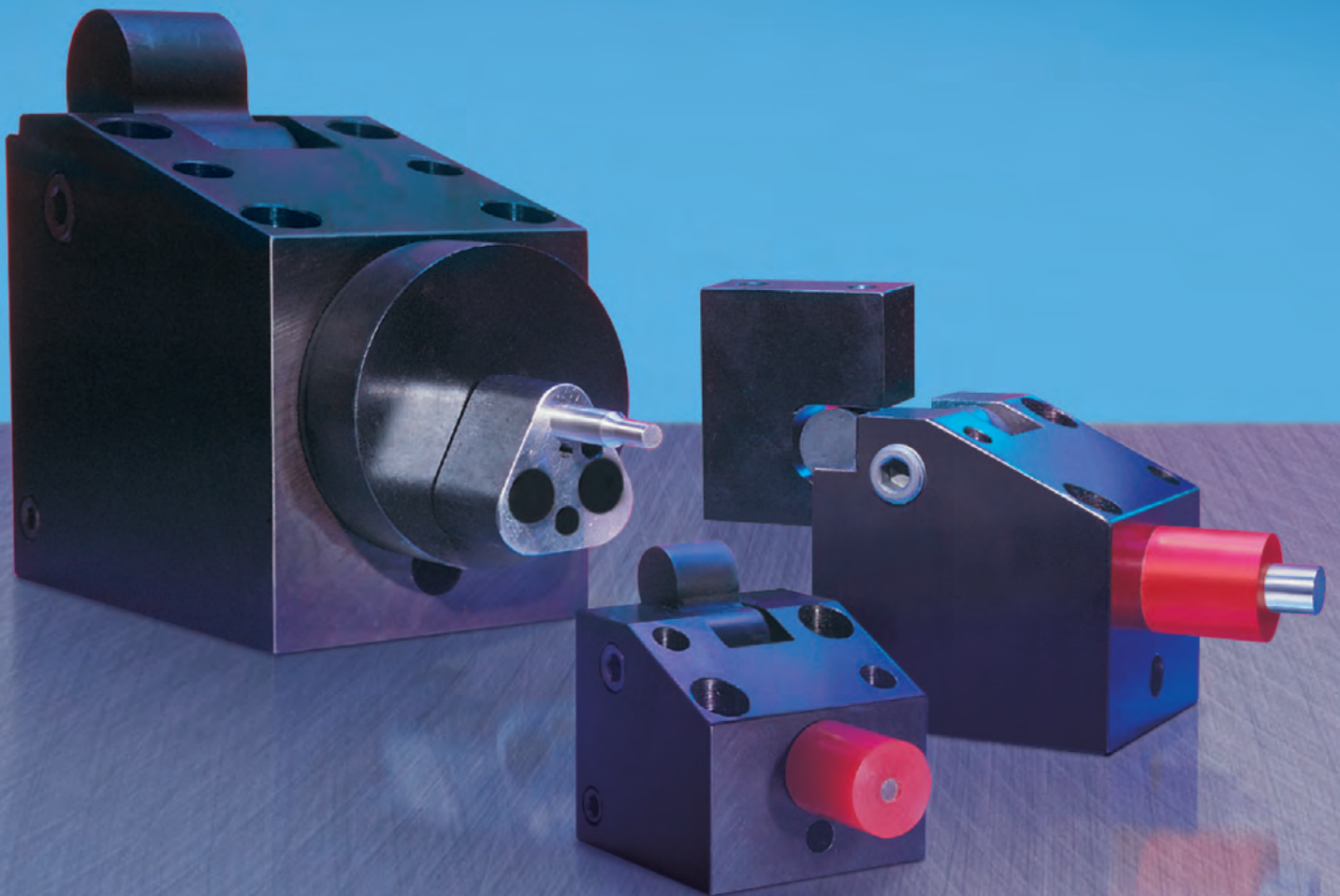


READY

THE INNOVATOR OF OUR INDUSTRY®

**CAMDRIVE®**  
*Interchangeable,  
In Stock and Loaded with Options*





# CAMDRIVE® - The Compact Cam with "Interchangeable Precision"

## Why Build & Repair Cams?

### CAMDRIVE® Benefits:

- Low cost, versatile design
- Fits in smallest die space
- Fast delivery . . . even for options
- Interchangeable tolerances, metric
- Hardened components, high production
- All units come equipped with a mechanical die spring return . . . a READY SuperSpring®

