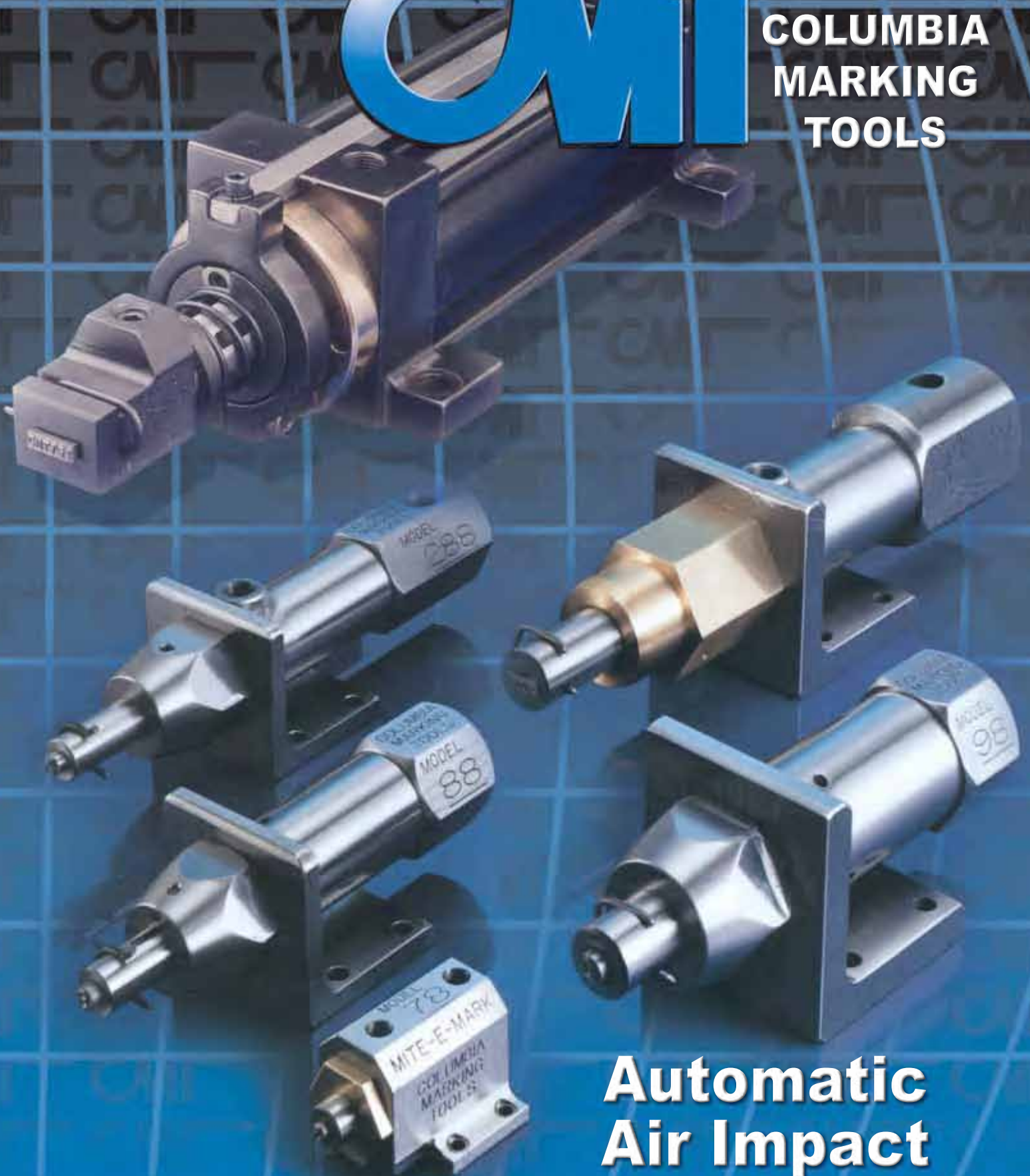


CMT

**COLUMBIA
MARKING
TOOLS**



**Automatic
Air Impact
Markers**

Company

Columbia Marking Tools is a leading manufacturer of marking products. Our broad spectrum of custom developed machines and components have made a significant "impact" on marking technology. Our company has an extensive history of innovations and technological breakthroughs. We continuously improve our products, incorporating the latest technology and components.

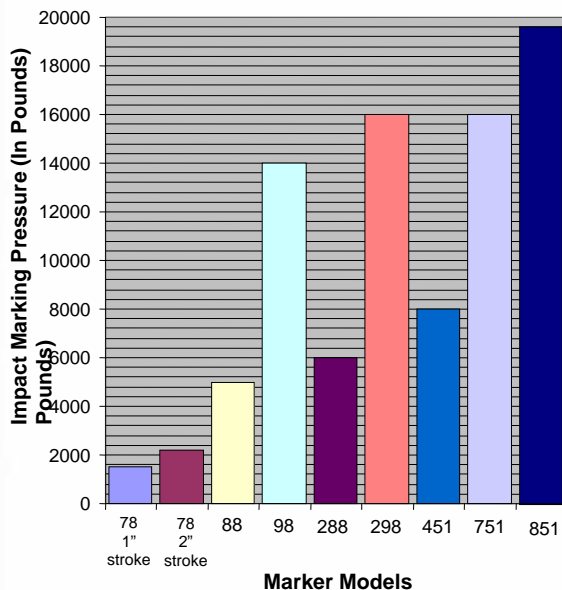


Building a better marker tomorrow isn't just something we say, we do it.

Quick Selection Guide/Marking Pressure Data

Pressures shown are approximate only and cannot be classified as being without exceptions or variations

Comparative Pressure Chart



Marking Pressure Data
Static Stamping Pressure per character

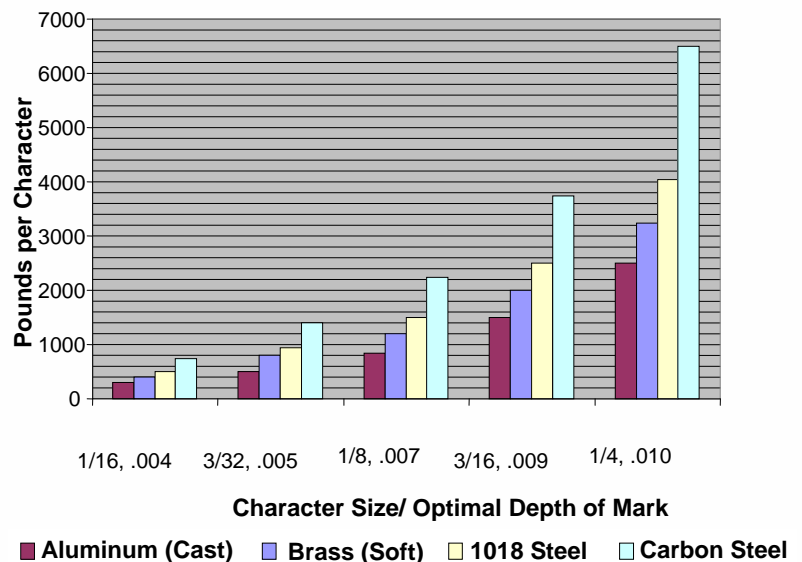


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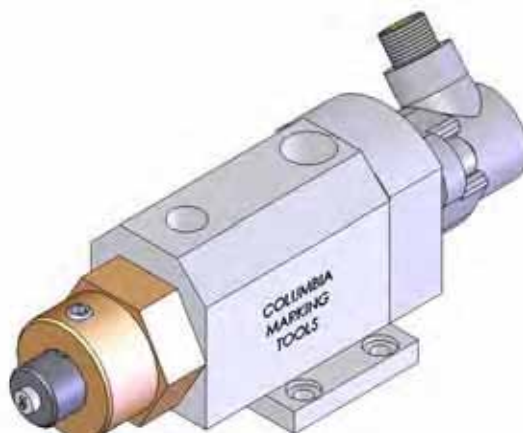
- Most air impact markers ship in 24 hours
- CMT quality air impact markers ship direct to customers world wide
- All markers thoroughly tested before shipment
- Technical data including 2D and 3D drawing files available
- Custom mounting, rods, and holders quoted upon request
- CMT provides turn-key solutions: Have CMT build your complete marking/assembly station

CMT Columbia Marking Tools AIR IMPACT MARKER

Model 78: Mite-E-Mark™ Double Acting Air Impact Marker

Model 78: This air operated marking tool offers 18 times the force of an air cylinder with the same bore. Compact construction allows this marker to be installed in limited space.

- 2 basic styles include Standard or Submersible models Submersible models are specially coated in a non-corrosive material for additional protection.
- Foot or Rear mounting styles
- The Keyed rod is to maintain character orientation, and the non-keyed rod allows the characters to rotate and is a smaller unit
- 4 Different rod styles to hold the stamps offer multi-character square "A" pockets, and single character round "B" pockets, in addition to "O" style set screw retention, and "G" style pin/o-ring retention. The "G" style rod is recommended for systems susceptible to vibrations



- 2 different cylinder approach strokes: 1" and 2"
- Integrated position sensors offer the added benefit to integrators
- Standard system requires lubricated air. The NL non-lube version is required for "dry" air.

Model 78 How to Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|--------------------------|-------|---------------|
| Standard Model | 78 | -78FK-OA-20-E |
| Submersible Model | 78SUB | |
| Foot Mount | F | _____ |
| Rear Mount | R | |
| Non-Keyed Rod (rotating) | N | _____ |
| Keyed Rod (non-rotating) | K | |
| Rod Style "A" | OA | _____ |
| Rod Style "B" | OB | |
| Rod Style "GA" | GA | |
| Rod Style "GB" | GB | |
| Stroke Length 1" | 10 | _____ |
| Stroke Length 2" | 20 | |
| 24VDC Position Sensor | E | _____ |
| 110VAC Position Sensor | P | |
| Non-Lube* (if required) | NL | ----- |

*Permanently lubricated marker for low maintenance requirements

E= 24V DC, PNP sourcing Euro connector

P= 110v, Mini connector

Recommended Air Hose: ¼" I.D. Minimum

Recommended Air Valve: CMT TP valve or ¼" 4-way

Operating pressure: 20-80psi

Max. Marking Pressure: 1500lbs (at 80psi) for 1" stroke and 2200 lbs (at 80psi) for 2" stroke

Stamp Capacity Rod Style "B" (1) Pc. CM7X Stamp Insert. CM7X inserts can mark up to a 3/16" character.

