|---|---|---|---|---|
| 1 | 12mm (.4724) | 7 | 18mm (.7086) | 13 | 24mm (.9449) | 19 | 30mm (1.1811) |
| 2 | 13mm (.5118) | 8 | 19mm (.7480) | 14 | 25mm (.9842) | 20 | 31mm (1.2205) |
| 3 | 14mm (.5512) | 9 | 20mm (.7874) | 15 | 26mm (1.0236) | 21 | 32mm (1.2598) |
| 4 | 15mm (.5906) | 10 | 21mm (.8268) | 16 | 27mm (1.0630) | 22 | 33mm (1.2992) |
| 5 | 16mm (.6299) | 11 | 22mm (.8661) | 17 | 28mm (1.1024) | 23 | 34mm (1.3386) |
| 6 | 17mm (.6693) | 12 | 23mm (.9055) | 18 | 29mm (1.1417) | 24 | 35mm (1.3780) |

Locking Screw is 1/2-13 for inch sizes and 12M for metric sizes; total distance of movement is .100".



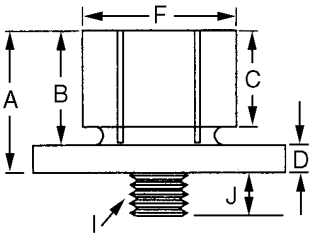


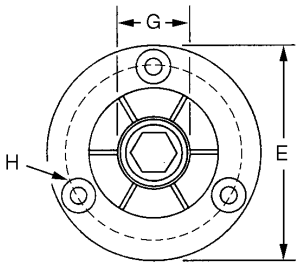
| Inch Part Number | Metric Part Number | Description |
|---|---|---|
| 68601 | 68651 | 1-6 smooth |
| 68602 | 68652 | 7-12 smooth |
| 68603 | 68653 | 13-18 smooth |
| 68604 | 68654 | 19-24 smooth |
| 68611 | 68661 | 1-6 serrated |
| 68612 | 68662 | 7-12 serrated |
| 68613 | 68663 | 13-18 serrated |
| 68614 | 68664 | 19-24 serrated |

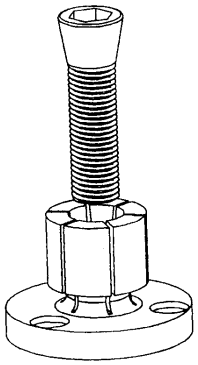
All clamps include a cam screw.
Clamps are 10mm (.394) thick.

| Part Number | Thread | Max. Torque Holding Force |
|---|---|---|
| 68202 | Cam Screw 1/2-13 | 65 Ft/lbs. – 4000 lbs. |
| 68199 | Cam Screw M12 | 88N.M. – 17,800 N. |

# ID Expansion Clamp



**The ID expansion clamp is the ideal way to hold parts on an inside diameter for multiple machining on a vertical or horizontal machining center.**

**The larger diameter of the clamp is held to a close tolerance for precision locating in a machined pocket on work cubes and fixture plates.**

**The customer machines the mild steel clamp to match the bore of the part ensuring proper fit. Often times the clamps can be remachined for different size jobs.**

- **Body Material: Mild Steel**
- **Low Profile**
- **Ideal for Secondary Operations on Lathe Parts**
- **Easily Machined to Size on Lathe or Mill**
- **Excellent for Palletized Setups**
- **Allows More Parts Per Workcube or Fixture Plate**
- **Tighten with Hex Key or Hydraulic Pull Cylinders (Drill clearance hole for longer bolt into hydraulic cylinder)**
- **Instructions included with each clamp**