## How to Select the Right Unit:

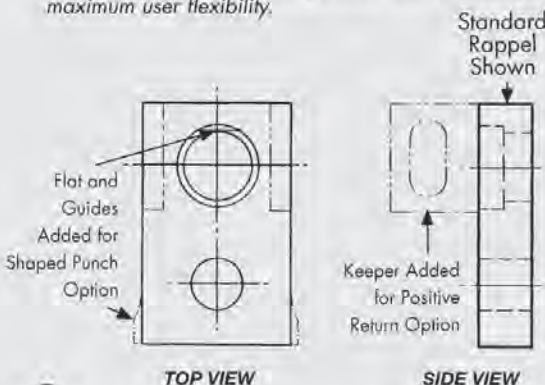
1. Choose the model number from page 3 which covers the required point diameter (D) and stroke (A).
2. Confirm that the model's tonnage exceeds the total force (piercing + stripping) required. Total Force = (hole perimeter x material thickness x material tensile strength) + stripping force from page 3 table.
3. Select options on pages 4 and 5. PLEASE NOTE: point size on standard punches must be specified.

## CAMDRIVE® Do's & Don'ts

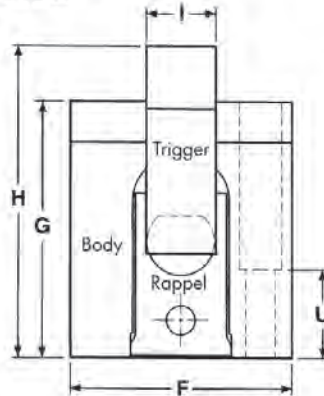
- DO:** key in back of unit to resist force.
- DO:** effect piercing in last quarter of max stroke **A**.
- DO:** remember punch stroke equals press stroke (1:1 ratio).
- DON'T:** mount CAMDRIVE® greater than  $\pm 15^\circ$  without using angle mount option trigger. Note:  $\pm 30^\circ$  max angle with option. No positive return on angle mounts.
- DON'T:** overstroke the unit.  
Max trigger stroke = 90% of A

## The CAMDRIVE® Rappel

The *rappel* is an internal component that differs with each available option. A *rappel* can always be changed to a different configuration later providing maximum user flexibility.

