



3636 Dayton Park Drive Dayton, OH 45414 USA Tel: 937-233-8792 Fax: 937-233-8485

Commercial Actuator Specifications

Date: March 21, 2008

VMC P/N: MA-8?4118653-??M Dwg No: DA-8?4118653-??M Rev:

Customer: Solar
Customer P/N:

Standard Features:

Type: Linear
****Voltage:** 12vdc, 24vdc, 36vdc
****Amperage:** 24a, 16a, 10a
Gear Ratio: 58:1
Clutch/Torque: none
Sensor/Resolution: Reed / 20 PPI (pulses per inch), 30 PPI, 40 PPI or Potentiometer/1K, 5K or 10K
Limits Switches: Standard button type
Screw Type: 3/4-5 Ball Screw
Stroke: To Suit (4" to 66")
Tube Mounting: Long Heavy Duty Clamp
End Mount: Standard 3/4" swivel
Drop In: Adjustable
Mounting Hardware: 1/2" or 3/4" Mounting Bolt Kit
****Speed:** .3 IPS (inches per second)
Rated Static Load: 8000 pounds
Rated Dynamic Load: 4000 pounds
Warranty: Negotiable - Standard 2 yr manufacturer defect, product only - repair or replace

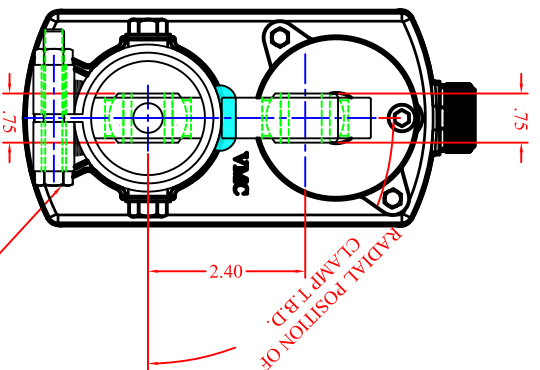
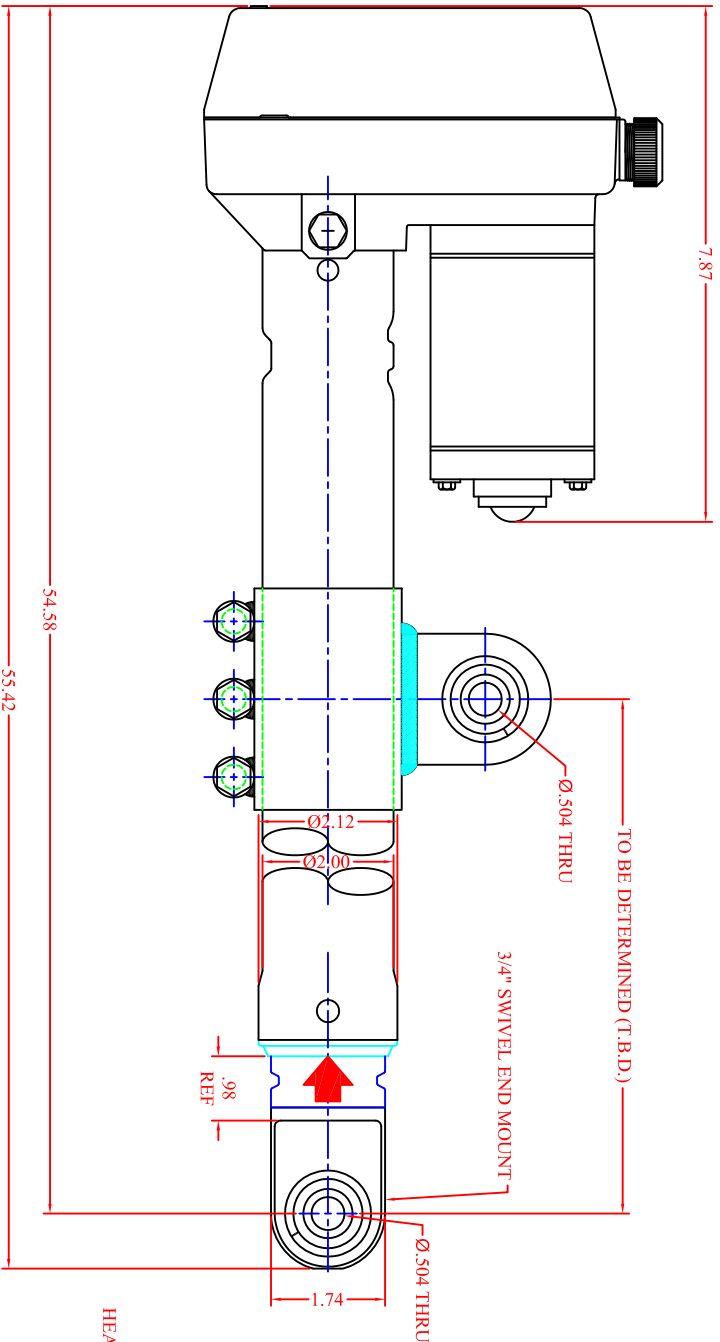
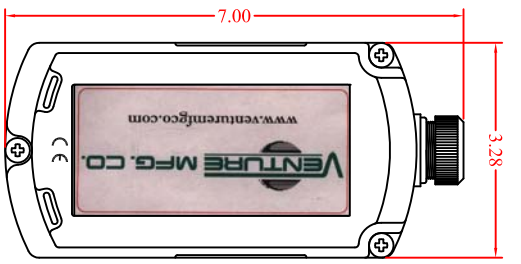
**** Note:** These specifications given at rated load

