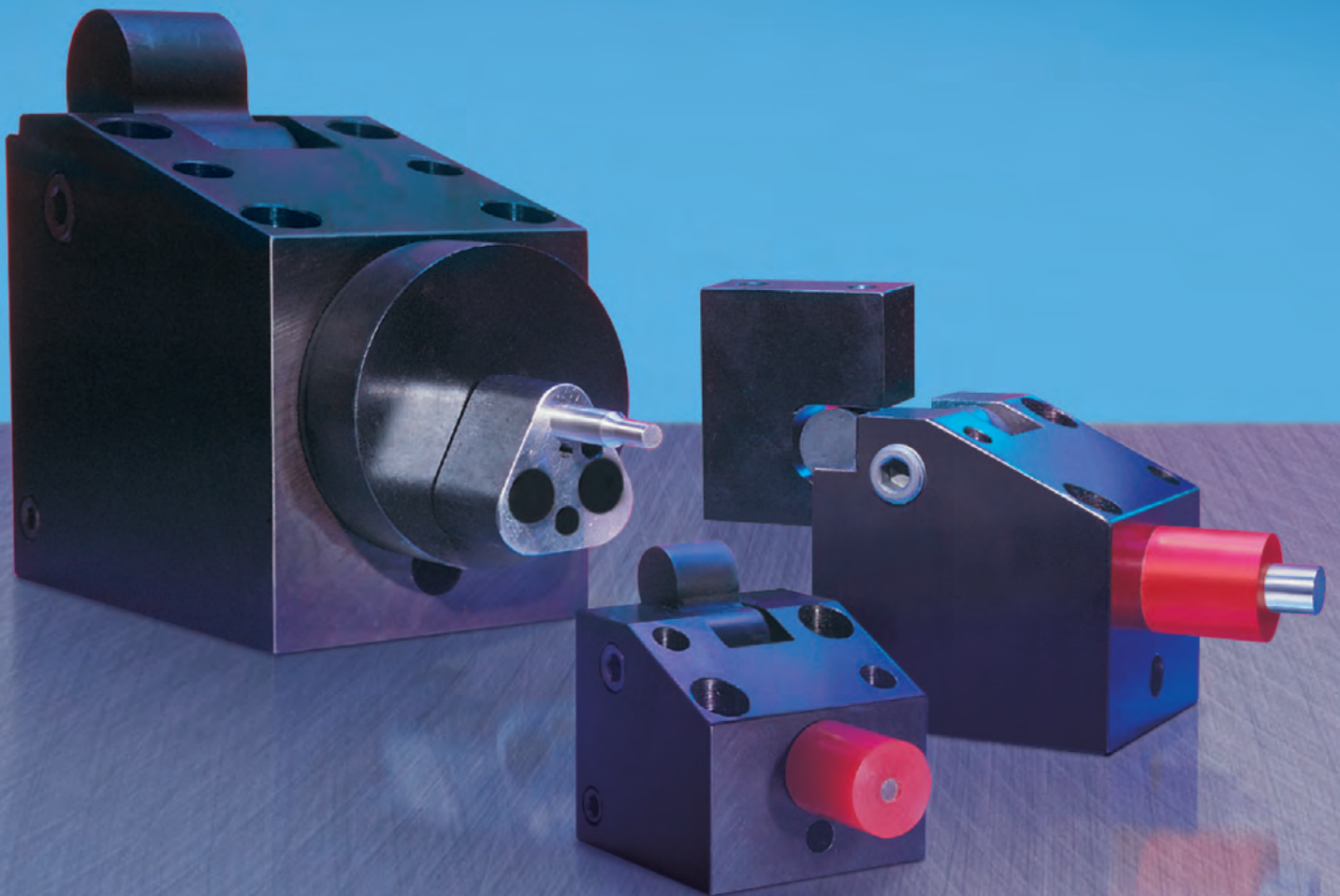


READY

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:

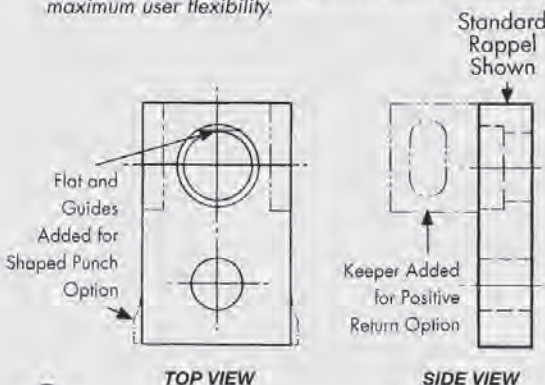
1. Choose the model number from page 3 which covers the required point diameter (D) and stroke (A).
2. Confirm that the model's tonnage exceeds the total force (piercing + stripping) required. Total Force = (hole perimeter x material thickness x material tensile strength) + stripping force from page 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