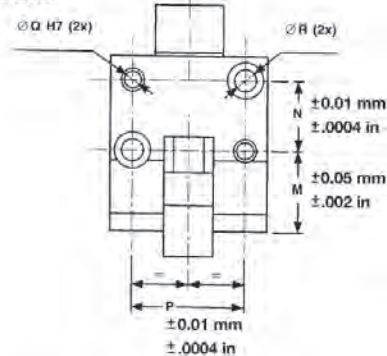


### End View



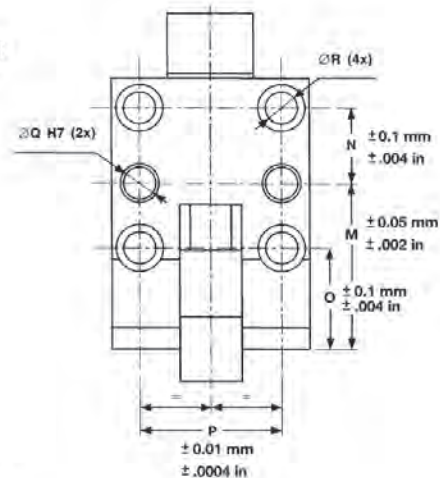
### Top View

TYPE C-XXXX-11  
for shorter strokes



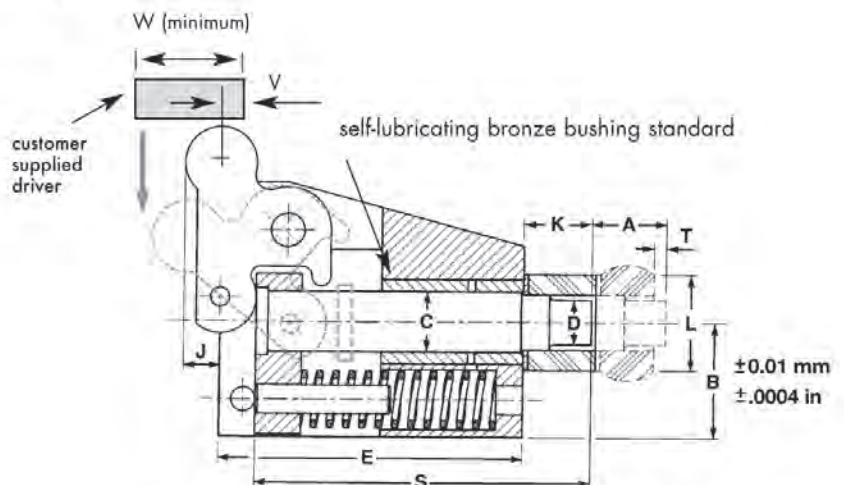
### Top View

TYPE C-XXXX-12/-13  
for longer strokes



### Side View

(with fully closed stroke)



NOTE: Maximum trigger stroke = A Minimum trigger stroke = 75% of A  
Maximum work stroke = 90% of A

All dimensions in mm and inch, except when otherwise stated.  
All dimensions are nominal unless tolerance is stated.