Packaging: Individual or Bulk packaged - maximum 50 pcs per skid.

Options:

1. Clamp attached and located linearly and radially per customer request.
2. Pigtail and connectors per customer request.
3. Special tube settings per customer request.
4. Motor Boot
5. Tube Boot
6. Standard Heavy Duty Clamp
7. External Ground Strap

Labeling: Standard Serialized Venture labeling or Private labeling to suit



P/N: MA-834118653-36M
12 AMPS @ 36VDC
58:1
LIMIT SWITCHES
REED SENSOR: 40 PULSES PER INCH
3/4-5 BALLSCREW
3/4" HD. LONG CLAMP W/ 1/2" BUSHING
3/4" SWIVEL END MOUNT W/ 1/2" BUSHING
36" STROKE
MODIFIED WITH SCREW ON DRIVE COUPLING &
H.D. INNER TUBE INSERT
CE Compliant to Machinery Directive 98/37/EC and EMC Directive 89/336/EEC
4000 lbs. DYNAMIC LOAD
8000 lbs. STATIC LOAD

DATE	VENTURE MFG. CO.
JULY 30, 2008	
SCALE	
FULL	
MA-834118653-36M	
A	



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Commercial Actuator Specifications

Date: March 21, 2008

VMC P/N: MA-8?4118343-??M Dwg No: DA-8?4118343-??M Rev:

Customer: Solar
Customer P/N:

Standard Features:

Type: Linear
****Voltage:** 12vdc, 24vdc, 36vdc
****Amperage:** 16a, 12a, 8a
Gear Ratio: 58:1
Clutch/Torque: none
Sensor/Resolution: Reed / 32 PPI (pulses per inch), 48 PPI, 64 PPI or Potentiometer/1K, 5K or 10K
Limits Switches: Standard button type
Screw Type: Acme w/Bronze Nut
Stroke: To Suit (4" to 66")
Tube Mounting: Standard Heavy Duty Clamp
End Mount: Standard 3/4" swivel
Drop In: Adjustable
Mounting Hardware: 1/2" or 3/4" Mounting Bolt Kit
****Speed:** .2 IPS (inches per second)
Rated Static Load: 6000 pounds
Rated Dynamic Load: 1500 pounds
Warranty: Negotiable - Standard 2 yr manufacturer defect, product only - repair or replace