Stamp Capacities Rod Style "A"

(4) Pc's 1/16" Char. CMF06 Stamp Inserts

(2) Pc's 1/8" Char. CMF13 Stamp Inserts

Stamp Capacities Rod Style "GB"

(1) Pc. CM7G Stamp Insert. CM7G inserts can mark up to a 3/16" character.

Stamp Capacities Rod Style "GA"

(4) Pc's 1/16" Char. CMV06 Stamp Inserts

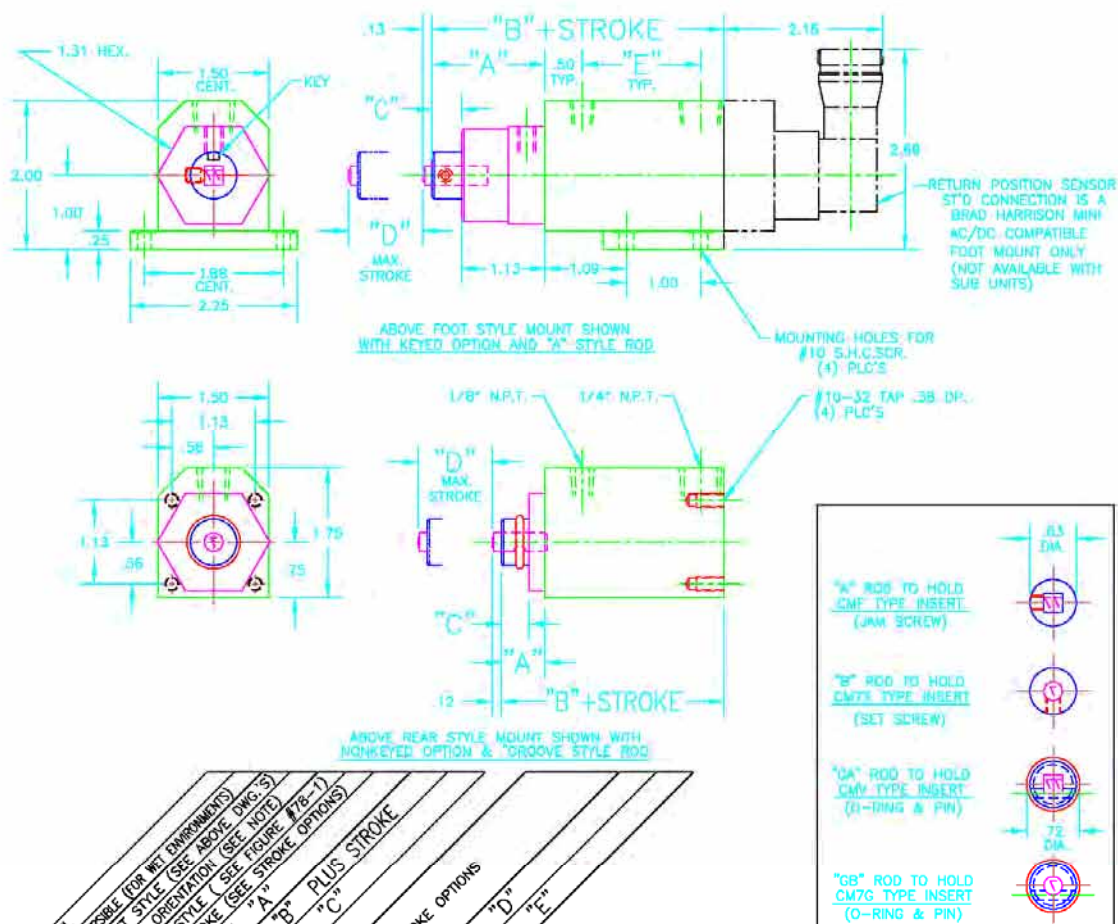
(2) Pc's 1/8" Char. CMV13 Stamp Insert

CMT

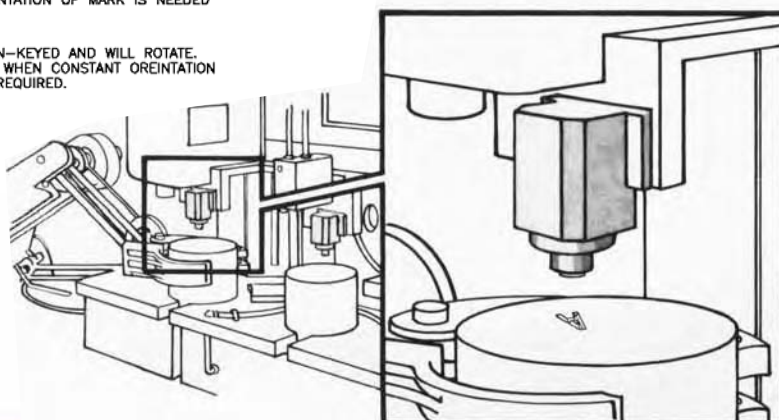
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AIR IMPACT MARKER

Model 78 Dimensions



Typical Application for Model 78





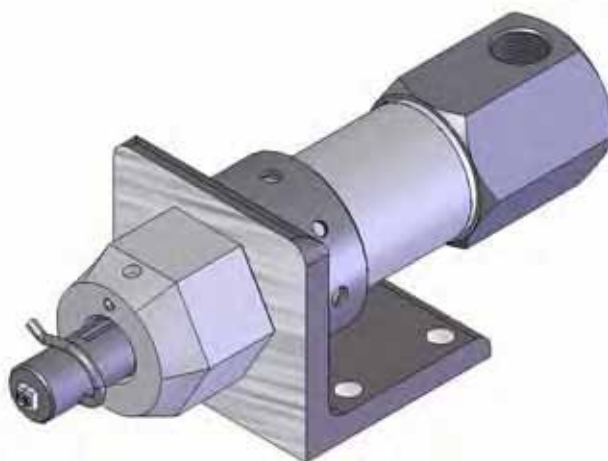
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Model 88: 3 Ton Single Acting Air Impact Marker

Model 88 3-TON: The Columbia model 88 impact marking cylinder is a rugged air cylinder with a built in stamp holder at the rod end. The 88 delivers a powerful impact blow of up to 3-tons at 80psi. The patented shock absorbing bumpers at both ends of the stroke to prevent damage to the marker when bottoming out on the forward stroke and reducing the shock on return stroke. The model 88 is a dependable marker at a very low investment cost. The rod has a spring return action while an efficient pressure venting system allows an instantaneous return stroke. Model 88 air impact markers have a keyed non-rotating rod and 2.5" of stroke.

- 3 Mounting styles include standard angle bracket, reverse angle bracket and straight sub-plate. Special mountings provided upon request.
- 3 Standard rod styles to hold the stamps offer multi-character OA or OAS38, and single character OB



- 2 different air port locations: standard end port or side port for restricted space installations
- Standard system requires lubricated air

Model 88 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|---------------------------|-------|-----------|
| 88 (Angle Bracket) | 88 | —88-OB-EF |
| 88R (Reverse Bracket) | 88R | |
| 88SP (Sub Plate) | 88SP | |
| Rod Style "A" | OA | — |
| Rod Style "AS38" | OAS38 | |
| Rod Style "B" | OB | |
| End ported end cap | E | — |
| Side ported end cap | S | |
| Standard Industrial Model | F | — |
| Light Duty | L* | |

*Light Duty Drawings provided on request only

Recommended Air Hose: 3/8" I.D. minimum

Recommended Air Valve: 3/8" 3-way or 4-way solenoid valve

Operating Pressure: 20 to 80psi

Max. Marking Pressure: 6000lbs (at 80psi)

Stamp Capacity Rod Style "B"

(1) Pc CM8X round insert can mark up to a 1/4" character.

Stamp Capacities Rod Style "A"

(4) Pc's 1/16" Char. CMG06 Stamp Inserts

(2) Pc's 1/8" Char. CMG13 Stamp Inserts

Stamp Capacities Rod Style "AS38"