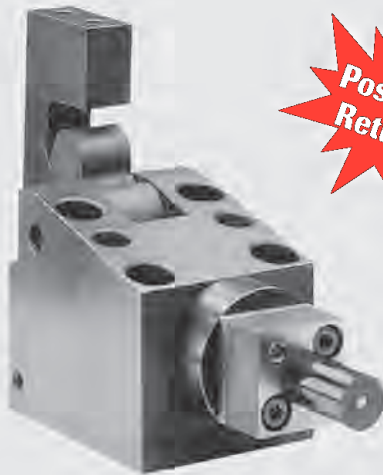


CATALOG REFERENCE	C-0250-		C-0375-		C-0500-		C-0625-		C-1000-		C-1500-	
	-11	-12	-11	-12	-11	-12	-11	-12	-12	-13	-12	-13
<b>Metric Tonne</b> US Ton	<b>1</b> 1.1		<b>2</b> 2.2		<b>3</b> 3.3		<b>5</b> 5.5		<b>10</b> 11		<b>18</b> 19.8	
<b>Max. Strip Force (daN)*</b> Max. Strip Force (lbs.)	<b>170</b> 382		<b>200</b> 450		<b>210</b> 472		<b>320</b> 719		<b>510</b> 1146		<b>560</b> 1259	
<b>Point D</b>	<b>1.5 to 4.7</b> mm .059 to .185 inch		<b>3.2 to 7.9</b> mm .125 to .311 inch		<b>4.7 to 11</b> mm .185 to .433 inch		<b>9.5 to 14.2</b> mm .374 to .559 inch		<b>14.3 to 22.4</b> mm .560 to .882 inch		<b>22.5 to 31</b> mm .883 to 1.22 inch	
<b>E</b>	<b>51</b> mm 2.008 inch	<b>76</b> mm 2.992 inch	<b>64</b> mm 2.520 inch	<b>91</b> mm 3.582 inch	<b>75</b> mm 2.952 inch	<b>98</b> mm 3.858 inch	<b>87</b> mm 3.425 inch	<b>112</b> mm 4.409 inch	<b>126</b> mm 4.960 inch	<b>158</b> mm 6.220 inch	<b>168</b> mm 6.614 inch	<b>231</b> mm 9.094 inch
<b>Max. Stroke A</b>	<b>9.5</b> mm .374 inch	<b>19</b> mm .748 inch	<b>13</b> mm .512 inch	<b>22</b> mm .866 inch	<b>16</b> mm .630 inch	<b>25</b> mm .984 inch	<b>19</b> mm .748 inch	<b>28</b> mm 1.102 inch	<b>32</b> mm 1.26 inch	<b>50</b> mm 1.968 inch	<b>38</b> mm 1.496 inch	<b>63</b> mm 2.480 inch
<b>B</b>	<b>22</b> mm .866 inch		<b>32</b> mm 1.260 inch		<b>36</b> mm 1.417 inch		<b>42</b> mm 1.654 inch		<b>48</b> mm 1.889 inch		<b>67</b> mm 2.638 inch	
<b>C</b>	<b>6</b> mm .236 inch		<b>10</b> mm .394 inch		<b>13</b> mm .512 inch		<b>16</b> mm .630 inch		<b>25</b> mm .984 inch		<b>38</b> mm 1.496 inch	
<b>F</b>	<b>51</b> mm 2.008 inch		<b>64</b> mm 2.520 inch		<b>68</b> mm 2.677 inch		<b>78</b> mm 3.071 inch		<b>92</b> mm 3.622 inch		<b>105</b> mm 4.133 inch	
<b>G</b>	<b>47</b> mm 1.850 inch		<b>63</b> mm 2.480 inch		<b>75</b> mm 2.953 inch		<b>87</b> mm 3.425 inch		<b>106</b> mm 4.173 inch		<b>146</b> mm 5.748 inch	
<b>H</b>	<b>59</b> mm 2.323 inch		<b>75</b> mm 2.953 inch		<b>91</b> mm 3.583 inch		<b>106</b> mm 4.173 inch		<b>129</b> mm 5.079 inch		<b>180</b> mm 7.087 inch	
<b>I</b>	<b>15</b> mm .591 inch		<b>19</b> mm .748 inch		<b>22</b> mm .866 inch		<b>24</b> mm .945 inch		<b>28</b> mm 1.102 inch		<b>41</b> mm 1.614 inch	
<b>J</b>	<b>6</b> mm .236 inch		<b>5</b> mm .197 inch		<b>6.5</b> mm .256 inch		<b>9</b> mm .354 inch		<b>15</b> mm .591 inch		<b>24</b> mm .945 inch	
<b>K</b>	<b>22</b> mm .866 inch		<b>22</b> mm .866 inch		<b>22</b> mm .866 inch		<b>22</b> mm .866 inch		<b>28.5</b> mm 1.122 inch		<b>41.5</b> mm 1.634 inch	
<b>L</b>	<b>18</b> mm .709 inch		<b>21</b> mm .826 inch		<b>23</b> mm .906 inch		<b>28</b> mm 1.102 inch		<b>45</b> mm 1.772 inch		<b>63</b> mm 2.480 inch	
<b>M</b>	<b>26</b> mm 1.024 inch	<b>50</b> mm 1.968 inch	<b>32</b> mm 1.260 inch	<b>57</b> mm 2.244 inch	<b>38</b> mm 1.496 inch	<b>59</b> mm 2.323 inch	<b>42</b> mm 1.654 inch	<b>66</b> mm 2.598 inch	<b>77</b> mm 3.031 inch	<b>110</b> mm 4.331 inch	<b>105</b> mm 4.134 inch	<b>168</b> mm 6.614 inch
<b>N</b>	<b>18</b> mm .708 inch		<b>23</b> mm .906 inch		<b>30</b> mm 1.181 inch		<b>35</b> mm 1.377 inch		<b>35</b> mm 1.377 inch		<b>45</b> mm 1.772 inch	
<b>O</b>	<b>26</b> mm 1.024 inch		<b>32</b> mm 1.260 inch		<b>38</b> mm 1.496 inch		<b>42</b> mm 1.654 inch		<b>50</b> mm 1.969 inch		<b>62</b> mm 2.441 inch	
<b>P</b>	<b>37</b> mm 1.457 inch		<b>46</b> mm 1.811 inch		<b>50</b> mm 1.968 inch		<b>56</b> mm 2.205 inch		<b>66</b> mm 2.598 inch		<b>79</b> mm 3.110 inch	
<b>Q</b>	<b>6</b> mm		<b>8</b> mm		<b>8</b> mm		<b>10</b> mm		<b>16</b> mm		<b>16</b> mm	
<b>R</b>	<b>M6</b>		<b>M8</b>		<b>M8</b>		<b>M10</b>		<b>M14</b>		<b>M14</b>	
<b>S</b>	<b>63</b> mm 2.480 inch	<b>88</b> mm 3.465 inch	<b>75</b> mm 2.953 inch	<b>102</b> mm 4.016 inch	<b>84.5</b> mm 3.327 inch	<b>107.5</b> mm 4.232 inch	<b>94</b> mm 3.700 inch	<b>119</b> mm 4.685 inch	<b>139.5</b> mm 5.492 inch	<b>171.5</b> mm 6.752 inch	<b>190.5</b> mm 7.500 inch	<b>253.5</b> mm 9.980 inch
<b>T</b>	<b>6</b> mm .236 inch		<b>6</b> mm .236 inch		<b>6</b> mm .236 inch		<b>6</b> mm .236 inch		<b>9</b> mm .354 inch		<b>9</b> mm .354 inch	
<b>U</b>	<b>15</b> mm .591 inch		<b>20</b> mm .787 inch		<b>25</b> mm .984 inch		<b>25</b> mm .984 inch		<b>30</b> mm 1.181 inch		<b>40</b> mm 1.575 inch	
<b>V</b>	<b>6</b> mm .236 inch		<b>6</b> mm .236 inch		<b>9</b> mm .354 inch		<b>9</b> mm .354 inch		<b>12</b> mm .472 inch		<b>18</b> mm .708 inch	
<b>W</b>	<b>19</b> mm .748 inch		<b>19</b> mm .748 inch		<b>25</b> mm .984 inch		<b>30</b> mm 1.181 inch		<b>33</b> mm 1.300 inch		<b>50</b> mm 1.968 inch	