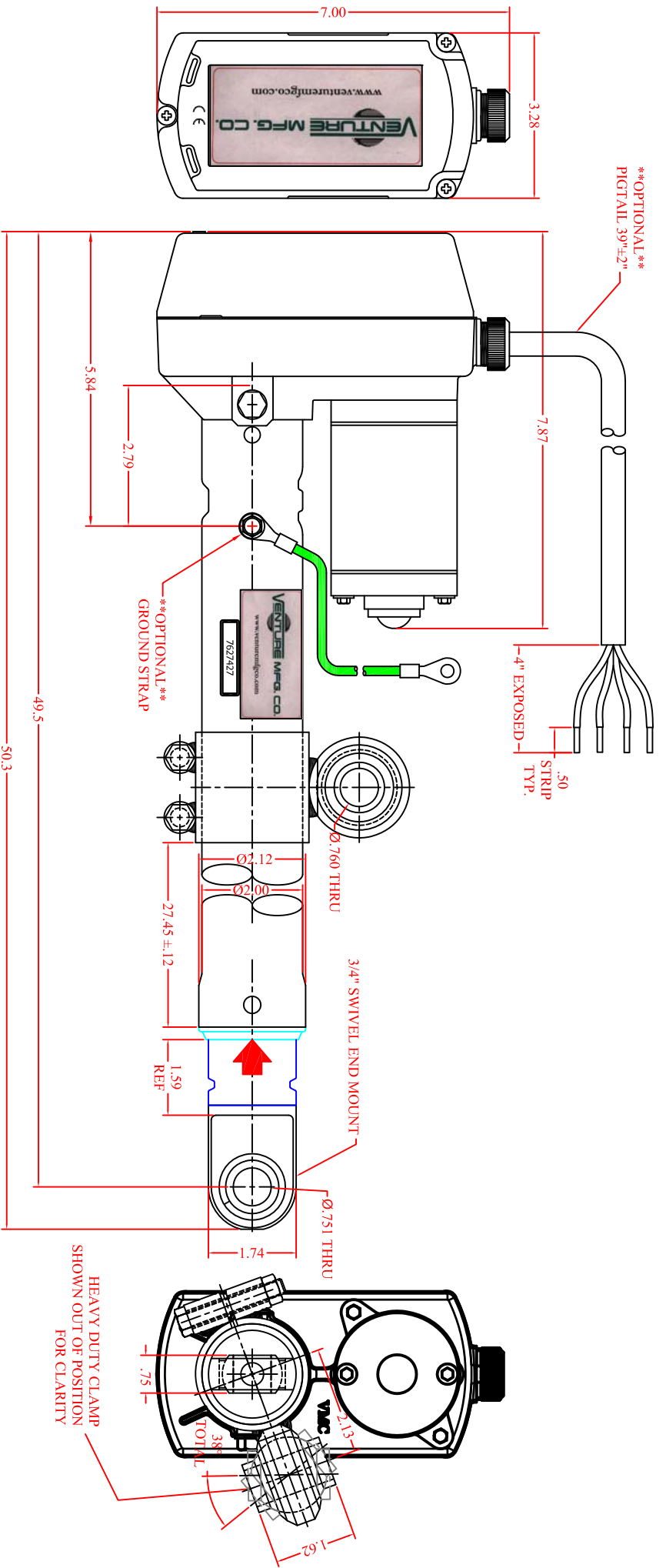
**** Note:** These specifications given at rated load

Packaging: Individual or Bulk packaged - maximum 50 pcs per skid.

Options:

1. Clamp attached and located linearly and radially per customer request.
2. Pigtail and connectors per customer request.
3. Special tube settings per customer request.
4. Motor Boot
5. Tube Boot
6. Extra Long Heavy Duty Clamp
7. External Ground Strap

Labeling: Standard Serialized Venture labeling or Private labeling to suit



P/N: MA-834118343-36M
 12 AMPS @ 36VDC
 58:1
 LIMIT SWITCHES
 REED SENSOR: 32 PULSES PER INCH
 3/4-8 L.H. ACME
 BRONZE NUT
 3/4" HD. CLAMP W/O BUSHING
 3/4" SWIVEL END MOUNT W/O BUSHING
 36" STROKE
 3/4" MTG. BOLT KIT
 MODIFIED WITH SCREW ON DRIVE COUPLING (716-05)
 CE Compliant to Machinery Directive 98/37/EC and
 EMC Directive 89/336/EEC
 1500 lbs. DYNAMIC LOAD
 5000 lbs. STATIC LOAD



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Commercial Actuator Specifications

Date: March 21, 2008

VMC P/N: MA-8?4118543-??M Dwg No: DA-8?4118543-??M Rev:

Customer: Solar
Customer P/N:

Standard Features:

Type: Linear
**Voltage: 12vdc, 24vdc, 36vdc
**Amperage: 12a, 8a, 5a
Gear Ratio: 58:1
Clutch/Torque: none
Sensor/Resolution: Reed / 20 PPI (pulses per inch), 30 PPI, 40 PPI or Potentiometer/1K, 5K or 10K
Limits Switches: Standard button type
Screw Type: 5/8-5 Ball Screw
Stroke: To Suit (4" to 66")
Tube Mounting: Standard Heavy Duty Clamp
End Mount: Standard 3/4" swivel
Drop In: Adjustable
Mounting Hardware: 1/2" or 3/4" Mounting Bolt Kit
**Speed: .3 IPS (inches per second)
Rated Static Load: 3000 pounds
Rated Dynamic Load: 1500 pounds
Warranty: Negotiable - Standard 2 yr manufacturer defect, product only - repair or replace