(6) Pc's 1/16" Char. CMG06 Stamp Inserts

(3) Pc's 1/8" Char. CMG13 Stamp Inserts

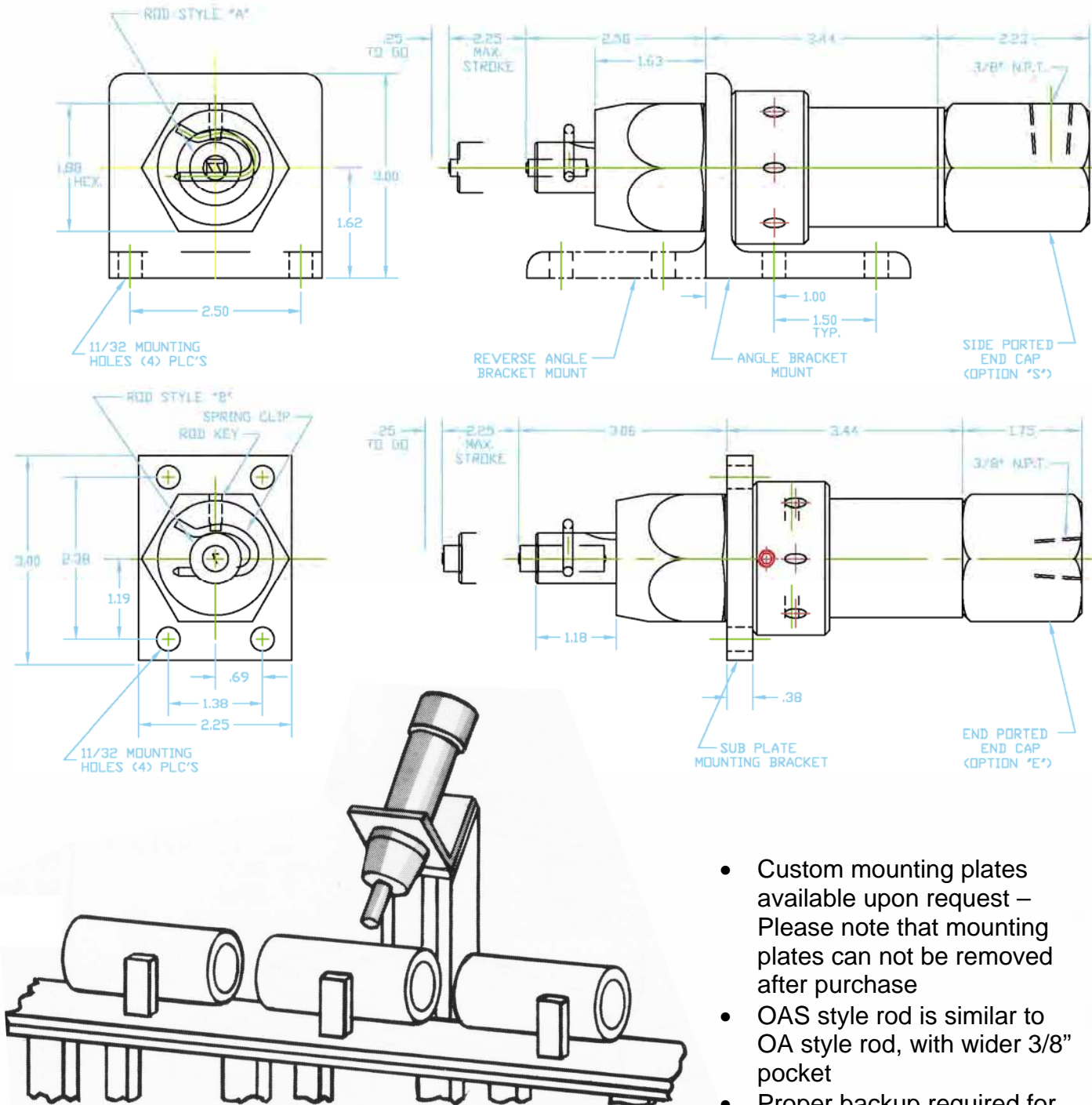


Rod Style B



Rod Style A

Model 88 Dimensions



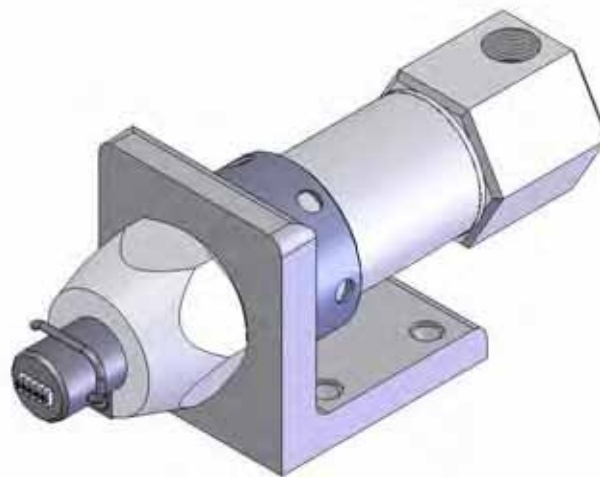
- Custom mounting plates available upon request – Please note that mounting plates can not be removed after purchase
- OAS style rod is similar to OA style rod, with wider 3/8" pocket
- Proper backup required for parts being marked

CMT Columbia Marking Tools AIR IMPACT MARKER

Model 98: 8 Ton Single Acting Air Impact Marker

Model 98 8-TON: The Columbia model 98 heavy duty impact marking cylinder is similar to the model 88 marker. However, the 98 delivers a much greater impact force (up to 8-TONS at 80psi) the 98 also has **patented shock absorbing bumpers** at both ends of the stroke to prevent damage to the marker when bottoming out on the forward stroke and reducing the shock on return stroke. The rod has a spring return action while an efficient pressure venting system allows an instantaneous return stroke. Model 98 air impact markers have a keyed non-rotating rod and 2.5" of stroke.

- 3 Mounting styles include standard angle bracket, reverse angle bracket and straight sub-plate. Special mountings provided upon request.
- 3 Standard rod styles to hold the stamps offer multi-character OA or OAS75, and single character OB



- 2 different air port locations: standard end port or side port for restricted space installations
- Standard system requires lubricated air

Model 98 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|---------------------------|-------|------------|
| 98 (Angle Bracket) | 98 | — 98-OB-EF |
| 98R (Reverse Bracket) | 98R | |
| 98SP (Sub Plate) | 98SP | |
| Rod Style "A" | OA | |
| Rod Style "AS75" | OAS75 | |
| Rod Style "B" | OB | |
| End ported end cap | E | |
| Side ported end cap | S | |
| Standard Industrial Model | F | |
| Light Duty | L* | |

*Light Duty Drawings provided on request only

Recommended Air Hose: ½" I.D. Minimum
Recommended Air Valve: ½" 3-way or 4-way solenoid valve

Operating Pressure: 20-80psi
Max Marking Pressure: 16,000lbs (at 80psi)

Stamp Capacity Rod Style "B"

(1) Pc CM9X round insert 1/16" to 3/8" character. Multi-character insert available for smaller character sizes.

Stamp Capacities Rod Style "A"

(10) Pc's 1/16" Char. CMG06 Stamp Inserts
 (5) Pc's 1/8" Char. CMG13 Stamp Inserts

Stamp Capacities Rod Style "AS75"

(12) Pc's 1/16" Char. CMG06 Stamp Inserts
 (6) Pc's 1/8" Char. CMG13 Stamp Inserts

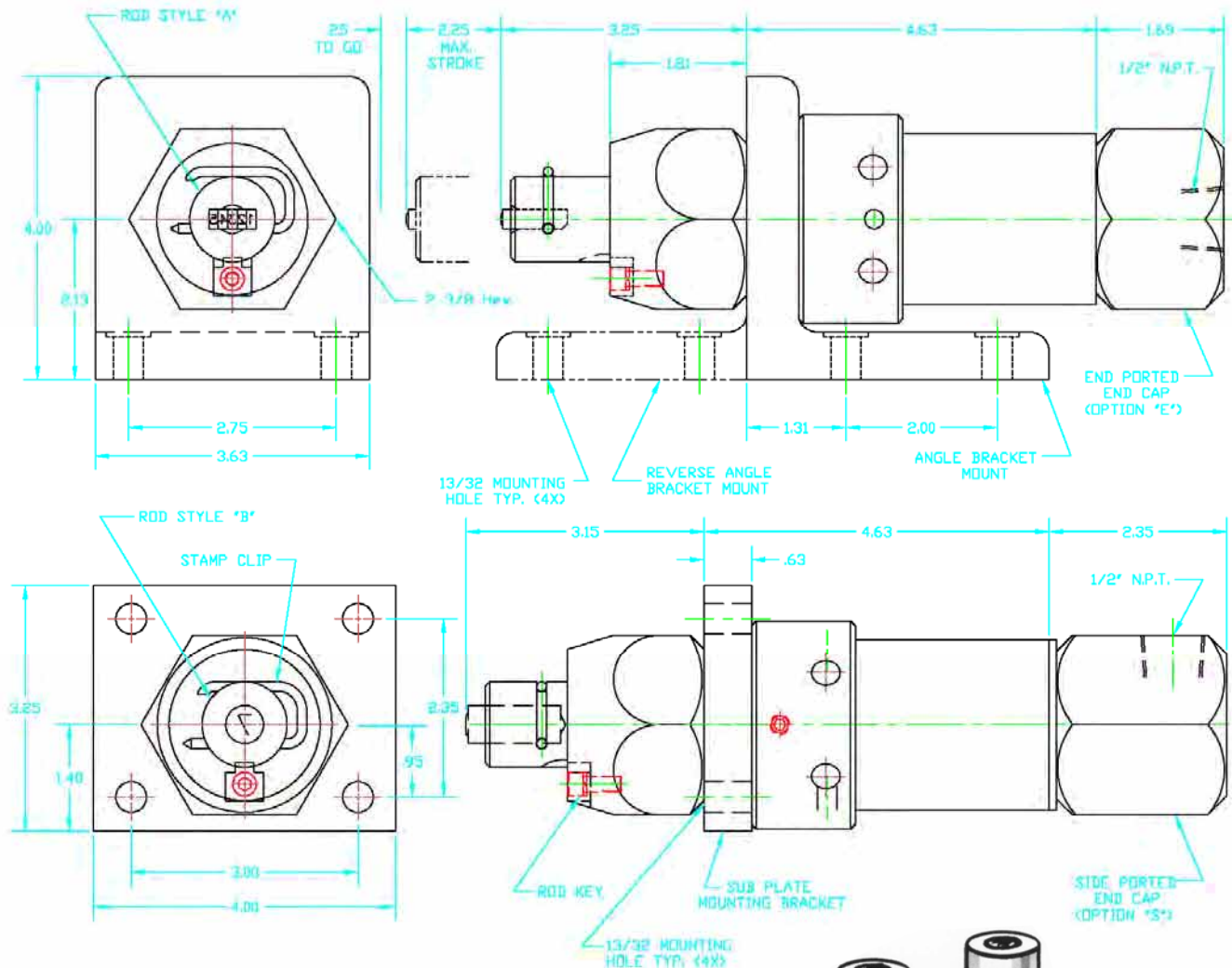


Rod Style B

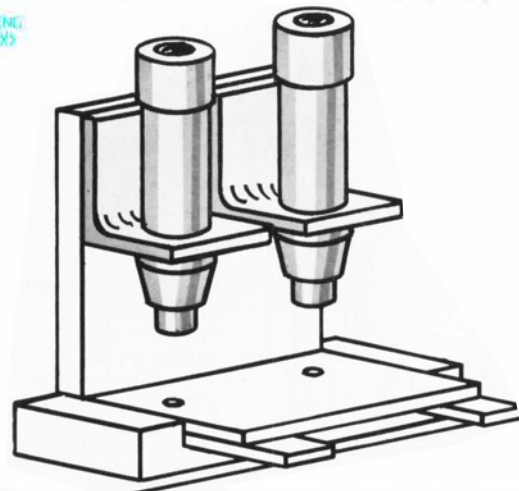


Rod Style A

Model 98 Dimensions



- Custom mounting plates available upon request – Please note that mounting plates can not be removed after purchase
- OAS style rod is similar to OA style rod, with wider 3/4" pocket
- Proper backup required for parts being marked