These are metric tools. \*1 daN = 2.24 lbs.; 1 mm = .0394 in. All dimensions are nominal unless tolerance is stated.

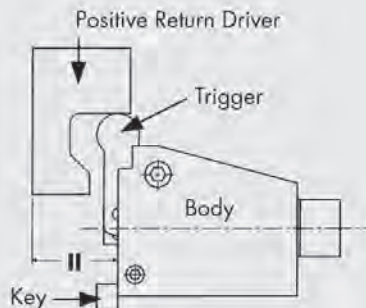
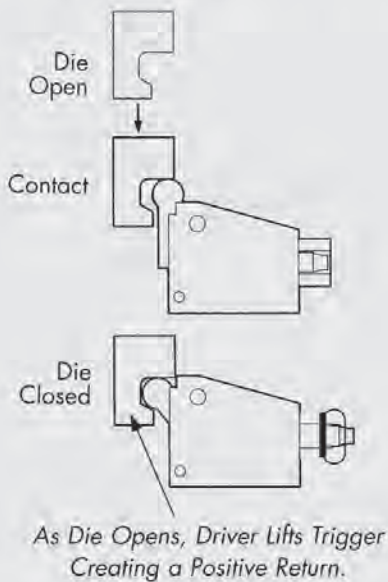
## Popular CAMDRIVE® Options

**One Design, Easily Adaptable for a Wide Range of Special Needs. Versatility and Precision by Interchangeable Internal Components.**



**Positive Return**

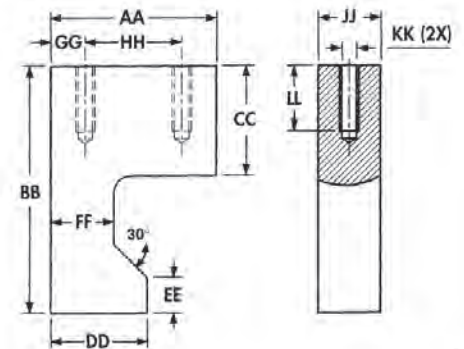
### How the Positive Return Option Works . . .



### POSITIVE RETURN OPTION

- Available on all units except the angle mount option.
- Can be used when mounting at angles of  $\pm 15^\circ$ .
- Conversion kit contains driver and appropriate rappel.
- Why risk die damage!