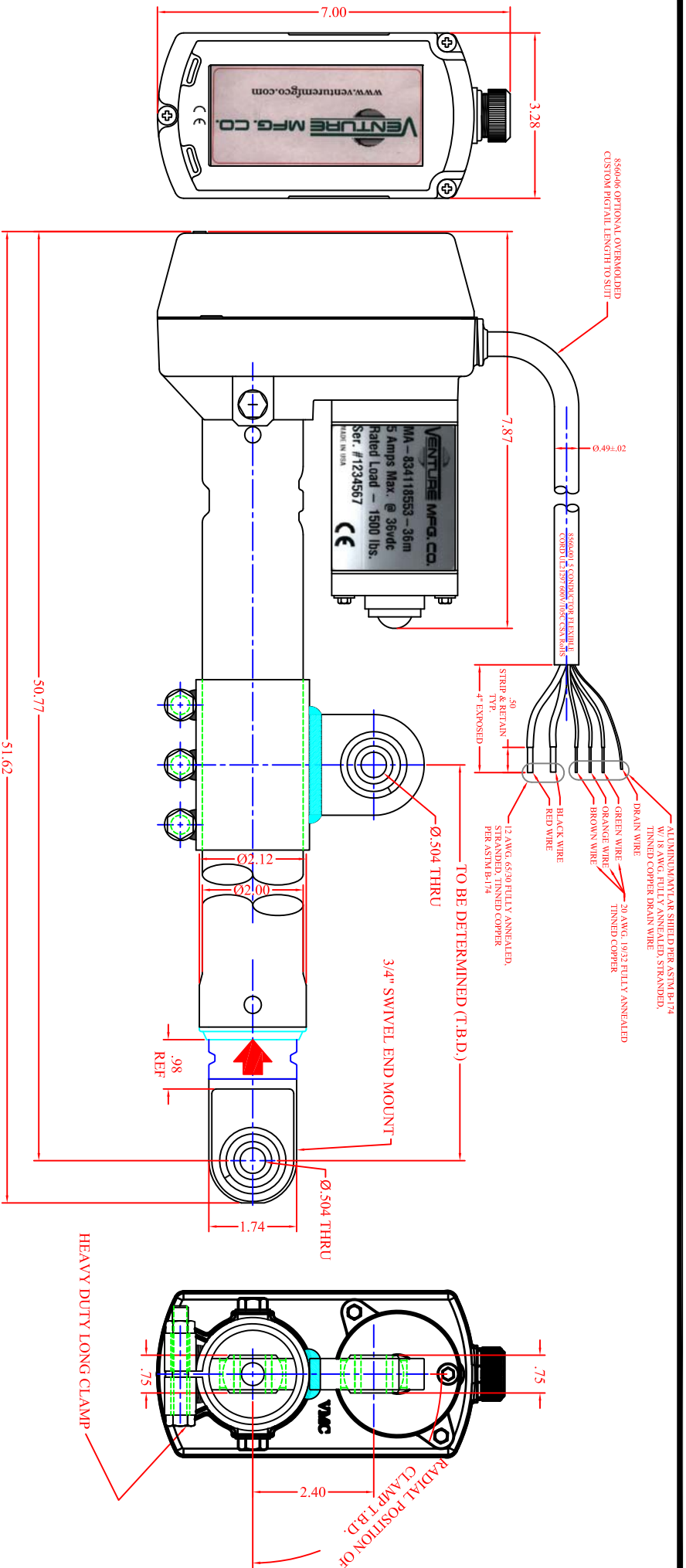
** Note: These specifications given at rated load

Packaging: Individual or Bulk packaged - maximum 50 pcs per skid.

Options:

1. Clamp attached and located linearly and radially per customer request.
2. Pigtail and connectors per customer request.
3. Special tube settings per customer request.
4. Motor Boot
5. Tube Boot
6. Extra Long Heavy Duty Clamp
7. External Ground Strap

Labeling: Standard Serialized Venture labeling or Private labeling to suit



P/N: MA-834118553-36M
 5 AMPS @ 36VDC
 58:1
 LIMIT SWITCHES
 REED SENSOR: 40 PULSES PER INCH
 5/8-5 BALLSCREW
 3/4" HD. LONG CLAMP W/ 1/2" BUSHING
 3/4" SWIVEL END MOUNT W/ 1/2" BUSHING
 36" STROKE
 MODIFIED WITH SCREW ON DRIVE COUPLING &
 CE Compliant to Machinery Directive 98/37/EC and EMC Directive 89/336/EEC
 1500 lbs. DYNAMIC LOAD
 3000 lbs. STATIC LOAD