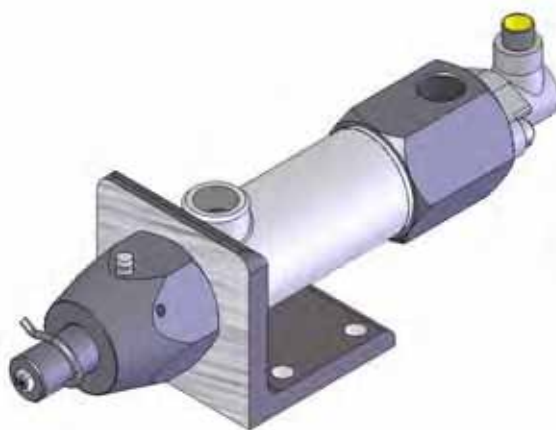


CMT Columbia Marking Tools AIR IMPACT MARKER

Model 288: 3 Ton Double Acting Air Impact Marker

Model 288 3-TON: The patented design of the 288 gives a marking pressure of three tons or 6,000 lbs which results from using 2.25" stroke with 80 psi air pressure.

- 3 basic styles include Standard, Extreme Industrial, or Submersible. Standard models are great for rugged industrial marking. Extreme Industrial models are specially coated in a non-corrosive material for additional protection. Submersible units are both coated and are keyless and offer reliable marking in leak test applications.
- 3 Mounting styles include standard angle bracket, reverse angle bracket and straight sub-plate. Special mountings provided upon request.
- 3 Standard rod styles to hold the stamps offer multi-character OA or OAS38, and single character OB
- 3 different approach strokes: 2 1/2", 4" and 6"



- Integrated position sensors offer the added benefit to integrators
- Standard marker requires lubricated air. The NL non-lube version is required for "dry" air.

Model 288 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|------------------------------|-------|---------------|
| 288 Standard | 288 | 288SP-OB-40-D |
| 288R (reverse angle bracket) | 288R | |
| 288SP (sub plate) | 288SP | |
| Standard | - | |
| Complete submersion | SUBU | |
| Dirty Environment | SUBK | |
| Rod Style "A" | OA | |
| Rod Style "AS38" | OAS38 | |
| Rod Style "B" | OB | |
| Stroke 2.5" | 25 | |
| Stroke 4.0" | 40 | |
| Stroke 6.0" | 60 | |
| End ported end cap | E | |
| Side ported end cap | S | |
| 24VDC Position Sensor | D | |
| 110VAC Position Sensor | P | |
| Non-Lube* (if required) | NL | |

*Permanently lubricated marker for low maintenance requirements

D= 24V DC, PNP sourcing Euro connector

P= 110v, Mini connector

Recommended Air Hose: 3/8" I.D. minimum
Recommended Air Valve: 3/8" 4-way solenoid valve
Operating Pressure: 20 to 80psi
Max. Marking Pressure: 6000lbs (at 80psi)

Stamp Capacity Rod Style "B"

(1) Pc CM8X round insert can mark up to a 1/4" character.

Stamp Capacities Rod Style "A"
 (4) Pc's 1/16" Char. CMG06 Stamp Inserts

(2) Pc's 1/8" Char. CMG13 Stamp Inserts

Stamp Capacities Rod Style "AS38"

(6) Pc's 1/16" Char. CMG06 Stamp Inserts

(3) Pc's 1/8" Char. CMG13 Stamp Inserts

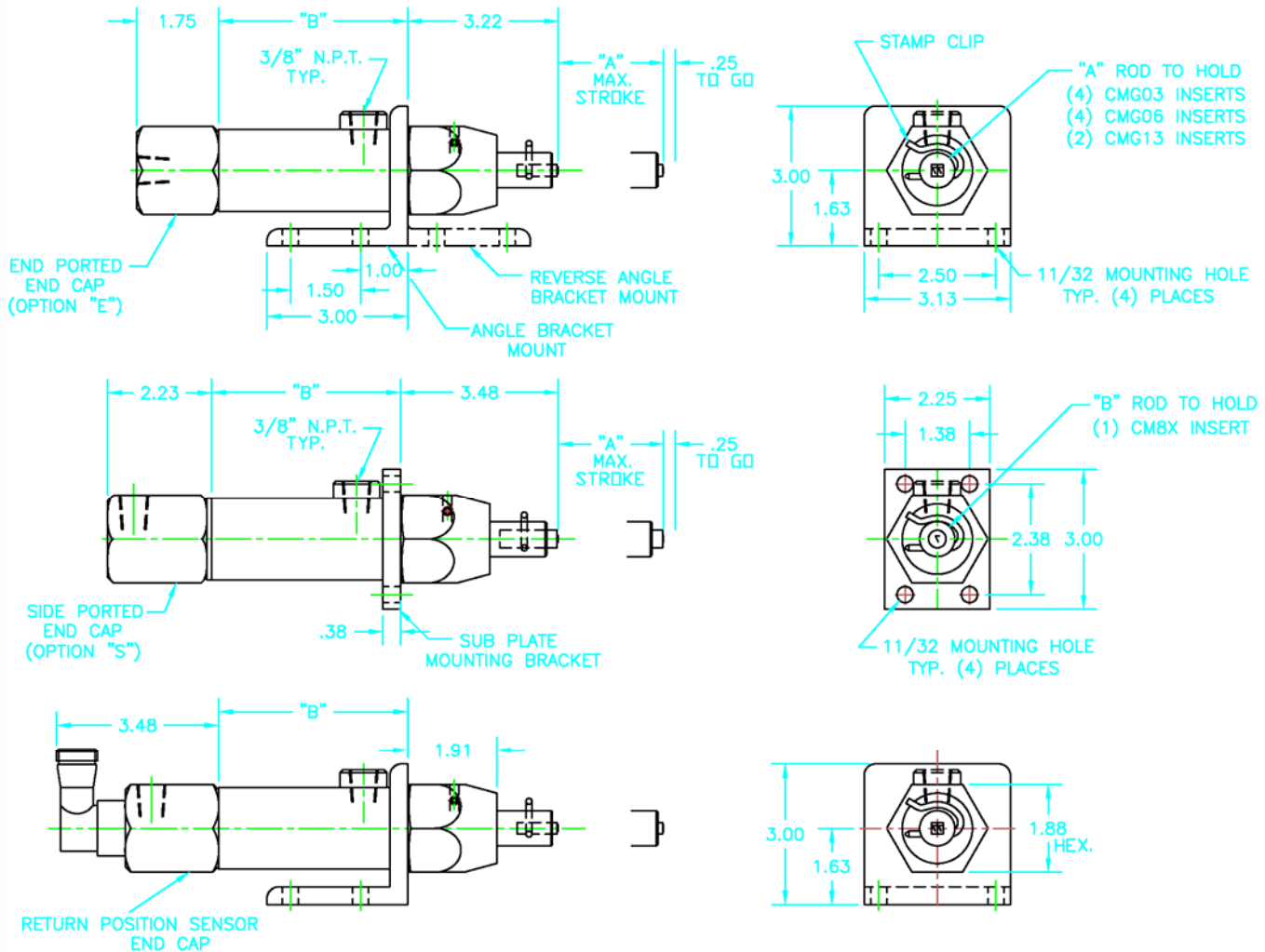


Rod Style B



Rod Style A

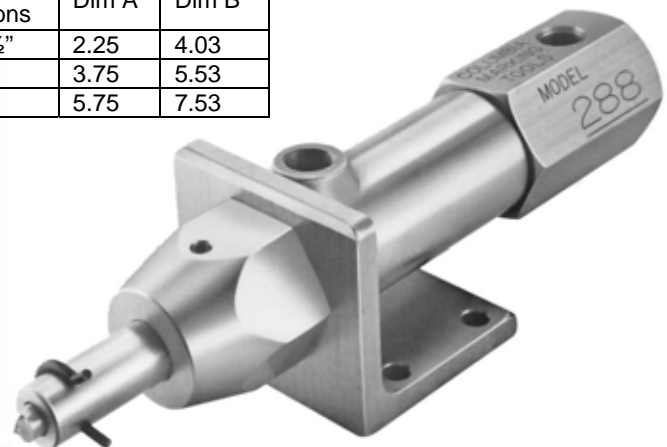
Model 288 Dimensions



#288-0A-25-P IS THE MODEL SHOWN ABOVE

| Stroke Options | Dim A | Dim B |
|----------------|-------|-------|
| 2 1/2" | 2.25 | 4.03 |
| 4" | 3.75 | 5.53 |
| 6" | 5.75 | 7.53 |

- Custom mounting plates available upon request – Please note that mounting plates can not be removed after purchase
- OAS style rod is similar to OA style rod, with wider 3/8" pocket
- Proper backup required for parts being marked

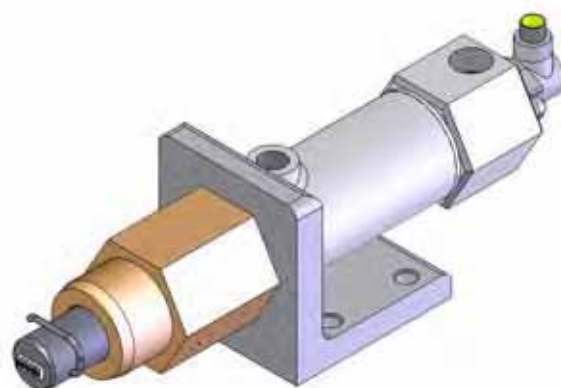


CMT Columbia Marking Tools AIR IMPACT MARKER

Model 298: 8 Ton Double Acting Air Impact Marker

Model 298 8-TON: The patented design of the 298 gives a marking pressure of eight tons or 16,000 lbs which results from using 2.25" stroke with 80 psi air pressure.