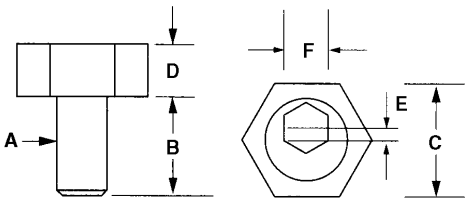
| Part Number | A | B | C | D | +.000 -.002 E | F | G+ | H* | I | J | Torque (ft/lbs) | Holding Force (lbs) | Replacement Screw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68401** | .42 | .30 | .24 | .12 | .787 | .29 | .16 | 2-56 on .540 BHC | 2-56 | .16 | .05 | 250 | **68900** |
| **68402** | .86 | .63 | .59 | .23 | 1.170 | .49 | .28 | 6-32 on .825 BHC | 8-32 | .30 | 3.6 | 950 | **68901** |
| **68403** | .98 | .75 | .59 | .23 | 1.240 | .56 | .48 | 6-32 on .910 BHC | 1/4-20 | .50 | 13.3 | 1,900 | **68902** |
| **68404** | .98 | .75 | .59 | .23 | 1.476 | .79 | .53 | 6-32 on 1.140 BHC | 5/16-18 | .56 | 27.6 | 2,500 | **68903** |
| **68405** | 1.13 | .88 | .69 | .25 | 1.968 | 1.06 | .71 | 8-32 on 1.550 BHC | 3/8-16 | .71 | 49.3 | 4,500 | **68904** |
| **68406** | 1.25 | 1.0 | .81 | .25 | 2.205 | 1.39 | .90 | 8-32 on 1.790 BHC | 1/2-13 | .71 | 120.0 | 5,900 | **68905** |
| **68407** | 1.56 | 1.25 | 1.06 | .31 | 2.736 | 1.65 | 1.15 | 10-32 on 2.200 BHC | 5/8-11 | .79 | 224.0 | 10,000 | **68906** |
| **68408** | 1.56 | 1.25 | 1.06 | .31 | 2.972 | 2.03 | 1.15 | 10-32 on 2.515 BHC | 5/8-11 | .79 | 224.0 | 10,000 | **68906** |
| **68409** | 1.79 | 1.48 | 1.27 | .31 | 4.232 | 3.06 | 1.15 | 1/4-20 on 3.646 BHC | 5/8-11 | .79 | 224.0 | 10,000 | **68907** |
| **68410** | 1.79 | 1.48 | 1.27 | .31 | 5.232 | 4.06 | 1.15 | 1/4-20 on 4.648 BHC | 5/8-11 | .79 | 224.0 | 10,000 | **68907** |
| **68411** | 1.79 | 1.48 | 1.27 | .31 | 6.89 | 5.23 | 1.15 | 1/4-20 on 4.648 BHC | 5/8-11 | .79 | 224.0 | 10,000 | **68907** |
| **68412** | 1.79 | 1.48 | 1.27 | .31 | 9.85 | 6.00 | 1.15 | 1/4-20 on 5.250 BHC | 5/8-11 | .79 | 125.0 | 6,000 | **68907** |

## Metric

| Part Number | A | B | C | D | +0.00 -0.05 E | F | G+ | H* | I | J | Torque (Nm) | Holding Force (N.) | Replacement Screw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68829** | 10.7 | 7.6 | 6.1 | 3.0 | 20.0 | 7.4 | 4.1 | M2 on 13.7 BHC | M2 | 4.1 | .70 | 1,113 | **68909** |
| **68830** | 21.8 | 16.0 | 15.0 | 5.9 | 29.72 | 12.4 | 8.0 | M3 on 20.95 BHC | M4 | 7.2 | 5.00 | 4,228 | **68910** |
| **68831** | 24.9 | 19.0 | 15.0 | 5.9 | 31.5 | 14.2 | 12.2 | M3 on 23.1 BHC | M6 | 11.2 | 17.00 | 8,455 | **68911** |
| **68832** | 24.9 | 19.0 | 15.0 | 5.9 | 37.5 | 20.0 | 13.5 | M3 on 29.0 BHC | M8 | 13.2 | 34.00 | 11,125 | **68912** |
| **68833** | 28.6 | 22.2 | 17.5 | 6.4 | 50.0 | 27.0 | 18.0 | M4 on 39.4 BHC | M10 | 16.3 | 60.00 | 20,025 | **68913** |
| **68834** | 31.8 | 25.4 | 20.6 | 6.4 | 56.0 | 35.3 | 23.0 | M4 on 45.5 BHC | M12 | 20.3 | 150.00 | 26,255 | **68914** |
| **68835** | 39.6 | 31.8 | 27.0 | 7.9 | 69.5 | 42.0 | 29.3 | M5 on 55.9 BHC | M16 | 21.4 | 280.00 | 44,500 | **68915** |
| **68836** | 39.6 | 31.8 | 27.0 | 7.9 | 75.5 | 51.5 | 29.3 | M5 on 63.9 BHC | M16 | 21.4 | 280.00 | 44,500 | **68915** |
| **68837** | 45.5 | 37.6 | 32.3 | 7.9 | 107.5 | 77.7 | 29.3 | M6 on 92.6 BHC | M16 | 19.3 | 280.00 | 44,500 | **68916** |
| **68838** | 45.5 | 37.6 | 32.3 | 7.9 | 132.90 | 103.0 | 29.3 | M6 on 118.06 BHC | M16 | 19.3 | 280.00 | 44,500 | **68916** |
| **68839** | 45.5 | 37.6 | 32.3 | 7.9 | 175.0 | 132.9 | 29.3 | M6 on 118.06 BHC | M16 | 19.3 | 280.00 | 44,500 | **68916** |
| **68850** | 45.5 | 37.6 | 32.3 | 7.9 | 250.2 | 152.4 | 29.3 | M6 on 133.35 BHC | M16 | 19.3 | 170.00 | 26,000 | **68916** |

* (3) Mounting Screws Included
\+ Minimum diameter the “F” dimension can be machined too.

# Micro™ Clamps




Jergens Micro™ Clamps feature both high hold down forces and low profiles, which makes them ideal for building fixtures on Ball Lock® fixturing plates. Two simple components make them work: a hardened steel socket cap screw with an offset head and a hexagonal washer. A half turn tightens or loosens the workpiece.