DATE:	JULY 30, 2008
SCALE:	FULL
VENTURE MFG. CO.	MA-834118553-36M
	A

COMMERCIAL ACTUATOR PRODUCTS

LITERAL/NUMERIC PART No. CODE SYSTEM

BCJ001

Rev: 16-Feb-09
prt dte: 2/16/09

EXAMPLE: ITEM NO. MA-834118332-18.00BK = MOTORIZED ACTUATOR WITH A BLACK GEARBOX, 36VDC 6800 RPM MOTOR, 58:1 RATIO, REED SWITCH, LIMIT SWITCHES, 800 SERIES 2" DIA. O.T., 3/4-8 L.H. ACME SCREW, STD CLAMP, 1/2" FLAT END MOUNT, 18.00" STROKE, Boot, Keyed



GEARBOX TYPE	
(0)	= NONE
(3)	= Raw Hsg w/o Strain Relief
(4)	= Raw Hsg w/Strain Relief
(5)	= Tan Hsg w/o Strain Relief
(6)	= Tan Hsg w/Strain Relief
(7)	= Blk Hsg w/o Strain Relief
(8)	= Blk Hsg w/Strain Relief
(9)	= SPECIAL (Specify)

UNIT TYPE	
(M)	= GEARBOX ONLY
(A)	= ACTUATOR TUBE ONLY
(MA)	= MOTORIZED ACTUATOR

SENSOR TYPE	
(0)	= NONE
(1)	= REED SWITCH ***
(2)	= HALL EFFECT ***
(3)	= POTENTIOMETER
(4)	= ENCODER ***
(9)	= SPECIAL (Specify)

SCREW DATA	
(0)	= NONE
(3)	= 3/4-8 L.H. ACME
(5)	= 5/8-5 R.H. BALL
(6)	= 3/4-5 R.H. BALL
(9)	= SPECIAL (Specify)

STANDARD MODIFIERS	
(OB)	= OPTIONAL BRAKE
(B)	= TUBE BOOT
(K)	= KEYED
(MB)	= Motor Boot
(M)	= MODIFIED
(P)	= PIGTAIL
(CE**)	Per Note

STROKE (in)

MA - 8 3 4 1 1 8 3 3 2 - 18.00 B M MB K CE P MB**

ELECTRIC MOTORS	
(0)	= NONE
(1)	= 12vdc 6800 RPM
(2)	= 24vdc 6800 RPM
(3)	= 36vdc 6800 RPM
(4)	= 90vdc 4200 RPM
(5)	= 120vdc* 4200 RPM
(7)	= STEPPER
(8)	= BRUSHLESS DC
(9)	= SPECIAL (Specify)
(A)	= 12vdc 2500 RPM
(B)	= 24vdc 2500 RPM
(C)	= 36vdc 2500 RPM
(D)	= 90vdc 2500 RPM
(E)	= 120vdc* 2500 RPM
(F)	= 12vdc 1200 RPM
(L)	= 12vdc 9000 RPM
(T)	= 18vdc 900 RPM

GEAR RATIO	
(0)	= NONE
(1)	= 18:1 GEAR DRIVE
(2)	= 28:1 GEAR DRIVE
(4)	= 58:1 GEAR DRIVE
(5)	= 360:1 WORM DRIVE ††
(6)	= 560:1 WORM DRIVE ††
(7)	= 1160:1 WORM DRIVE ††
(9)	= SPECIAL (Specify)

OUTER TUBE DIAMETER	
(0)	= NONE
(1)	= 2.25" 1200 Series
(8)	= 2.00" 800 SERIES
(9)	= SPECIAL (Specify)

TUBE MOUNTING	
(0)	= NONE
(1)	= TRUNNION
(2)	= HD INLINE BRACKET †
(3)	= STD CLAMP
(4)	= H.D. CLAMP
(5)	= HD Long CS CLAMP
(6)	= HD Long CLAMP
(7)	= Std INLINE BRACKET †
(8)	= HD INLINE Clamp
(9)	= SPECIAL (Specify)

END MOUNTS	
(0)	= NONE
(1)	= 1/2" SWIVEL
(2)	= 1/2" FLAT
(3)	= 3/4" SWIVEL
(4)	= Universal (specify thread)
(5)	= CLEVIS
(9)	= SPECIAL (Specify)