- 3 basic styles include Standard, Extreme Industrial, or Submersible. Standard models are great for rugged industrial marking. Extreme Industrial models are specially coated in a non-corrosive material for additional protection. Submersible units are both coated and are keyless and offer reliable marking in leak test applications.
- 3 Mounting styles include standard angle bracket, reverse angle bracket and straight sub-plate. Special mountings provided upon request.
- 3 Standard rod styles to hold the stamps offer multi-character OA or OAS75, and single character OB
- 3 different approach strokes: 2 1/2", 4" and 6"



- Integrated position sensors offer the added benefit to integrators
- Standard marker requires lubricated air. The NL non-lube version is required for "dry" air.

Model 298 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|------------------------------|-------|---------------|
| 298 Standard | 298 | 298SP-OB-40-D |
| 298R (reverse angle bracket) | 298R | |
| 298SP (sub plate) | 298SP | |
| Standard | - | _____ |
| Complete submersion | SUBU | |
| Dirty Environment | SUBK | |
| Rod Style "A" | OA | _____ |
| Rod Style "AS75" | OAS75 | |
| Rod Style "B" | OB | |
| Stroke 2.5" | 25 | _____ |
| Stroke 4.0" | 40 | |
| Stroke 6.0" | 60 | |
| End ported end cap | E | _____ |
| Side ported end cap | S | |
| 24VDC Position Sensor | D | |
| 110VAC Position Sensor | P | ----- |
| Non-Lube* (if required) | NL | |

*Permanently lubricated marker for low maintenance requirements

D= 24V DC, PNP sourcing Euro connector

P= 110v, Mini connector

Recommended Air Hose: 1/2" I.D. minimum
Recommended Air Valve: 1/2" 4-way solenoid valve
Operating Pressure: 20 to 80psi

Max. Marking Pressure:
 16000lbs (at 80psi)

Stamp Capacity Rod Style "B"
 (1) Pc CM9X round insert 1/16" to 3/8" character. Multi-character insert available for smaller character sizes.



Rod Style B

Stamp Capacities Rod Style "A"
 (10) Pc's 1/16" Char. CMG06 Stamp Inserts
 (5) Pc's 1/8" Char. CMG13 Stamp Inserts

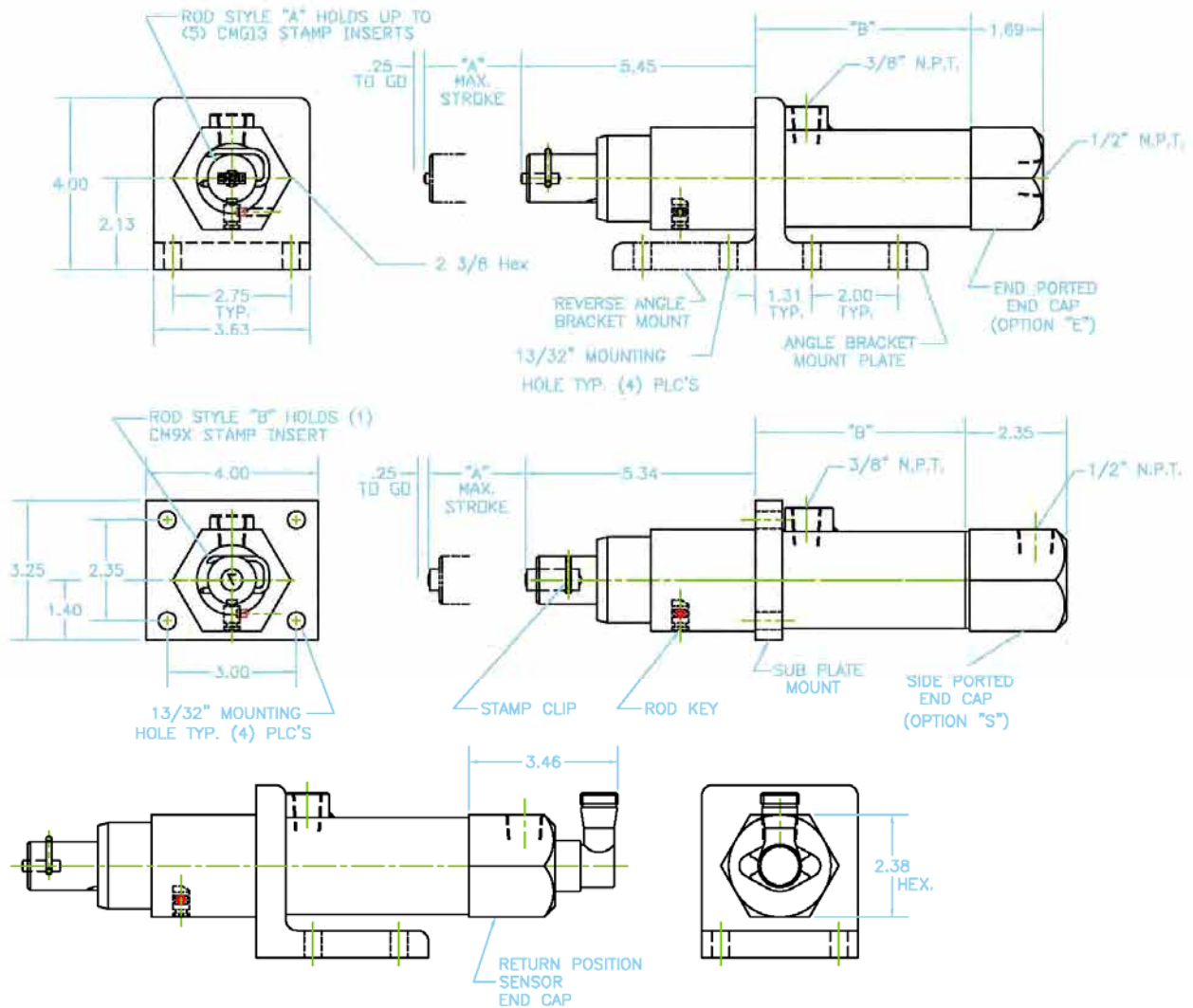


Rod Style A

Stamp Capacities Rod Style "AS75"

(12) Pc's 1/16" Char. CMG06 Stamp Inserts
 (6) Pc's 1/8" Char. CMG13 Stamp Inserts

Model 298 Dimensions



- Custom mounting plates available upon request – Please note that mounting plates can not be removed after purchase
- OAS style rod is similar to OA style rod, but has 3/4" wide pocket
- Proper backup required for parts being marked

| Stroke Options | Dim A | Dim B |
|----------------|-------|-------|
| 2 1/2" | 2.25 | 4.88 |
| 4" | 3.75 | 6.38 |
| 6" | 5.75 | 8.38 |

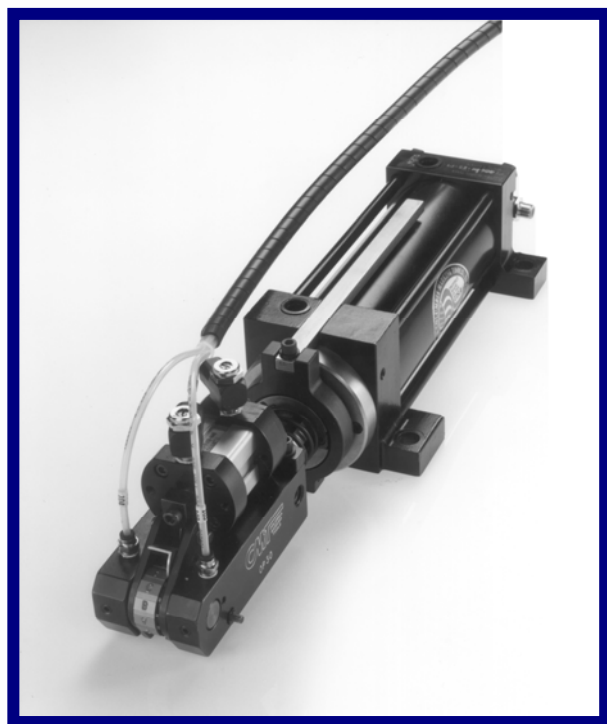


27430 Luckino Dr. Chesterfield MI 48047 • 586.949.8400 • 586.949.8401

Slide-A-Mark Series Double Acting Air Impact Marker Systems

SLIDE-A-MARK 6 ton to 10 ton: The Columbia SLIDE-A-MARK series heavy duty marking cylinders offer a patented soft-impact marking action and low noise level, making it ideal for mounting into existing automation. The SLIDE-A-MARK eliminates costly approach slides for reaching into parts or fixturing which contain clearance issues.

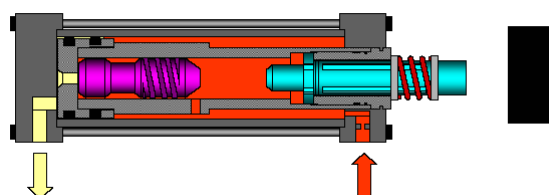
- The telescoping action of the Slide-A-Mark series makes this marker ideal for the use of stamp holders for extended marking legends, and numbering heads. CMT "Select" series of numbering heads makes random machines codes possible.