- Low profile makes computer programming easier
- Cam action provides fast, strong clamping
- Small size allows more parts per load
- Requires only a tapped hole in your fixture
- Available in stainless steel
- Note clockwise rotation recomended workpiece stop should be on the right of the Clamp.

| Part Number Steel | Part Number Stainless | A | B | C | D | Total Distance of Measurement E | Key Size F | G* | Maximum Holding Force | Replacement Screw |
|---|---|---|---|---|---|---|---|---|---|---|
| **68501** | — | 8-32 | .350 | .312 | .110 | .030 | 5/64 | .150 | 205 | **68521** |
| **68502** | — | 10-32 | 340 | .500 | .160 | .040 | 3/32 | .250 | 350 | **68533** |
| **68503** | **68153** | 1/4-20 | .470 | .625 | .190 | .040 | 1/8 | .308 | 800 | **68523** |
| **68505** | — | 5/16-24 | .460 | .812 | .190 | .040 | 3/16 | .400 | 750 | **68525** |
| **68506** | **68515** | 5/16-18 | .460 | .812 | .190 | .040 | 3/16 | .400 | 750 | **68526** |
| **68507** | — | 3/8-16 | .710 | .812 | .250 | .050 | 3/16 | .400 | 2,000 | **68527** |
| **68509** | — | 1/2-13 | .900 | 1.000 | .375 | .100 | 5/16 | .500 | 4,000 | **68529** |
| **68511** | — | 5/8-11 | 1.125 | 1.187 | .500 | .100 | 3/8 | .590 | 6,000 | **68531** |

*** This measurement is the correct location to drill and tap the hole from the edge of the work piece.**

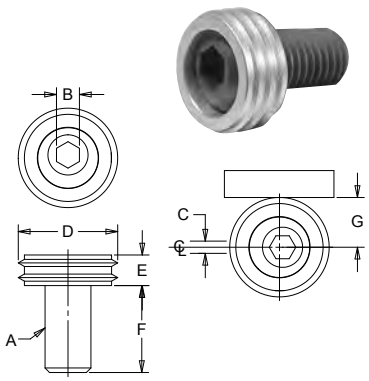
## Metric

| Part Number Steel | Part Number Stainless | A | B | C | D | Total Distance of Measurement E | Key Size F | G* | Maximum Holding Force (N) |
|---|---|---|---|---|---|---|---|---|---|
| **68571** | — | M4 x 0.7 | 9.6 | 7.93 | 2.8 | .76 | 3 | 3.8 | 910 |
| **68572** | **68551** | M6 x 1.0 | 11.2 | 15.86 | 4.75 | 1.01 | 4 | 7.8 | 3,558 |
| **68573** | **68553** | M8 x 1.25 | 15.0 | 20.61 | 4.75 | 1.01 | 5 | 10.15 | 3,355 |
| **68574** | — | M10 x 1.5 | 19.0 | 20.61 | 6.35 | 1.52 | 7 | 10.15 | 8,895 |
| **68575** | — | M12 x 1.75 | 22.8 | 25.38 | 9.52 | 2.03 | 8 | 12.7 | 17,790 |
| **68576** | — | M16 x 2.0 | 28.5 | 30.13 | 12.69 | 2.54 | 12 | 15.0 | 26,680 |

*** This measurement is the correct location to drill and tap the hole from the edge of the work piece.**

**Replacement Screws available, contact customer service for more information.**

# Knife Edge Clamps




Knife edge clamps can be used for clamping rough cut stock, castings, or any material that requires a hardened clamping element. Hardened steel, brass-plated.

Replacement Screws available, contact customer service for more information.

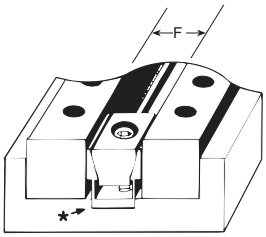
| Part Number | A | B | C | D | E | F | G* | Torque (ft. lbs) | Max. Holding Force (lbs) |
|---|---|---|---|---|---|---|---|---|---|
| **68547** | 3/8-16 | 3/16 | 0.050 | 0.812 | 0.250 | 0.710 | 0.400 | 16.6 | 2,000 |
| **68548** | 1/2-13 | 5/16 | 0.080 | 1.000 | 0.375 | 0.900 | 0.500 | 52 | 4,000 |
| **68549** | 5/8-11 | 3/8 | 0.100 | 1.187 | 0.500 | 1.125 | 0.590 | 80 | 6,000 |
| **Metric** | | | | | | | | (Nm) | (N) |
| **68840** | M10 | 7M | 1.27 | 20.60 | 6.35 | 19.00 | 10.15 | 28 | 8,900 |
| **68841** | M12 | 8M | 2.03 | 25.40 | 9.52 | 22.80 | 12.70 | 88 | 17,800 |
| **68842** | M16 | 12M | 2.54 | 30.15 | 12.70 | 28.50 | 15.00 | 135 | 26,700 |