LIMITS	
(0)	= None (w/o CLT or LS)
(1)	= LIMIT SWITCHES
(2)	= CLUTCH
(3)	= BOTH
(4)	= Clutch w/ Manual Crank
(5)	= Both w/ Manual Crank
(6)	= Limits w/Manual Crank w/o CLT
(7)	= None w/Manual Crank
(9)	= SPECIAL (Specify)

NOTE: STD CLUTCH SETTINGS ARE: 125 in-lbs FOR 58:1 GEARBOXES
125 in-lbs FOR 28:1 GEARBOXES
75 in-lbs. FOR 18:1 GEARBOXES
CUSTOM CLUTCH SETTINGS ARE AVAILABLE

*120vdc MOTOR SUPPLIED WITH 10 amp RECTIFIER FOR USE IN 120vac CIRCUIT

** CE Certification available on 12v, 24v & 36v models only and comply with; Machinery Directive: EN60204-1: 2006 and EMC: EN55014-1: 2006, EN 61000-6-4: 2007

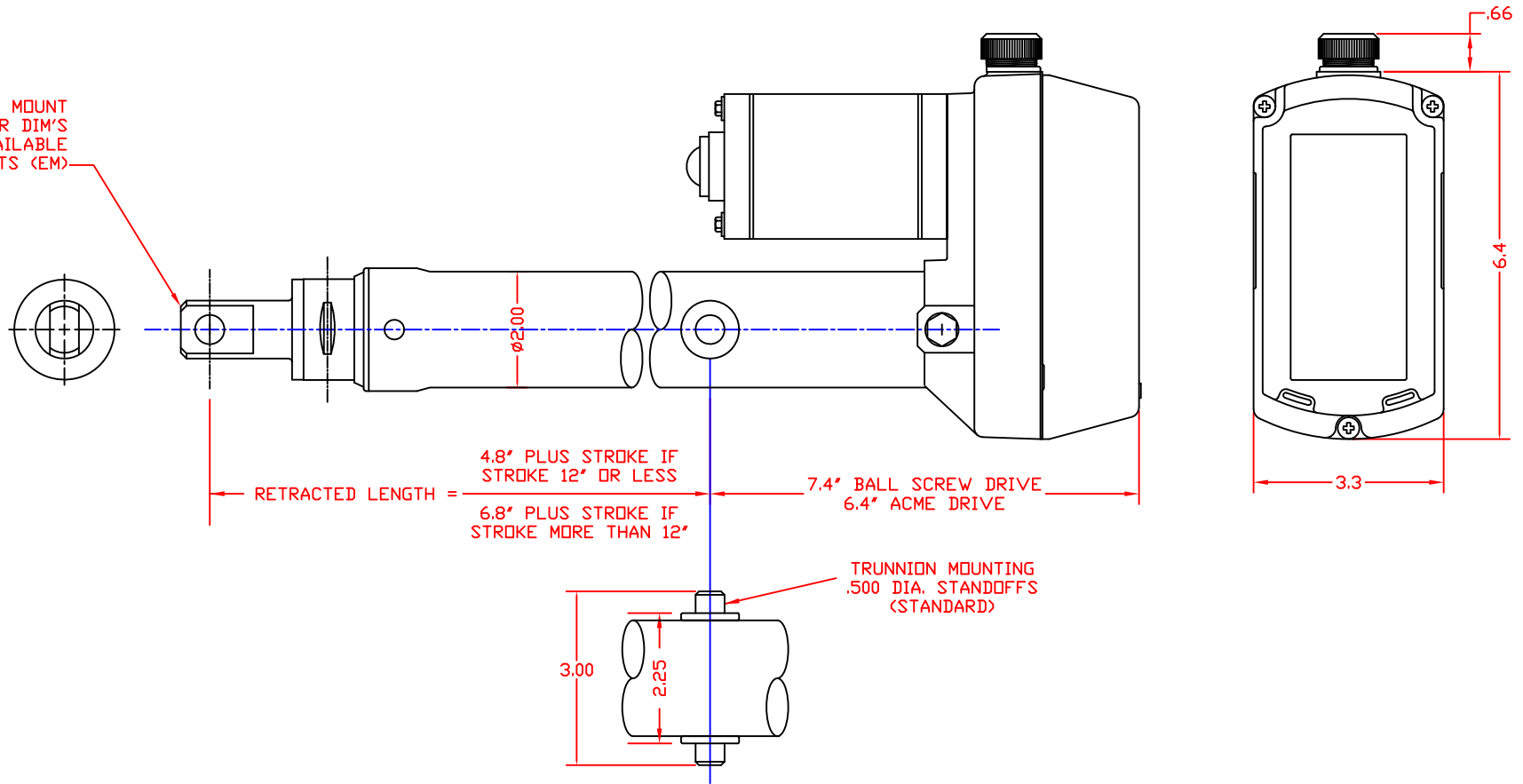
*** SPECIFY DESIRED PPR (Pulses Per Revolution) or PPI (Pulses Per Inch)

NOTE: STD U.O.S.
ACME SCREWS (A) ARE LEFT HAND (L.H.) PITCH
BALL SCREWS (B) ARE RIGHT HAND (R.H.) PITCH

†† These ratios are achieved by combining the 8500 gearbox with the 890 series 20:1 worm drive gearbox.