### Positive Return Driver



Positive Return Driver Dimensions

Catalog Reference		C-0250	C-0375	C-0500	C-0625	C-1000	C-1500
AA	mm	30	40	50	55	58	82
	inch	1.181	1.574	1.968	2.165	2.283	3.228
BB	mm	45	50	60	70	85	115
	inch	1.772	1.968	2.362	2.756	3.346	4.528
CC	mm	21	25	29	34	40	50
	inch	.827	.984	1.142	1.339	1.574	1.968
DD	mm	17	27	33	35	37	48
	inch	.669	1.063	1.299	1.377	1.457	1.890
EE	mm	8	9	10	11	13	15
	inch	.315	.354	.394	.433	.511	.591
FF	mm	11	21	25	25	25	32
	inch	.433	.827	.984	.984	.984	1.260
GG	mm	6	8	10	12.5	14	20
	inch	.236	.315	.394	.492	.551	.787
HH	mm	18	24	30	30	30	42
	inch	.709	.945	1.181	1.181	1.181	1.654
II	mm	24	34	41	46	53	74
	inch	.945	1.339	1.614	1.811	2.087	2.913
JJ	mm	15	19	22	24	28	41
	inch	.591	.748	.866	.945	1.102	1.614
KK	mm	M6	M6	M8	M10	M12	M16
	inch	M6	M6	M8	M10	M12	M16
LL	mm	16	16	20	20	25	32
	inch	.630	.630	.787	.787	.984	1.260

These are metric tools.  
All dimensions are nominal unless tolerance is stated.



## SELF-LUBRICATING BRONZE BUSHING STANDARD:

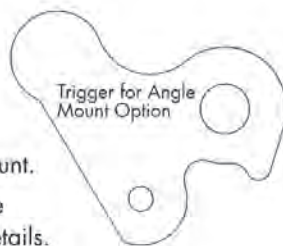
- Standard on all models.
- Meets U.S. automotive standards.
- Eliminates the need for a grease fitting.
- Requires virtually no maintenance while increasing life.
- Ideal for automotive dies.

## SHAPED PUNCH OPTION:

- Round punch blank with flat on head supplied with this option.
- Rappel is equipped with a matching flat tangent to punch body diameter (C). (see CAMDRIVE® rappel page 2)
- Rappel also is guided in CAMDRIVE® body for precision (see CAMDRIVE® rappel page 2).
- Special shaped punches per print available, longer delivery and at extra charge.

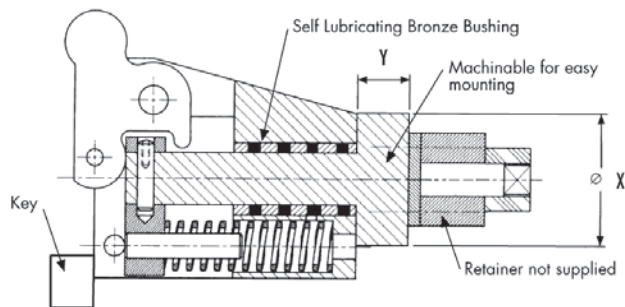
## ANGLE MOUNT OPTION:

- Used when mounting at  $\pm 15^\circ - 30^\circ$  (max.)
- Unit comes with trigger for angle mount.
- Positive Return option is not available with angle mount. Call READY for details.



## RETAINER MOUNT OPTION:

- Mount standard retainers to machinable face.
- Use the standard or special tools you select.
- This option available only on:  
C-0625-11/-12, C-1000-12/-13 and C-1500-12/-13
- Positive Return option available, special rappel (page 2).



## Retainer Mount Dimensions

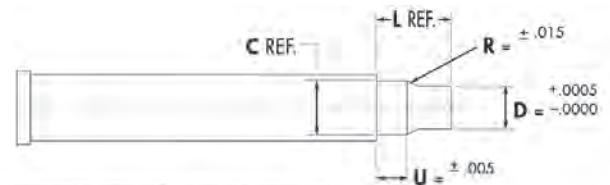
Catalog Reference	C-0625-11 C-0625-12	C-1000-12 C-1000-13	C-1500-12 C-1500-13
X	50	64	80
mm			89.5
inch	1.969	2.520	3.149
Y	20	25	30
mm			30
inch	.787	.984	1.181

All dimensions are nominal unless tolerance is stated.