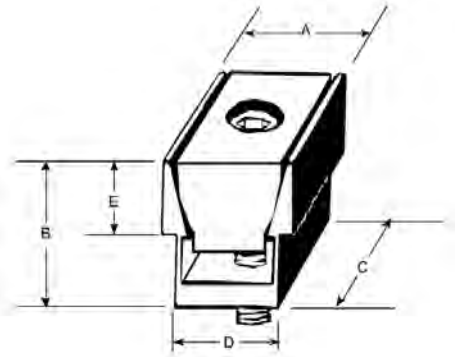
*** This measurement is the correct location to drill and tap the hole from the edge of the work piece.**

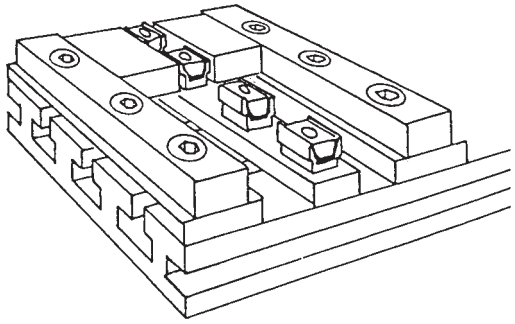
# Expanding Micro™ Clamps

Jergens Expanding Micro Clamps allow you to fixture more parts on your fixture plates. The unique expanding design can hold two parts at once when used with a positive stop.

- Minimizes tool changes
- Holds two parts with equilateral clamping action
- Ideal for clamping flat or round work pieces
- Reduces wasted space
- Aluminum Housing, Steel Wedge



*A shallow slot, a little wider than D dimension, will insure clamp remains in line with workpiece.

| Part Number | A | B | C | D* | E | F† | Thread Size | Maximum Spread | Maximum Holding Force (lbs) | Key Size |
|---|---|---|---|---|---|---|---|---|---|---|
| **68706** | .240 | .250 | .320 | .210 | .100 | .250 | 2-56 | .265 | 200 | 5/64 |
| **68707** | .360 | .380 | .470 | .310 | .185 | .375 | 4-40 | .395 | 310 | 3/32 |
| **68701** | .485 | .500 | .625 | .410 | .220 | .500 | 8-32 | .540 | 500 | 9/64 |
| **68702** | .735 | .750 | .940 | .632 | .375 | .750 | 1/4-20 | .800 | 1,500 | 3/16 |
| **68703** | .980 | 1.00 | 1.250 | .820 | .500 | 1.000 | 5/16-18 | 1.060 | 2,000 | 1/4 |
| **68704** | 1.470 | 1.50 | 1.875 | 1.215 | .750 | 1.500 | 1/2-13 | 1.590 | 3,500 | 3/8 |
| **68705** | 1.960 | 2.00 | 2.500 | 1.625 | 1.000 | 2.000 | 5/8-11 | 2.100 | 6,000 | 1/2 |

## Metric

| Part Number | A | B | C | D* | E | F† | Thread Size | Maximum Spread | Maximum Holding Force (N) | Key Size |
|---|---|---|---|---|---|---|---|---|---|---|
| **68716** | 6.1 | 6.9 | 8.1 | 5.3 | 3.6 | 6.4 | M2 | 6.7 | 880 | 1.5 |
| **68717** | 9.1 | 9.7 | 11.9 | 7.9 | 4.7 | 9.5 | M2.5 | 10 | 1,350 | 2 |
| **68711** | 12.3 | 14.5 | 15.9 | 10.4 | 5.6 | 12.7 | M4 | 13.2 | 2,224 | 3 |
| **68712** | 18.6 | 19.0 | 23.8 | 16.1 | 9.5 | 19.0 | M6 | 20.3 | 6,670 | 5 |
| **68713** | 24.8 | 25.9 | 31.7 | 20.8 | 12.7 | 25.4 | M8 | 26.9 | 8,895 | 6 |
| **68714** | 37.3 | 38.6 | 47.6 | 30.8 | 19.0 | 38.1 | M12 | 39.9 | 15,565 | 10 |
| **68715** | 49.7 | 51.5 | 63.5 | 41.2 | 25.4 | 50.8 | M16 | 53.0 | 26,690 | 14 |

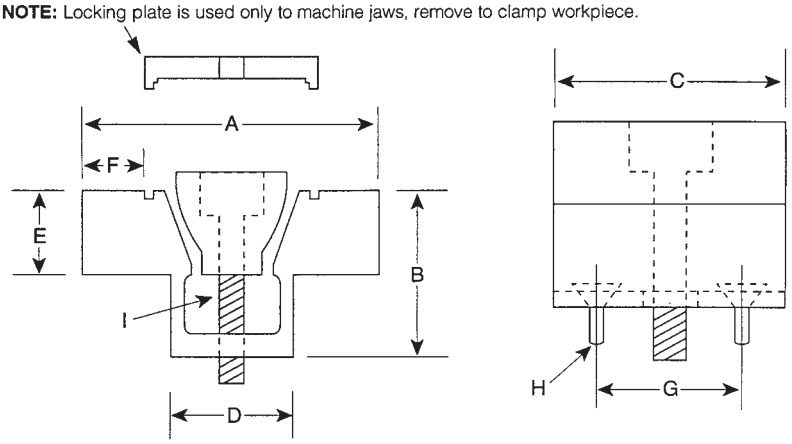
†F is the distance needed between workpieces for clamp clearance. Drill and tap mounting hole on the center of F dimension.