† Std INLINE BRACKET RATED FOR 750 LB LOAD
HD INLINE BRACKET RATED FOR 3000 LB LOAD

1/2" FLAT END MOUNT
SEE SHEET 2 FOR DIM'S
AND OTHER AVAILABLE
TUBE END MOUNTS (EM)



CUSTOM STROKES AVAILABLE UPON REQUEST

GBX RATIO	RATED LOAD lbs.	PERFORMANCE DATA (BALL SCREW)					PERFORMANCE DATA (ACME)					
		AMPERAGE DRAW @ RATED LOAD					RATED LOAD lbs.	AMPERAGE DRAW @ RATED LOAD				
		12 vdc	24 vdc	36 vdc	90 vdc	120 vac		12 vdc	24 vdc	36 vdc	90 vdc	120 vac
18:1	750	20	12	8	1.8	1.6	500	17	10	7.5	1.7	1.11
INCHES/SEC.		.9	.9	1.1	.7	.6	IPS	.6	.6	.7	.4	.4
28:1	1500	24	16	10	4	2	750	17	10	7.5	1.8	1.0
INCHES/SEC.		.6	.6	.8	.5	.4	IPS	.35	.35	.4	.25	.25
58:1	1500	12	8	5	1.6	.9	750	9	6	4.5	1.2	.8
INCHES/SEC.		.3	.3	.4	.25	.23	IPS	.2	.2	.25	.15	.15

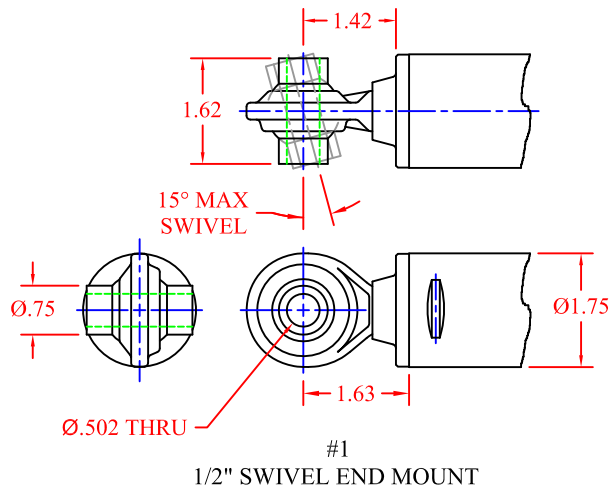
ACTUATOR PERFORMANCE AND SELECTION DATA

SEE SHEET NO. 2 FOR END MOUNT OPTIONS.
SEE SHEET NO. 3 & 4 FOR MOUNTING OPTIONS
SEE SHEET NO. 5 & 6 FOR TRUNNION & TRUNNION BRACKET DETAILS