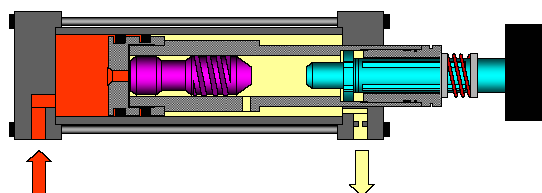
- By loosening the collar clamp the on the rod, radial rod orientation adjustment becomes infinite.

The SLIDE-A-MARK operates as follows:

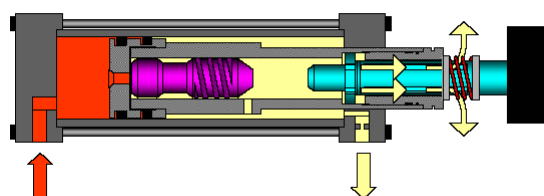
1) fully retracted



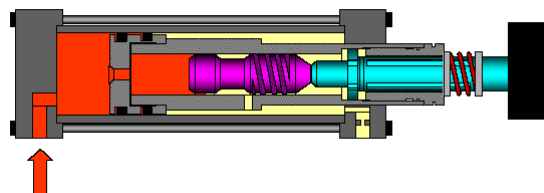
2) start of advance



3) start of load



4) internal hammer fires



- Because the air hammer is internal, the Slide-A-Mark offers the same marking forces anywhere from 1/2" to the end of it's stroke length. When marking parts of various sizes, the mark will remain similar in depth.



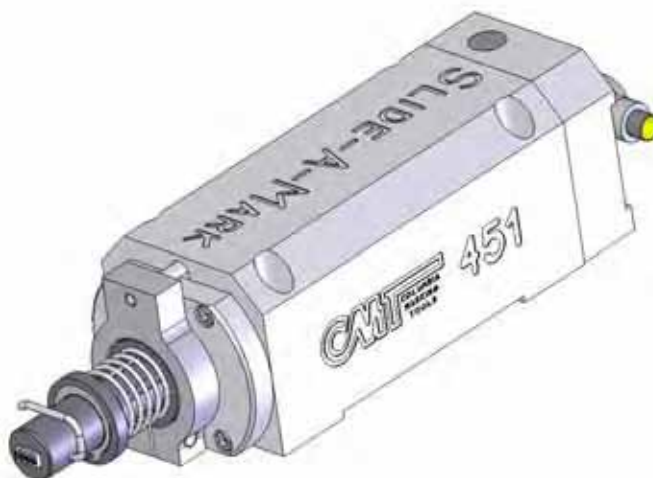
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MARKER

Slide-A-Mark™ Model 451 – Compact and Reduced Sound

Model 451 4-TON: This model is the smallest of Slide-A-Mark series. The solid cast iron construction contributes to the quiet marking capabilities of this system. The Slide-A-Mark feature acts as a self clamping device, and allows for minimal fixturing. Radial rod orientation becomes infinite by loosening the front collar clamp on the rod.

- 3 Standard rod styles to hold the stamps offer multi-character OA or OAS63, and single character OB
- 2 different approach strokes: 2 ½" and 4 ½"
- Integrated position sensors offer the added benefit to integrators
- This marker comes standard in the non-lube version for use with "dry" filtered air.



Model 451 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|----------------------------------|-------|-------------|
| 451 Compact – Quiet 4 | 451 | 451-OA-45-E |
| Rod Style "B" single character | OB | |
| Rod Style "A" multi-character | OA | |
| Rod Style "AS63" multi-character | OAS63 | |
| Stroke 2.5" | 25 | |
| Stroke 4.5" | 45 | |
| Standard | 00 | |
| 24VDC Position Sensor | E | |
| 110VAC Position Sensor | P | |
| Standard Non-Lube* | | |

*Permanently lubricated marker for low maintenance requirements

E= 24V DC, PNP sourcing Euro connector

P= 110v, Mini connector

The model 451 offers a "quieter" impact marking operation. The preload feature, along with the solid construction, reduces sounds.

Recommended Air Hose: 3/8" I.D. minimum

Recommended Air Valve: 3/8" 4-way solenoid valve

Operating Pressure: 20 to 80psi

Max. Marking Pressure: 8000lbs (at 80psi)

Stamp Capacity Rod Style "B"

(1) Pc CM9X round insert 1/16" to 1/4" character. Multi-character insert available for smaller character sizes.

Stamp Capacities Rod Style "A"
(8) Pc's 1/16" Char. CMG06 Stamp Inserts

(4) Pc's 1/8" Char. CMG13 Stamp Inserts

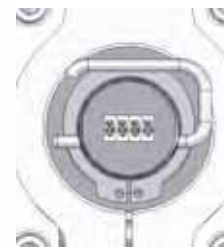
Stamp Capacities Rod Style "AS63"

(10) Pc's 1/16" Char. CMG06 Stamp Inserts

(5) Pc's 1/8" Char. CMG13 Stamp Inserts

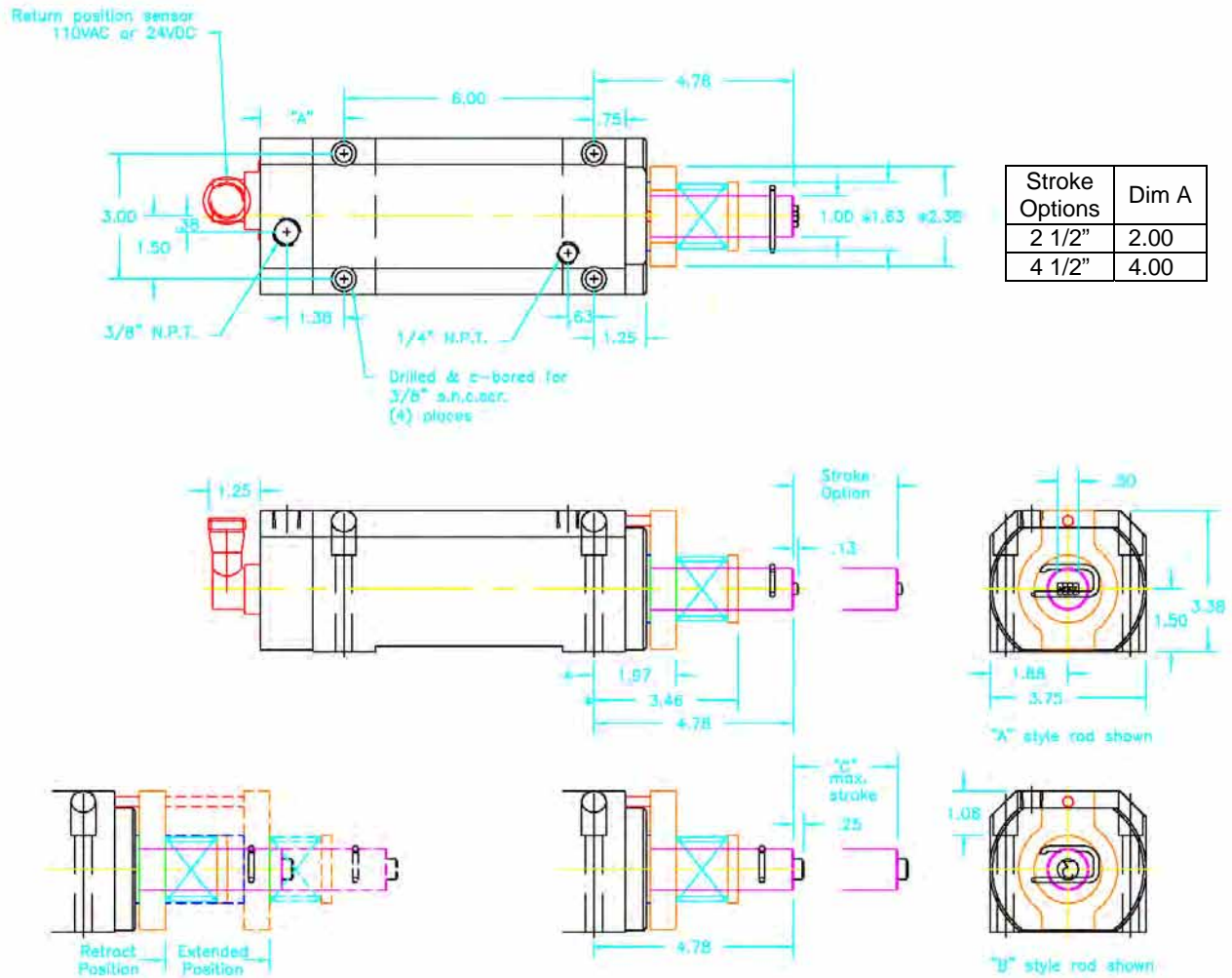


Rod Style B



Rod Style A

Model 451 Dimensions



- By loosening the collar clamp on the rod, radial rod orientation adjustment becomes infinite.
- OAS style rod is similar to OA style rod, with wider 5/8" pocket
- Standard holders, numbering heads, and Anvils mount on rod style H



CMT Columbia Marking Tools AIR IMPACT MARKER

Slide-A-Mark™ 751 and 851

Model 751 8-Ton and 851 10-Ton: These systems offer the widest array of options for integration. The Slide-A-Mark feature acts as a self clamping device, and allows for minimal fixturing. Radial rod orientation becomes infinite by loosening the front collar clamp on the rod. The models 751 and 851 are also offered with a wide range of holders and numbering heads.

- 5 Standard rod styles to hold the stamps offer multi-character OA or OAS75, single character OB, standard ball lock tooling mount OK, or custom press shank mount OH.
- 4 different approach strokes: 2 ½", 4", 6", and 8". 10" and 12" stroke lengths are available upon request.
- Integrated position sensors offer the added benefit to integrators. These units offer the added feature of an optional advance and return position sensors.



- Standard marker requires lubricated air. The NL non-lube version is required for "dry" air.