# Machinable Expanding Micro™ Clamps

**The compact Machinable Expanding Micro™ Clamp is available with extra material on the clamping jaw so it can be machined to conform to the shape of your work-piece – enabling you to fixture unusual applications easily. The specially designed steel wedge spreads the clamping force uniformly on both sides of the aluminum channel. Clamps may be ordered with a unique locking plate to make the clamp rigid while machining the jaw to your specifications, without vibration.**

- **Material: Channel 7075-76 Alumnium**
- **Mounting Screws Included**
- **Compact Design**
- **Allows more parts to be mounted on Fixture**

**NOTE:** Locking plate is used only to machine jaws, remove to clamp workpiece.




| Part Number With Locking Plate | Part Number Without Locking Plate | A* | B | C | D | E | F† | G | Mounting Screw **H | I | Maximum Holding Force (lbs) | Recommended Expansion Stroke (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68770** | **68771** | 1.125 | 0.50 | 0.62 | 0.420 | 0.18 | 0.18 | 0.400 | 2-56 | 8-32 | 500 | 0.015 |
| **68772** | **68773** | 1.500 | 0.75 | 0.94 | 0.632 | 0.37 | 0.26 | 0.624 | 6-32 | 1/4-20 | 1,500 | 0.015 |
| **68774** | **68775** | 2.000 | 1.00 | 1.25 | 0.820 | 0.50 | 0.39 | 0.812 | 6-32 | 5/16-18 | 2,000 | 0.020 |
| **68776** | **68777** | 3.000 | 1.50 | 1.87 | 1.215 | 0.75 | 0.62 | 1.200 | 10-32 | 1/2-13 | 3,500 | 0.030 |
| **68778** | **68779** | 4.000 | 2.00 | 2.50 | 1.625 | 1.00 | 0.80 | 1.625 | 1/4-20 | 5/8-11 | 6,000 | 0.040 |

*** The distance needed between workpieces for clamp clearance, drill and tap mounting holes on the center of "A" dimension.**
**† The amount of machinable stock on jaws.**
**** Mounting Screws Included**

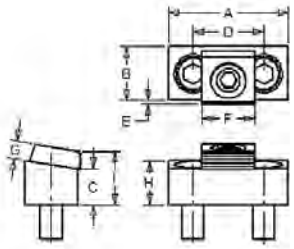
## Metric

| Part Number With Locking Plate | Part Number Without Locking Plate | A* | B | C | D | E | F† | G | Mounting Screw **H | I | Maximum Holding Force (N) | Recommended Expansion Stroke (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68870** | **68871** | 28.6 | 12.7 | 15.7 | 10.67 | 6.3 | 4.6 | 10.16 | M2 | M4 | 2,224 | 0.4 |
| **68872** | **68873** | 38.1 | 19.1 | 23.9 | 16.05 | 9.4 | 6.6 | 15.87 | M4 | M6 | 6,670 | 0.4 |
| **68874** | **68875** | 50.8 | 25.4 | 31.8 | 20.83 | 12.7 | 9.9 | 20.62 | M4 | M8 | 8,895 | 0.6 |
| **68876** | **68877** | 76.2 | 38.1 | 47.5 | 30.86 | 19.1 | 15.7 | 30.48 | M5 | M12 | 15,565 | 0.8 |
| **68878** | **68879** | 101.6 | 50.8 | 63.5 | 41.28 | 25.4 | 20.3 | 41.28 | M6 | M16 | 26,690 | 1.1 |

*** The distance needed between workpieces for clamp clearance, drill and tap mounting holes on the center of "A" dimension.**
**† The amount of machinable stock on jaws.**
**** Mounting Screws Included**

# Micro™ Toe Clamps

This cam action fixture clamp provides positive down force while using very little space on the fixture. Workpieces can be clamped in series by using the back surface of a clamp to locate the next workpiece. The hardened steel clamping element has both a smooth surface for machined workpieces and a serrated clamping surface for rougher work. The height of the clamp can be adjusted by milling the slot deeper in the fixture plate.




| Part Number | A | B | C | D | E† | F | G | H | I | Cam Screw | Distance of Movement | Mounting Screws | Torque (ft/lbs) | Holding Force(lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68731** | 1.70 | .75 | .50 | 1.00 | .090 | .75 | .25 | .62 | .845 | **68527** | .050 | 5/16-18 x 3/4 LH | 20.8 | 2,000 |
| **68732** | 2.12 | 1.00 | .45 | 1.32 | .110 | 1.00 | .38 | .62 | .960 | **68529** | .100 | 3/8-16 x 3/4 LH | 65.0 | 4,000 |
| **68733** | 2.95 | 1.50 | .99 | 2.00 | .130 | 1.50 | .50 | 1.25 | 1.70 | **68531** | .100 | 1/2-13 x 1 1/4 SHCS | 100.0 | 6,000 |