## STANDARD PUNCH OPTIONS:

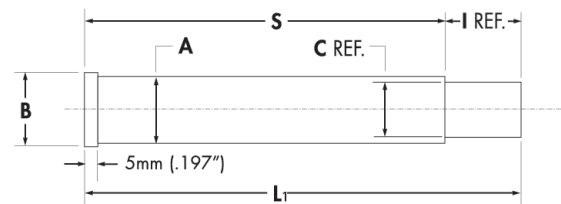
- READY offers CAMDRIVE® punches in two point configurations; custom round pointed (please specify "D" dimension at time of order) and in a punch blank configuration (customer to grind point).
- Piercing must take place during the last 25% of stroke. Allow additional stroke for punch re-sharpening, when applicable. Do not exceed 90% of stroke.
- READY recommends sharpening a punch no more than two times during the course of its life.
- Special ejector style punches also available upon request. Refer to the chart below for dimensional data.

## CAMDRIVE® Metric Punch (pointed to order)



Model	L	C	U
250	mm	22	4.7
	inch	.866	.185
375	mm	22	7.9
	inch	.866	.311
500	mm	22	11
	inch	.866	.433
625	mm	22	14.2
	inch	.866	.559
1000	mm	28.5	22.4
	inch	1.122	.882
1500	mm	41.5	31
	inch	1.634	1.220

## CAMDRIVE® Metric Punch Blank

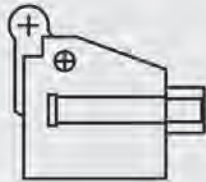


Model	A	B	C	S	L <sub>1</sub>	I
250-11	mm	6	9	4.7	41	63
	inch	.236	.354	.185	1.614	2.480
250-12	mm	6	9	4.7	66	88
	inch	.236	.354	.185	2.599	3.465
375-11	mm	10	13	7.9	53	75
	inch	.394	.512	.311	2.087	2.953
375-12	mm	10	13	7.9	80	102
	inch	.394	.512	.311	3.150	4.016
500-11	mm	13	16	11	63.5	85.5
	inch	.512	.630	.433	2.500	3.366
500-12	mm	13	16	11	85.5	107.5
	inch	.512	.630	.433	3.366	4.232
625-11	mm	16	19	14.2	72	94
	inch	.630	.748	.559	2.835	3.701
625-12	mm	16	19	14.2	97	119
	inch	.630	.748	.559	3.819	4.685
1000-12	mm	25	28	22.4	111	139.5
	inch	.984	1.102	.882	4.370	5.492
1000-13	mm	25	28	22.4	143	171.5
	inch	.984	1.102	.882	5.630	6.752
1500-12	mm	38	41	31	149	190.5
	inch	1.496	1.614	1.220	5.866	7.500
1500-13	mm	38	41	31	212	253.5
	inch	1.496	1.614	1.220	8.346	9.980

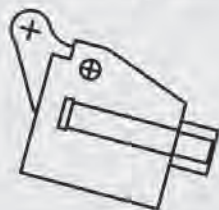
## How To Order a CAMDRIVE®

### Standard Model

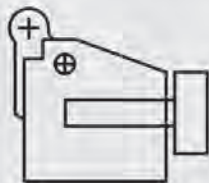
(specify D = for ground point)



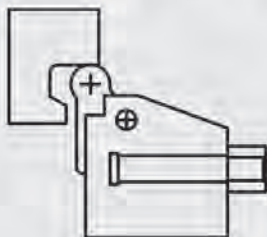
### Angle Mount Option - AM



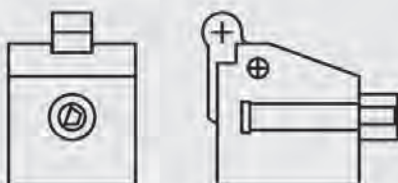
### Retainer Mount Option - RM



### Positive Return Option - PR



### Shaped Punch Option - SP



Follow these simple steps and build your part number (s) by filling in the chart below:

1. Review "How to Select the Right Unit" on page 2 or fill out Worksheet on page 7 and fax it to us and we will assist you in your selection.
2. Determine what options you require from pages 4 & 5.
3. Select the part number from the chart below.