Model 751 and 851 How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|----------------------------------|-------|--------------|
| 751 8-ton system | 751 | 751-OA-40-E1 |
| 851 10-ton system | 851 | |
| Rod Style "B" single character | OB | |
| Rod Style "A" multi-character | OA | |
| Rod Style "AS75" multi-character | OAS75 | |
| Rod Style "K" tooling mount | OK | |
| Rod Style "H" Press shank mount | OH | |
| Stroke 2.5" | 25 | |
| Stroke 4.0" | 40 | |
| Stroke 6.0" | 60 | |
| Stroke 8.0" | 80 | |
| Standard | 00 | |
| Return 24VDC Position Sensor | E1 | |
| Advance and Return | E2 | |
| 24VDC Position Sensor | | |
| Return 110 VAC Position Sensor | P1 | |
| Advance and Return 110VAC | P2 | |
| Position Sensor | | |
| Non-Lube* (if required) | NL | ----- |

*Permanently lubricated marker for low maintenance requirements

E= 24V DC, PNP sourcing Euro connector

P= 110v, Mini connector

Recommended Air Hose: 3/8" I.D. minimum

Recommended Air Valve: 3/8" 4-way solenoid valve

Operating Pressure: 20 to 80psi

Max. Marking Pressure: For 751 = 16000lbs (at 80psi)

For 851 = 20000lbs (at 80 psi)

Stamp Capacity Rod Style "B"

(1) Pc CM9X round insert 1/16" to ¼" character. Multi-character insert available for smaller character sizes.

Stamp Capacities Rod Style "A"

(10) Pc's 1/16 Char. CMG06

Stamp Inserts

(5) Pc's 1/8 Char. CMG13 Stamp Inserts

Stamp Capacities Rod Style "AS75"

(12) Pc's 1/16 Char. CMG06 Stamp Inserts

(6) Pc's 1/8 Char. CMG13 Stamp Inserts

Tooling Mount Rod Style "K"

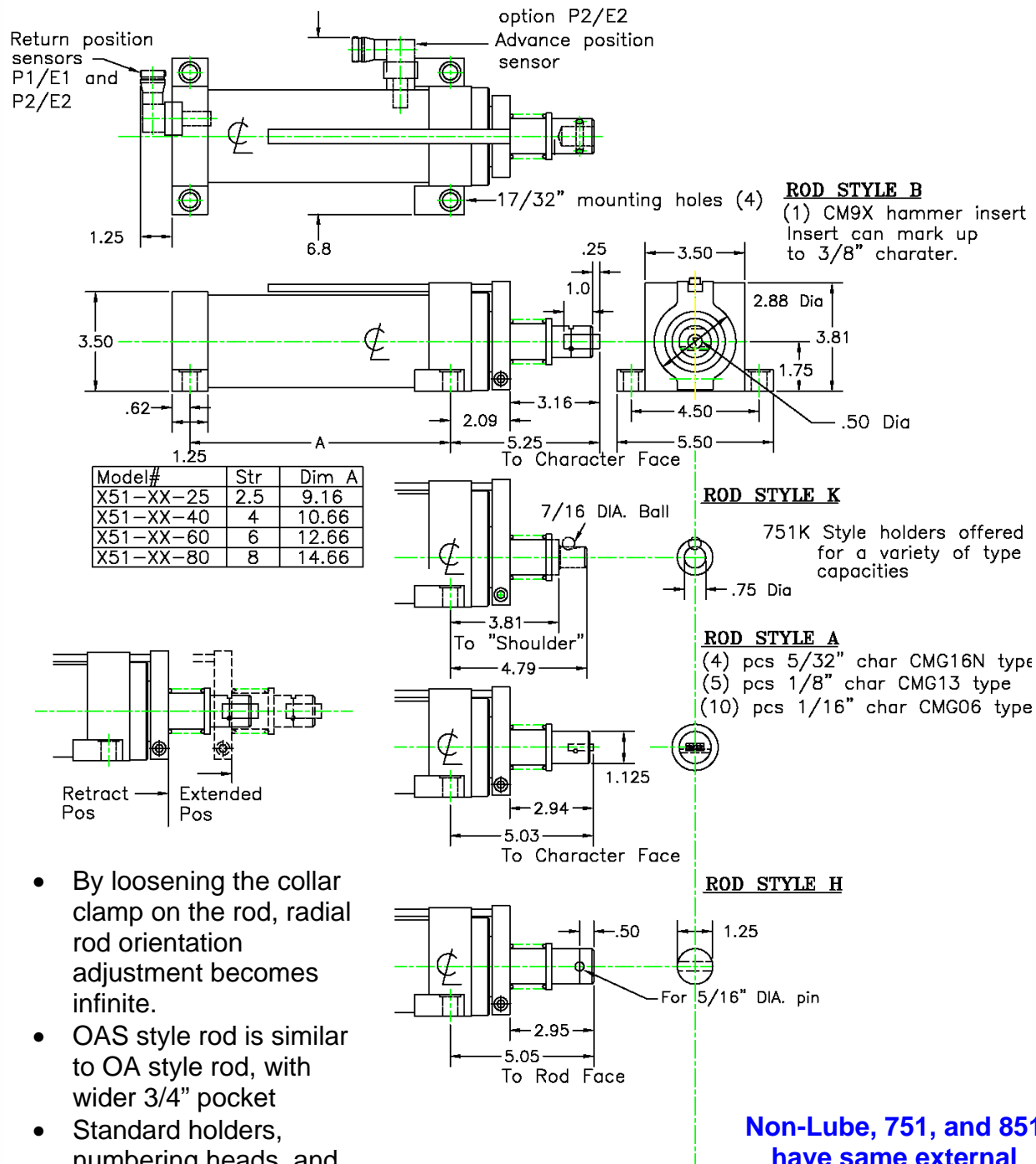
Ball lock mount for standard tooling including holders and numbering heads

Tooling mount Rod Style "H"

Press shank to mount custom tooling



Model 751 and 851 Dimensions



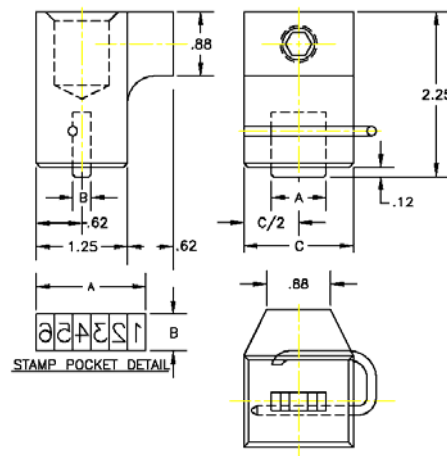
- By loosening the collar clamp on the rod, radial rod orientation adjustment becomes infinite.
- OAS style rod is similar to OA style rod, with wider 3/4" pocket
- Standard holders, numbering heads, and Anvils mount on rod style K

**Non-Lube, 751, and 851
have same external
dimensions**

Slide-A-Mark™ K Style Quick Change Holders



Quick change holders are used on the rod style K. These holders allow for marking of larger legends. They are quickly removed by loosening a set screw. To assure the fastest changeover time, have a spare holder preset with the new marking legend.



| Item Number | "A" | "B" | "C" | 1/16" | 3/32" | 1/8" | 5/32" | 3/16" | 1/4" |
|-------------|------|------|------|-------|-------|------|-------|-------|------|
| 751KA5010 | 0.50 | 0.25 | 1.50 | 8 | (5) | 4 | - | - | - |
| 751KA7510 | 0.75 | 0.25 | 1.50 | 12 | 8 | 6 | - | - | - |
| 751KA10010 | 1.00 | 0.25 | 2.25 | 16 | (10) | 8 | - | - | - |
| 751KA15010 | 1.50 | 0.25 | 2.25 | 24 | 16 | 12 | - | - | - |
| 751KA20010 | 2.00 | 0.25 | 3.25 | 32 | (21) | 16 | - | - | - |
| 751KA25010 | 2.50 | 0.25 | 3.25 | 40 | (26) | 20 | - | - | - |
| 751KB7510 | 0.75 | 0.31 | 1.50 | - | - | - | 4 | 4 | - |
| 751KB15010 | 1.50 | 0.31 | 2.25 | - | - | - | 8 | 8 | - |
| 751KB20010 | 1.88 | 0.31 | 3.25 | - | - | - | 10 | 10 | - |
| 751KB22510 | 2.50 | 0.31 | 3.25 | - | - | - | 12 | 12 | - |
| 751KC10010 | 1.00 | 0.38 | 2.25 | - | - | - | - | - | 4 |
| 751KC15010 | 1.50 | 0.38 | 2.25 | - | - | - | - | - | 6 |
| 751KC20010 | 2.00 | 0.38 | 3.25 | - | - | - | - | - | 8 |

*Numbers in () require additional spacer to fill pocket

Floating holder option (as shown at right) will adjust for slight variances in the marking surface. These are available on K style Holders and the CMM adapters.

| Part Number | Drawings available upon request |
|--------------|---|
| 751KXFL###10 | X and ### = Character and number from table above. Floating holder will have same type capacity but dimensions will vary |

Adapters are available for CMM retainers. For more information on CMM please see complete catalog. Drawings available upon request.

| Part Number | Includes CMM retainer and stamps |
|--------------|--|
| 751KFLP8210A | CMM101 retainer and CMM103 stamps |
| 751KFLR4240A | CMMR18R1900 retainer and CMM018 stamps |



Floating Holder Adapter and Retainer

- Excellent for Sheet Metal Marking

Slide-A-Mark™ Numbering Heads

Model 130K Manual Numbering head and 123K Automatic Numbering Head: Numbering heads offer marking legend flexibility. The benefits include simplicity of design, and rugged manufacturing.

- Manually sequenced and automatically sequenced wheels. Automatic wheels require actuation device.
- Patented pawl system for easy setting and positive alignment.
- Sturdy one piece frames.
- Large diameter main shaft for bearing load.
- Standard character sizes include: 1/16", 3/32", 1/8", 5/32", 3/16", and 1/4". Metric sizes available upon request.
- Standard Wheels 10 stations reading 0 through 9
- Custom wheels include alpha and symbols readings, and 12 and 14 station wheels.