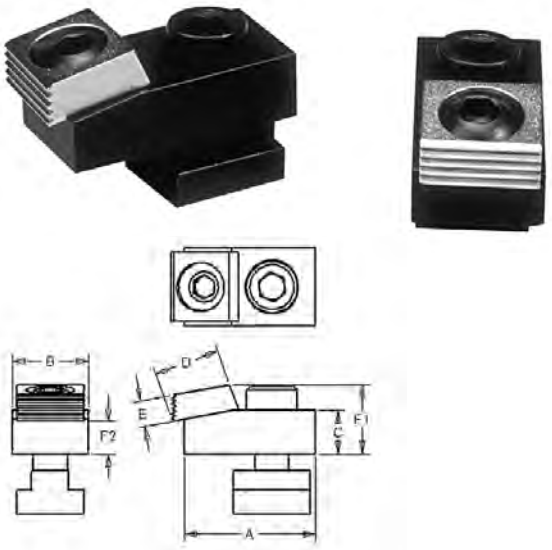
**† "E" is the distance needed between the front of the clamp base and the workpiece.**

## Metric

| Part Number | A | B | C | D | E† | F | G | H | Cam Screw | Distance of Movement | Mounting Screws | Torque (ft/lbs) | Holding Force(lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **68781** | 43.2 | 19.0 | 12.7 | 25.4 | 2.3 | 19.0 | 6.4 | 15.75 | M10 | 1.6 | M8 | 28.0 | 8,900 |
| **68782** | 54.0 | 25.4 | 11.4 | 33.5 | 2.8 | 25.4 | 9.7 | 15.75 | M12 | 2.0 | M10 | 88.0 | 17,800 |
| **68783** | 75.0 | 38.1 | 25.2 | 50.8 | 3.3 | 38.1 | 12.7 | 2.5 | M16 | — | M12 | — | — |

**† "E" is the distance needed between the front of the clamp base and the workpiece.**

# Micro™ T-Slot Toe Clamps




This clamp is like the Micro Toe Clamp, only it is designed to be used in the T-slots of machine tables. It provides positive down force while maintaining a low profile. The hardened steel clamping element has both a smooth surface for machined work pieces and a serrated clamping surface for rougher work.

## Inch

| Part Number | T-Slot Size | A | B | C | D | E | F¹ | F² | Max. Torque/ Holding Force (Ft Lbs/Lbs) |
|---|---|---|---|---|---|---|---|---|---|
| **68750** | No T-nut or Mtg. Screw | 1.94 | 1.12 | 0.62 | 1.00 | 0.38 | 1.00 | 0.875 | 65/4,000 |
| **68741** | 9/16 | 1.94 | 1.12 | 0.62 | 1.00 | 0.38 | 1.00 | 0.875 | 65/4,000 |
| **68742** | 5/8 | 1.94 | 1.12 | 0.62 | 1.00 | 0.38 | 1.00 | 0.875 | 65/4,000 |
| **68743** | 11/16 | 1.94 | 1.12 | 0.62 | 1.00 | 0.38 | 1.00 | 0.875 | 65/4,000 |
| **68744** | 3/4 | 1.94 | 1.12 | 0.62 | 1.00 | 0.38 | 1.00 | 0.875 | 65/4,000 |

## Metric

| Part Number | T-Slot Size | A | B | C | D | E | F¹ | F² | Max Torque/ Holding Force (N.m./N.) |
|---|---|---|---|---|---|---|---|---|---|
| **68791** | 14 | 50 | 28.5 | 15.7 | 25.4 | 9.6 | 25.4 | 22.2 | 88.00/17,800 |
| **68792** | 16 | 50 | 28.5 | 15.7 | 25.4 | 9.6 | 25.4 | 22.2 | 88.00/17,800 |
| **68793** | 18 | 50 | 28.5 | 15.7 | 25.4 | 9.6 | 25.4 | 22.2 | 88.00/17,800 |
| **68794** | No T-nut or Mtg. Screw | 50 | 28.5 | 15.7 | 25.4 | 9.6 | 25.4 | 22.2 | 88.00/17,800 |

F¹ - The distance from the top of the back of the washer to the bottom of the clamp body.
F² - The distance from the top of the front of the washer to the bottom of the clamp body.