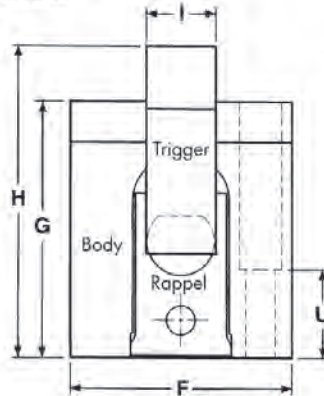
- DO:** key in back of unit to resist force.
- DO:** effect piercing in last quarter of max stroke **A**.
- DO:** remember punch stroke equals press stroke (1:1 ratio).
- DON'T:** mount CAMDRIVE® greater than $\pm 15^\circ$ without using angle mount option trigger. Note: $\pm 30^\circ$ max angle with 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.

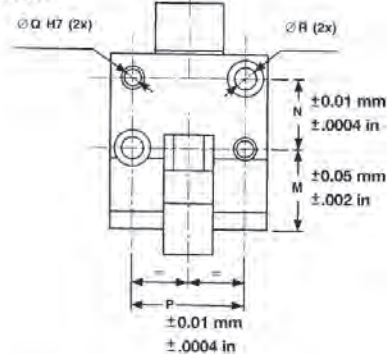


End View



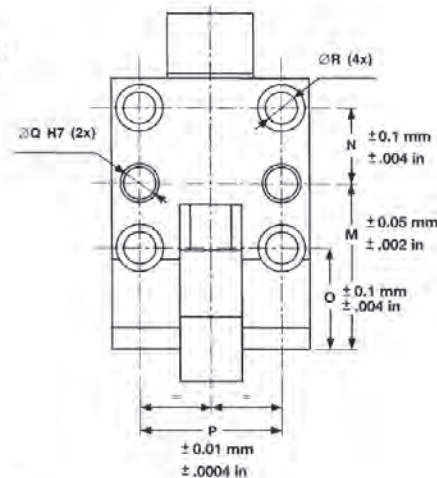
Top View

TYPE C-XXXX-11
for shorter strokes



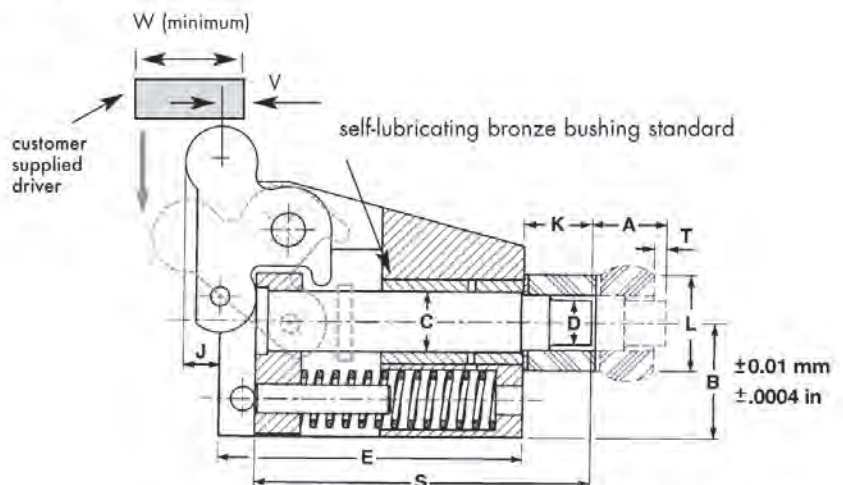
Top View

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

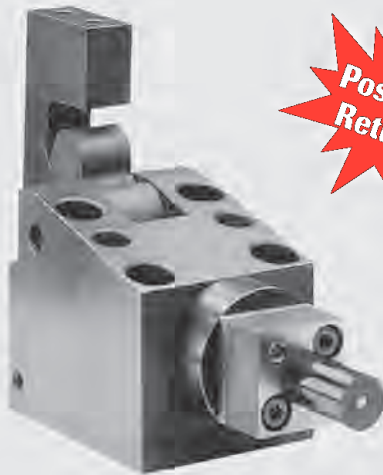
All dimensions in mm and inch, except when otherwise stated.
All dimensions are nominal unless tolerance is stated.