Model 123K shown with Actuator

Model 130K and 123K How To Order

To Order: Select only the symbols that represent the marker feature that is needed. Place that symbol in the sequence as shown.

| FEATURE | SYM. | EXAMPLE |
|--------------------------------|------|--|
| 130K Manual Numbering Head | 130K | 123K-2M-3A-13-A |
| 123K Automatic Numbering Head | 123K | |
| No Manual wheels | - | <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 50px; height: 50px; border: 1px solid black;"></div> </div> |
| 1 Manual wheel | 1M | |
| 2 Manual wheels | 2M | |
| 3 Manual wheels | 3M | |
| 4 Manual wheels | 4M | |
| 5 Manual wheels | 5M | |
| No Automatic Wheels (for 130K) | - | <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 50px; height: 50px; border: 1px solid black;"></div> </div> |
| 1 Automatic wheel | 1A | |
| 2 Automatic wheels | 2A | |
| 3 Automatic wheels | 3A | |
| 4 Automatic wheels | 4A | |
| 5 Automatic wheels | 5A | |
| 1/16" character size | 06 | <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 50px; height: 50px; border: 1px solid black;"></div> </div> |
| 3/32" character size | 09 | |
| 1/8" character size | 13 | |
| 3/16" character size | 19 | |
| 1/4" character size | 25 | |
| Actuator | A | <div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 0; right: 0; width: 50px; height: 50px; border: 1px solid black;"></div> </div> |
| No Actuator | 0 | |

Styles: 130K for manual changing of the numbers, and 123K for automated incremental serialization of the numbers

Number of Manual Wheels: Number of manual wheels in the numbering head

Number of Automatic Wheels: Only available on the model 123K. These automated wheels start from the right side of the marking legend (as read).

Character Size: Size of characters on the wheels, all standard wheels reading 0 to 10. Optional readings available.

Actuator: Pneumatic actuator is used to sequence the incremental numbers and requires second 4-way valve to cycle. Only available on the model 123K.

Approval: Complete approval drawings will be provided upon placement or order, and require customer approval to proceed.

Pressure Required: Numbering head configurations may require more force than provided by Slide-A-Mark. Please check pressure charts for verification.

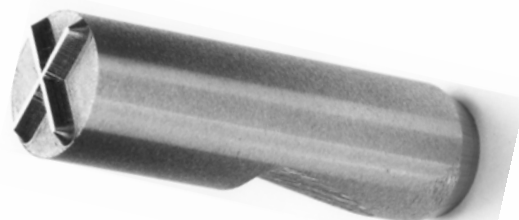


**Columbia
Marking
Tools**

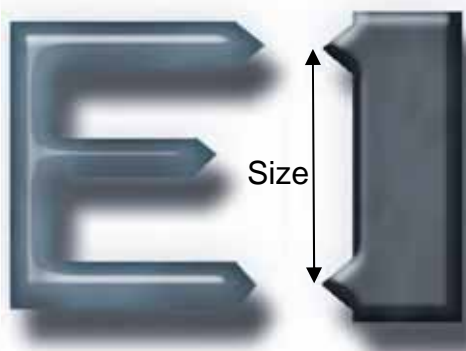
**AIR
IMPACT
MARKER**

CMT Quality Stamps

The process of engraving stamps and inserts that CMT uses assures for a longer stamp life. These stamps and inserts are made from select tool steel and carefully heat treated. They stand up best under high production marking conditions.



Measuring Letters & Figures



The character size is measured from the tallest part of the stamp die. When the stamp die indents into the metal the mark will be larger. The most common error is to overestimate the character size.

To order individual **LETTERS** and **FIGURES** add suffix of actual letter or figure to part number

To **BLANK SPACERS** add suffix of "-00" to part number

To order **PUNCTUATION** add suffix from table below to part number

| | | |
|-----|----|----|
| CMG | 09 | -A |
|-----|----|----|

Style Char Size Letter or Figure

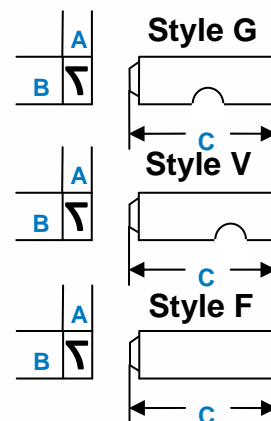
| | | |
|-----|-----|-----|
| CMF | -13 | -00 |
|-----|-----|-----|

Style Char Size Blank Spacer

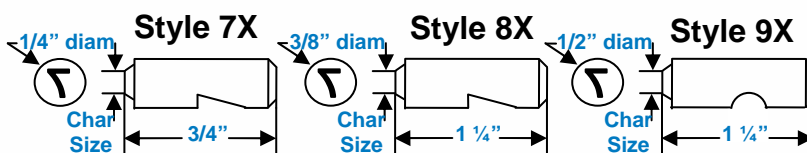
| | | |
|------|----|-----|
| CM8X | 25 | -RR |
|------|----|-----|

Style Char Size Asterisk Suffix

| Char Size | A | B | C | Style G Standard Groove Part Number | Style V Special Groove Part Number | Style F Standard Flat Part Number |
|-----------|------|------|-----|---|--|---|
| 1/16 | 1/16 | 1/4 | 7/8 | CMG06- | CMV06- | CMF06- |
| 3/32 | 3/32 | 1/4 | | CMG09- | CMV09- | CMF09- |
| 1/8 | 1/8 | 1/4 | | CMG13- | CMV13- | CMF13- |
| 5/32 | 5/32 | 1/4 | | CMG16N- | | |
| 3/16 | 3/16 | 5/16 | | CMG19- | | |
| 1/4 | 1/4 | 3/8 | | CMG25- | | |



| Mark | Symbol | Suffix |
|----------------|--------|--------|
| Dash | - | -DD |
| Period | . | -PP |
| Comma | , | -CC |
| Diagonal | / | -SS |
| Ampersand | & | -AA |
| Number sign | # | -TT |
| Multiplication | X | -MM |
| Equals Sign | = | -EE |
| Colon | : | -LL |
| Plus Sign | + | -UU |
| Asterisk | * | -RR |
| Percent Sign | % | -QQ |
| Dollar Sign | \$ | -BB |

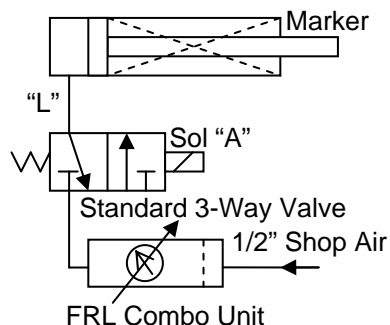


| Char Size | Style 7X 1/4" Diam Part Number | Style 8X 3/8" Diam Part Number | Style 9X 1/2" Diam Part Number |
|-----------|--------------------------------------|--------------------------------------|--------------------------------------|
| 1/16 | CM7X06- | CM8X06- | CM9X06- |
| 3/32 | CM7X09- | CM8X09- | CM9X09- |
| 1/8 | CM7X13- | CM8X13- | CM9X13- |
| 5/32 | CM7X16- | CM8X16- | CM9X16- |
| 3/16 | CM7X19- | CM8X19- | CM9X19- |
| 1/4 | | CM8X25- | CM9X25- |

CM7G information provided on website, www.columbiamt.com

Suggested Pneumatic Controls

Single Acting: Model 88 and 98

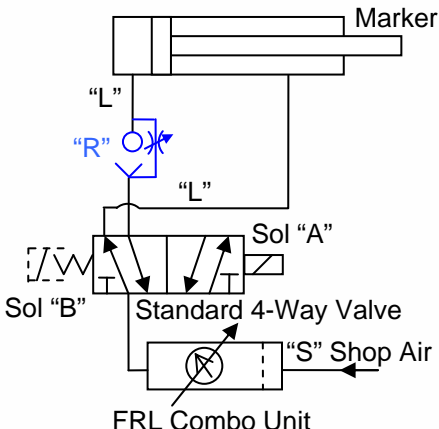


"L" Tubing sizes
Model 88 – 3/8"
Model 98 – 1/2"

Electrical sequence for spring return valve

1. To advance marker energize solenoid "A"
2. To return marker de-energize solenoid "A". Spring in marker returns ram after pressure is exhausted.

Double Acting: Model 78, 288, 298, and Slide-A-Mark



"L" Tubing Sizes
Model 78 and 288 – 3/8"
Model 298 – 1/2"
Slide-A-Mark – 1/2"

"S" Shop Air
Model 78 – 3/8"
Model 288 and 298 – 1/2"
Slide-A-Mark – 1/2"

Electrical Sequence for double solenoid valve.

1. To advance marker energize solenoid "A".
2. To return marker and reset – de-energize solenoid "A" and energize solenoid "B".

Electrical sequence for spring return valve.

1. To advance marker – energize solenoid "A".
2. To return marker and reset – de-energize solenoid "A" after part is marked.

Speed control adjustment (not for use with Slide-A-Mark)

Adjust speed control "R" to control speed of retract motion. DO NOT install speed control on forward (rod) port of marker,

*Note: For most efficient operation, electrical signal energizing solenoid "A" should be very short, approximately .06 to .10 seconds.

Retro-Fit Valve Pack – Fast and Easy Installation



Each Valve Pak Includes:

- High Air Flow Valve
- Filter, Regulator, Lubricator And Gage Unit
- Lock-Out, Air Shut-Off Valve
- Completely Assembled
- Exhaust Muffler
- Air Timed Return On Valve For Adjustable Instant response

| Feature | Symbol | Example |
|---------------|--------|-------------|
| Single Acting | RVPS | —RVPD-DC-NL |
| Double Acting | RVPD | |
| AC | - | |
| DC | DC | |
| Non-Lube | NL | |

CMT

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586.949.8400
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