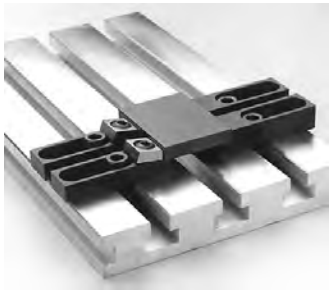
| Part Number | T-Slot Size |
|---|---|
| **68750** | No T-nut or Mtg. Screw |
| **68741** | 9/16 |
| **68742** | 5/8 |
| **68743** | 11/16 |
| **68744** | 3/4 |

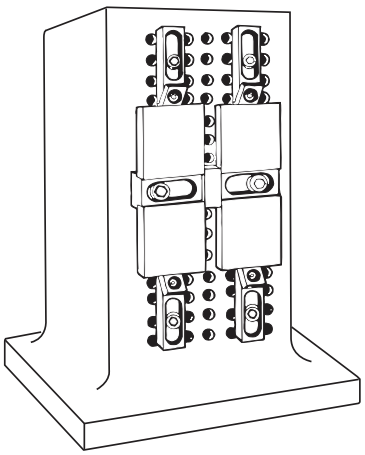
**Torque mounting bolt to 110 Ft/Lbs (150 N.m.)**

## Metric

| Part Number | T-Slot Size |
|---|---|
| **68791** | 14 |
| **68792** | 16 |
| **68793** | 18 |
| **68794** | No T-nut or Mtg. Screw |

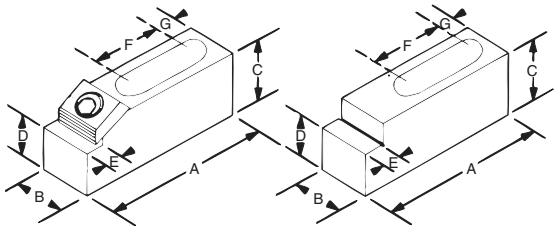
# Micro™ Edge Clamps



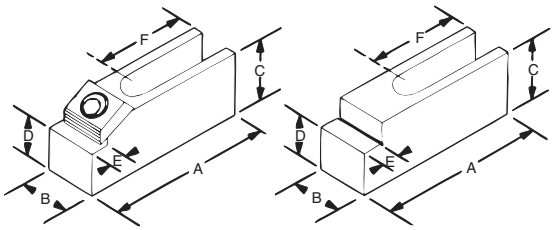


The Micro Edge Clamp offers increased versatility through its unique elevated clamping abilities.

- Workpiece is elevated for through milling and drilling
- Cam action provides positive holddown force
- Provides flexible set-ups for hard to hold parts
- Works in plates, both with tapped hole layouts or T-slot configurations
- Can be mounted vertically or horizontally
- Built-in stops locate workpiece for repeat positioning
- Larger sizes are ideal for mold shop applications
- Tapered mounting slot prevents movement when clamping pressure is applied
- Hardened steel clamping element, low carbon steel body




Closed slot style




Open slot style

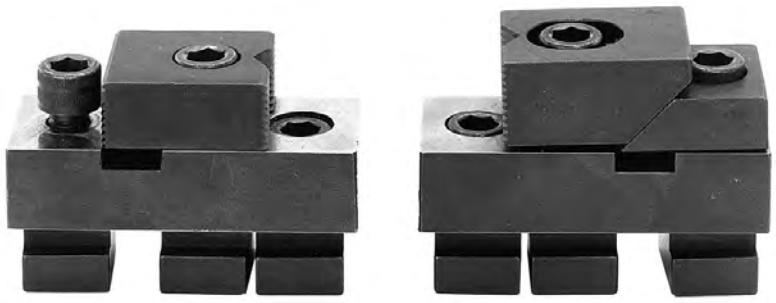
## Inch

| Part Number | Item | A | B | C | +.0000 -.0130 D | E | F | G | Cam Screw Part Number | Mounting Screw | Slot |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **68721** | Clamp | 2.50 | .75 | .62 | .4600 | .31 | .83 | .53 | **68527** | 5/16 | Closed |
| **68722** | Stop | 2.50 | .75 | .75 | .4600 | .31 | 1.11 | .53 | — | 5/16 | Closed |
| **68723** | Clamp | 3.75 | 1.12 | .62 | .4800 | .37 | 1.68 | .50 | **68529** | 1/2 | Closed |
| **68724** | Stop | 3.75 | 1.12 | .87 | .4800 | .37 | 1.68 | .50 | — | 1/2 | Closed |
| **68725** | Clamp | 4.21 | 1.50 | 1.62 | 1.3780 | .37 | 1.82 | — | **68535** | 5/8 | Open |
| **68726** | Stop | 4.21 | 1.50 | 2.00 | 1.3780 | .37 | 1.82 | — | — | 5/8 | Open |

## Metric

| Part Number | Item | A | B | C | +.0000 -.0005 D | E | F | G | Cam Screw Part Number | Mounting Screw | Slot |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **68821** | Clamp | 63.5 | 19.1 | 15.8 | 11.68 | 8.0 | 21.1 | 13.5 | **68532** | M8 | Closed |
| **68822** | Stop | 63.5 | 19.1 | 19.1 | 11.68 | 8.0 | 28.2 | 13.5 | — | M8 | Closed |
| **68823** | Clamp | 95.3 | 28.5 | 15.8 | 12.19 | 9.4 | 42.7 | 12.7 | **68534** | M12 | Closed |
| **68824** | Stop | 95.3 | 28.5 | 22.1 | 12.19 | 9.4 | 42.7 | 12.7 | — | M12 | Closed |
| **68825** | Clamp | 107.0 | 38.1 | 41.2 | 35.00 | 9.4 | 46.2 | NA | **68535** | M16 | Open |
| **68826** | Stop | 107.0 | 38.1 | 50.8 | 35.00 | 9.4 | 46.2 | NA | — | M16 | Open |