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

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

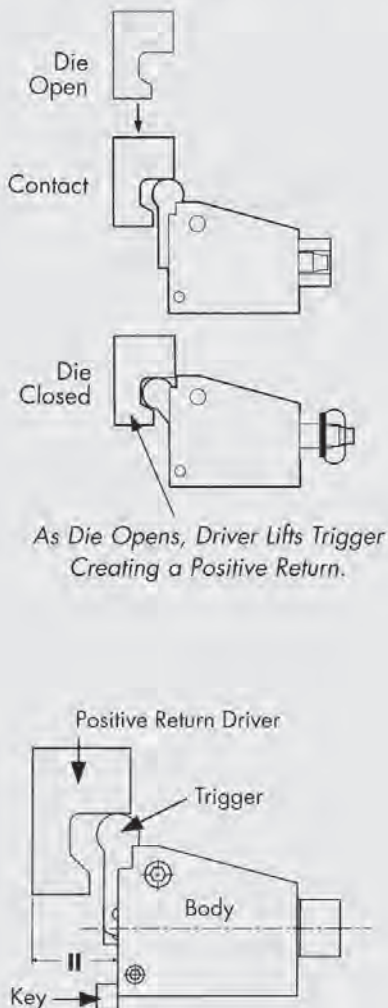
Popular CAMDRIVE® Options

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



Positive Return

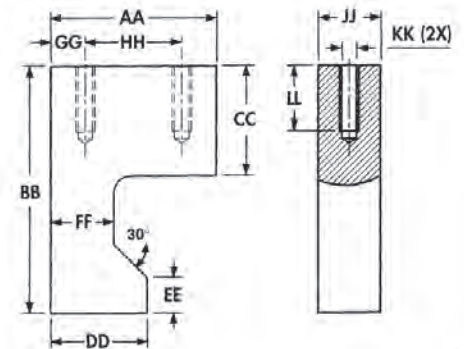
How the Positive Return Option Works . . .



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:

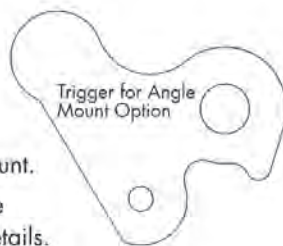
- Standard on all models.
- Meets U.S. automotive standards.
- Eliminates the need for a grease fitting.
- Requires virtually no maintenance while increasing life.
- Ideal for automotive dies.

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.

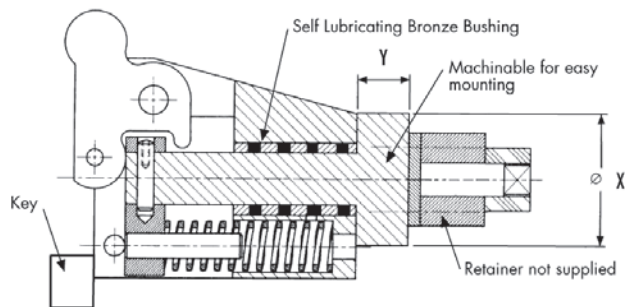
ANGLE MOUNT OPTION:

- 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

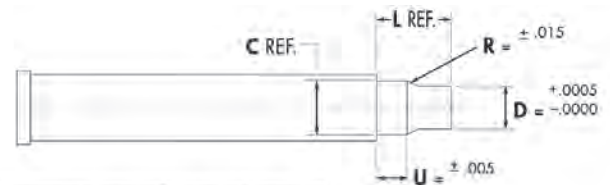
Catalog Reference	C-0625-11 C-0625-12	C-1000-12 C-1000-13	C-1500-12 C-1500-13	
X	50	64	80	89.5
inch	1.969	2.520	3.149	3.524
Y	20	25	30	30
inch	.787	.984	1.181	1.181

All dimensions are nominal unless tolerance is stated.

STANDARD PUNCH OPTIONS:

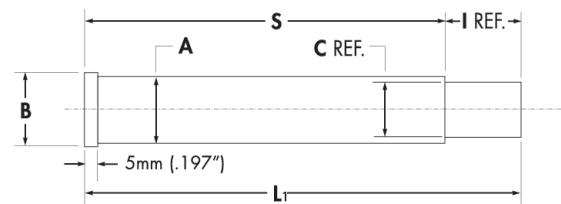
- READY offers CAMDRIVE® punches in two point configurations; custom round pointed (please specify "D" dimension at time of order) and in a punch blank configuration (customer to grind point).
- Piercing must take place during the last 25% of stroke. Allow additional stroke for punch re-sharpening, when 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	9.4
	inch	.866	.185	.370
375	mm	22	7.9	9.4
	inch	.866	.311	.370
500	mm	22	11	9.4
	inch	.866	.433	.370
625	mm	22	14.2	9.4
	inch	.866	.559	.370
1000	mm	28.5	22.4	12.7
	inch	1.122	.882	.500
1500	mm	41.5	31	19
	inch	1.634	1.220	.748

