Milfab Cam Punch Units

Choose the right style

The difference between the Inboard, Outboard, and Gas Spring models is punch stripping. The Top Mount variation is available in all three models. Milfab Cam Units generate the rated punching and stripping forces at the end of the stroke. Always use the full stroke entering the die 1/16 inch.

SEVEN POINT SELECTION GUIDELINES:

1. MATERIAL THICKNESS - Do not exceed the rated material thickness for each cam unit without consulting our engineering department.
2. PART SHAPE - Use Inboard Spring cam units on flat parts with room for urethane stripper displacement. Use Outboard Spring cam units on tubes and curved surfaces for positive die spring stripping. Use Gas Spring cam units where higher stripping force is required.
3. PUNCH STROKE - Select amount needed. Use full stroke for maximum leverage and stripping force
4. PUNCHING FORCE - Punching Force, tons = LC x T x TS / 2000
5. STRIPPING FORCE - The force required to strip a punch is difficult to determine since it is influenced by the type of metal pierced, punch size, punch/die clearance, punch sharpness, and other factors. Stripping Force, lbs. LC x T x M x 2000-- Where:

   LC= length of cut

   T= material thickness

   TS= tensile strength, psi

   M= material multiplier, tsi, steel, and stainless steel - 1.5, aluminum - 2.25

6. POINT SIZE - Diagonals must fit maximum point size. For Inboard Spring models maximum point size is less than punch body diameter due to the ground shoulder supporting the washer and stripper

How to order

Model no. = prefix letters + punch body dia. + suffix

PREFIXES

(n) - Number of Punches

M - Metric punch, dowels, and screws

T - top mount

G - gas spring

E - extended range, oversized point

B - self-lube bushing

K - keyed cam unit and punch

O - outboard spring

S - short punch stroke

L - long punch stroke

PUNCH BODY DIAMETER

250 - 1/4 in., 6 mm

375 - 3/8 in., 10 mm

500 - 1/2 in., 13 mm

625 - 5/8 in., 16 mm

75 - 3/4 in., 20 mm

87 - 7/8 in., (no metric equivalent)

100 - 1 in., 25 mm

125 - 1 1/4 in., (no metric equivalent)

7. POINT SHAPE - Shaped points require keyed cam units to keep the punch from rotating in the bore.

137 - 1 3/8 in., (no metric equivalent)

150 - 1 1/2 in., (no metrical equivalent)

SUFFIXES

A - A2 punch

AE - A2 ejector punch

M - M2 punch

ME - M2 ejector punch

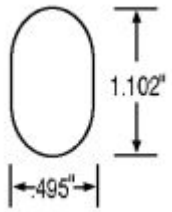
TO ORDER, PLEASE SPECIFY QUANTITY, CAM UNIT MODEL NUMBER, and P' DIMENSION FOR ROUND HOLES, OR P' and W' DIMENSIONS AND THE SHAPE.

EXAMPLE:

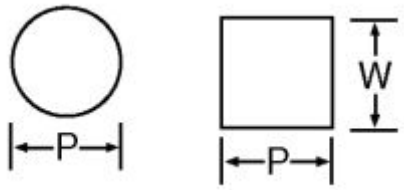
KOS125AE:

P=.495" W=1.102"

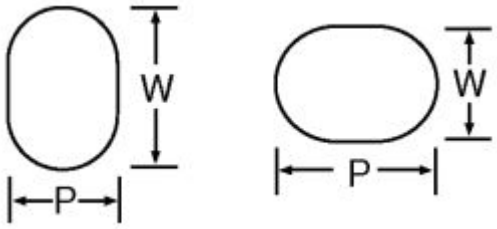
Oblong, this is a keyed, outboard model, short stroke cam unit with a 1.250" A2 ejector punch ground to a .495" by 1.102" oblong point.



Standard Round ---- Square



Oblong 1 --- Oblong 2



Rectangular 1 --- Rectangular 2