# Modular Mini Vise



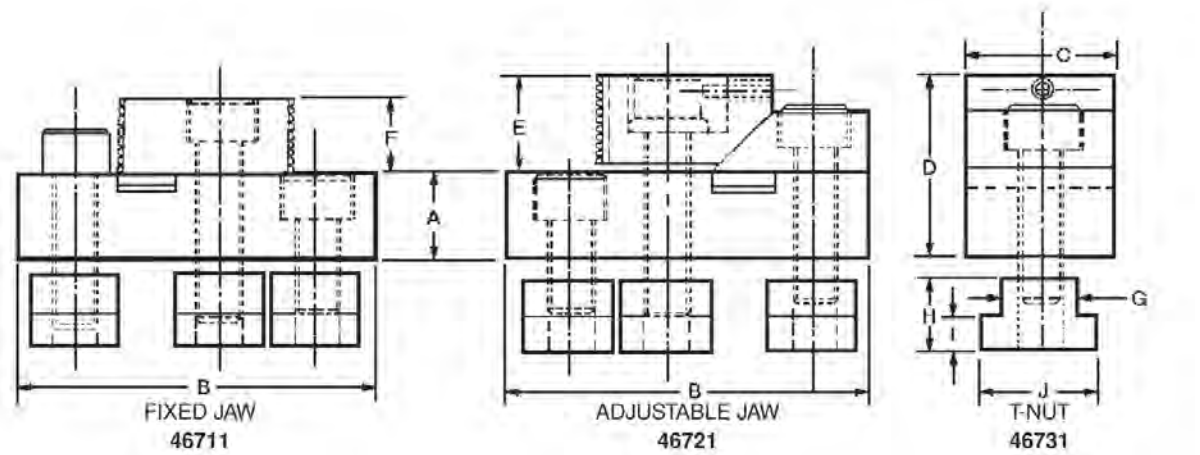
- Material: C-1018
- Finish: Black Oxide
  Case Hardened 58-62 Rc

| Part Number | Description |
|---|---|
| 46711 | Fixed Jaw Clamp |
| 46721 | Adj. Jaw Clamp |
| 46731 | T-Slot Nut |

The Jergens Modular Mini Vise provides accurate location and positive holding. The bases are hardened and ground to the same height as Jergens Rest Pads for accurate location. The jaws are serrated and hardened to provide positive holding. These versatile clamps may be used as shown, or the jaws may be reversed to allow the workpiece to rest on the machine table or fixture base. The clamps can be made part of a dedicated fixture by removing the T-nuts and fastening the 3/8-16" cap screws directly to the fixture.

To use the Jergens Modular Mini Vise: position the fixed jaw clamp and tighten all three cap screws to secure the clamp. Position the adjustable clamp and tighten the outside capscrews. Insert the workpiece and tighten the center cap screw. The adjustable jaw will force the workpiece down against the base and over against the fixed jaw clamp.

The 46711 clamp has a fixed jaw for locating.
The 46721 clamp has an adjustable jaw for clamping.
Each clamp is supplied with three 3/8-16" cap screws and three 46731 T-nuts.




| +.0000 -.0005 A | B | C | Maximum Height D | E | F | Table Slot G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|
| .7205 | 3 | 1 1/4 | 1-9/16 | 3/4 | 5/8 | 5/8 | 5/8 | 11/32 | 1 |

# Mini Edge Clamps & Stops

## Cam Action Clamps

- **Cam Action Clamps - The clamp actuates by a com screw with .047" (1.2mm) of stroke.**

| Part Number | Material | Clamp Type | Clamping Height | Max. Torque | Holding Force |
|---|---|---|---|---|---|
| **68881** | Spring Steel | Low Profile Clamp | .1000" (2.5mm) | 6.6 ft. lbs. (8.95 Nm) | 880 lbs. (3900 N) |
| **68882** | Spring Steel | Raised Clamp | .300" (2.5mm) | 6.6 ft. lbs. (8.95 Nm) | 880 lbs. (3900 N) |

## Stops / Locators

- **Stop / Locators - Single Stops are used for pieces over 1.75" (44.5mm) long. Double Stops are used for smaller pieces.**

| Part Number | Material | Stop Type | Jaw Height |
|---|---|---|---|
| **68883** | Spring Steel | Single Stop | .100" (2.5mm) |
| **68884** | Spring Steel | Double Stop | .100" (2.5mm) |
| **68885** | Spring Steel | Raised Single Stop | .300" (7.5mm) |
| **68886** | Spring Steel | Raised Double Stop | .300" (7.5mm) |
| **68887** | Spring Steel | Swivel Stop | .100" (2.5mm) |
| **68888** | Spring Steel | Raised Swivel Stop | .100" (2.5mm) |