CAMDRIVE® Metric Punch Blank

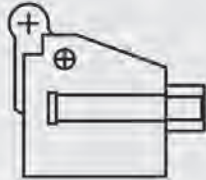


Model		A	B	C	S	L ₁	I
250-11	mm	6	9	4.7	41	63	22
	inch	.236	.354	.185	1.614	2.480	.866
250-12	mm	6	9	4.7	66	88	22
	inch	.236	.354	.185	2.599	3.465	.866
375-11	mm	10	13	7.9	53	75	22
	inch	.394	.512	.311	2.087	2.953	.866
375-12	mm	10	13	7.9	80	102	22
	inch	.394	.512	.311	3.150	4.016	.866
500-11	mm	13	16	11	63.5	85.5	22
	inch	.512	.630	.433	2.500	3.366	.866
500-12	mm	13	16	11	85.5	107.5	22
	inch	.512	.630	.433	3.366	4.232	.866
625-11	mm	16	19	14.2	72	94	22
	inch	.630	.748	.559	2.835	3.701	.866
625-12	mm	16	19	14.2	97	119	22
	inch	.630	.748	.559	3.819	4.685	.866
1000-12	mm	25	28	22.4	111	139.5	28.5
	inch	.984	1.102	.882	4.370	5.492	1.122
1000-13	mm	25	28	22.4	143	171.5	28.5
	inch	.984	1.102	.882	5.630	6.752	1.122
1500-12	mm	38	41	31	149	190.5	41.5
	inch	1.496	1.614	1.220	5.866	7.500	1.634
1500-13	mm	38	41	31	212	253.5	41.5
	inch	1.496	1.614	1.220	8.346	9.980	1.634

How To Order a CAMDRIVE®

Standard Model

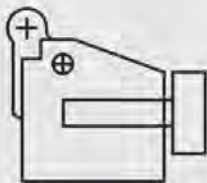
(specify D = for ground point)



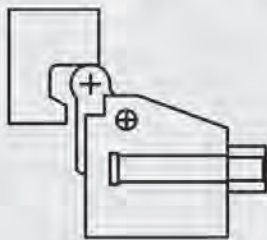
Angle Mount Option - AM



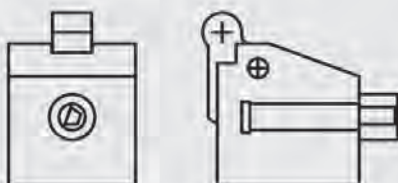
Retainer Mount Option - RM



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

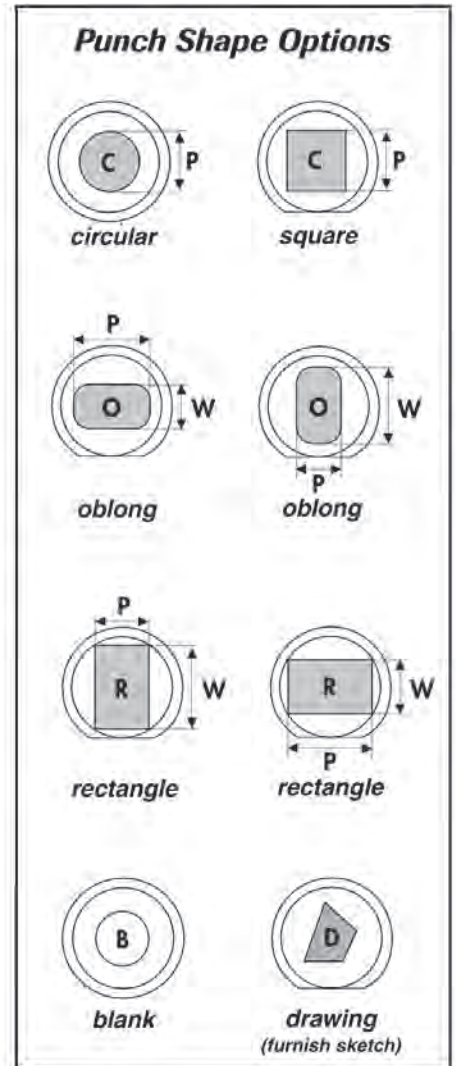
Cam Tonnage Required: _____
 Cam Stroke Required: _____
 Stripping Force Required: _____

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 IndustrySM

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U.S.A. • U.K. • France • Belgium • Germany • Sweden • Netherlands • Singapore • India

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