Model and Stroke	Angle Mount -AM*	Retainer Mount -RM	Positive Return -PR*	Shaped Punch -SP
C-0250-11		N/A		
C-0250-12		N/A		
C-0375-11		N/A		
C-0375-12		N/A		
C-0500-11		N/A		
C-0500-12		N/A		
C-0625-11				
C-0625-12				
C-1000-12				
C-1000-13				
C-1500-12				
C-1500-13				

\* = Angle Mount option not available with Positive Return option

### Sample Part #

C-0250-11-AM-SP = C-0250-11  
Short stroke unit, Angle Mount, Shaped Punch

C-0625-12-RM-PR = C-0625-12  
Long stroke unit, Retainer Mount,  
Positive Return

C-0500-11, "D"=.375 = C-0500-11  
Short stroke unit with punch point ground to .375"

C-0500-11 = C-0500-11  
Short stroke unit with blank punch point  
(per C dim on page 5)

Selecting the right **READY CAMDRIVE®** is as easy as **1 . . . 2 . . . 3**  
**Copy and fax this worksheet for FAST QUOTES**

**1** Company: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

**2 Please describe your application criteria**

Part Material: \_\_\_\_\_  
 Part Thickness: \_\_\_\_\_  
 Tensile Strength: \_\_\_\_\_  
 Length of Cut: \_\_\_\_\_

**Cam Requirements**

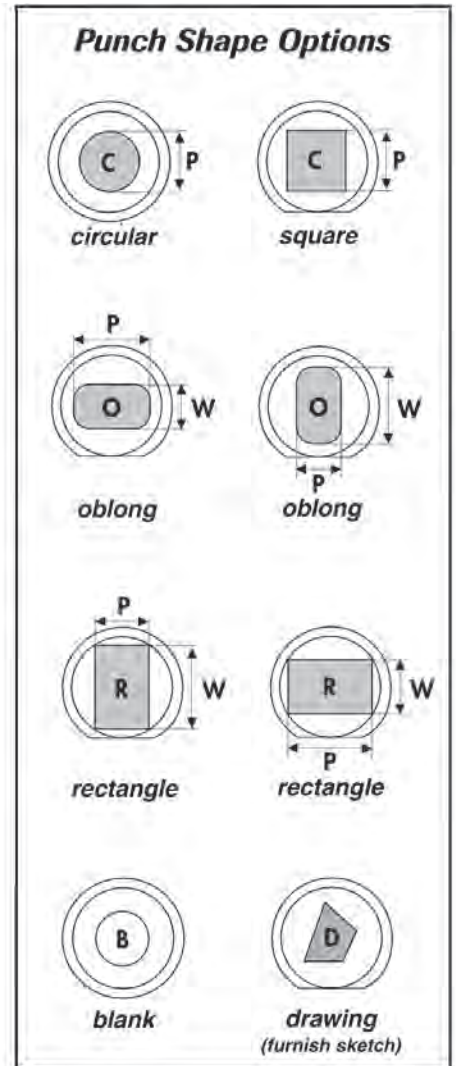
Cam Tonnage Required: \_\_\_\_\_  
 Cam Stroke Required: \_\_\_\_\_  
 Stripping Force Required: \_\_\_\_\_

**Options** (Please circle one)

Positive Return Option? Yes / No      Retainer Mount Option? Yes / No  
 Angle Mount Option? Yes / No      Shape Punch Option? Yes / No

**Specifications**

**3** Number of Cams Required: \_\_\_\_\_  
 CAMDRIVE® Model Number: \_\_\_\_\_  
 Punch Shape (Please circle one):  
     Circular / Square / Oblong / Rectangle / Blank / Drawing  
 Punch Point Dimensions: P= \_\_\_\_\_ W= \_\_\_\_\_  
 Punch Material (A2 standard):      A2 / M2 / M2 w/TiN / M2 Nitrided  
 Style Punch (Solid Is standard):      Solid / Ejector



**Submitted by:** \_\_\_\_\_  
**date:** \_\_\_\_\_

**Reviewed by:** \_\_\_\_\_  
**date:** \_\_\_\_\_

**Quote Reference #** \_\_\_\_\_  
**date** \_\_\_\_\_



READY



## The Innovator of Our Industry<sup>SM</sup>

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**READY TECHNOLOGY, INC.**

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(800) 543-4355 • (937) 866-7200 • fax (937) 866-7226

[www.readytechnology.com](http://www.readytechnology.com)