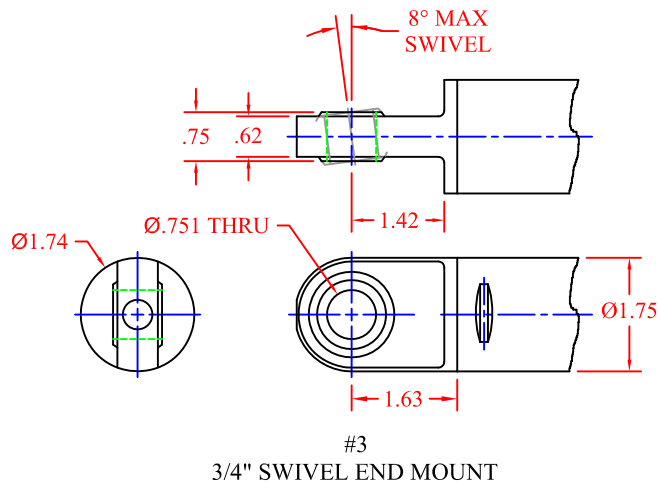
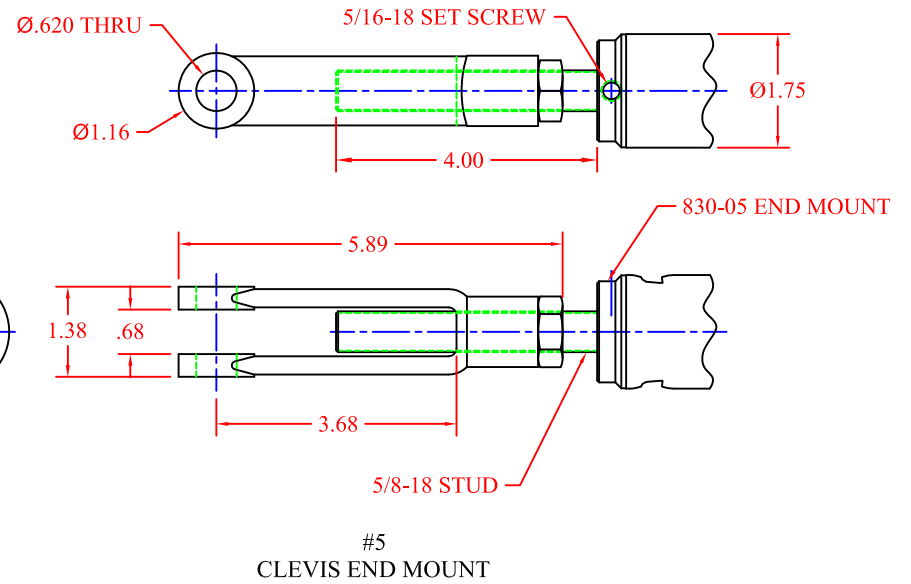
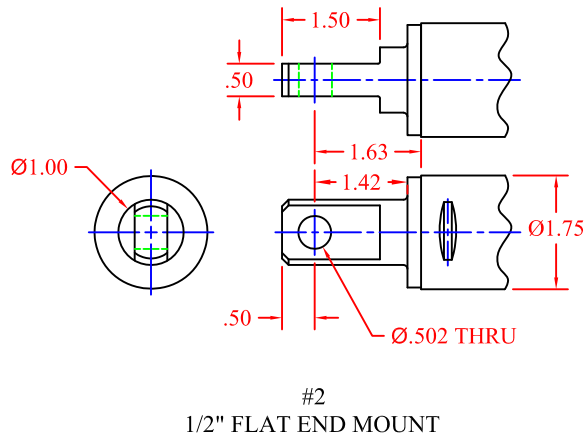
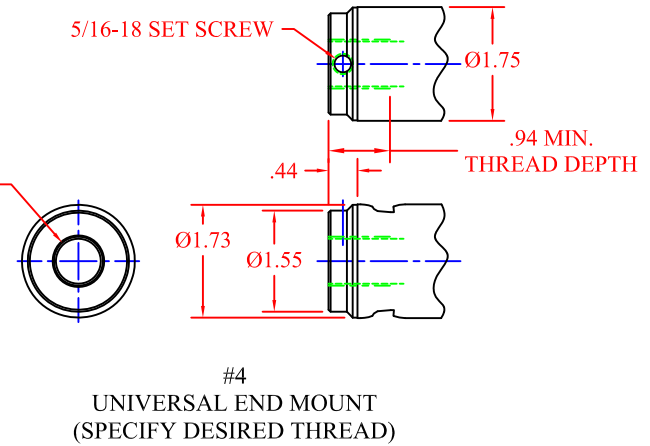
SEE BCJ001 FOR PART NO.

SHEET NO. 1

VENTURE MFG. CO.
3636 DAYTON PARK DRIVE
DAYTON OHIO 45414
TEL: (937)233-6832
FAX: (937)233-8485
WEB PAGE: www.venturemfgco.com



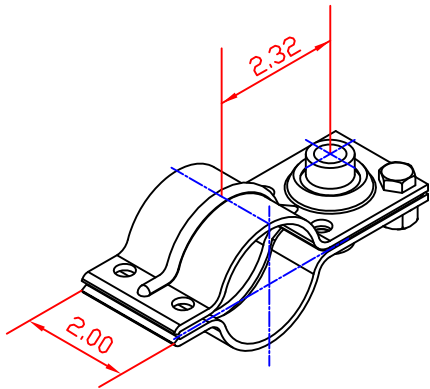
830-00, 3/4-10 UNC THREAD
 830-01, 1/2-20 UNF THREAD
 830-02 & -03, 3/8-16 UNC THREAD
 830-04, NO THREAD
 830-05, 5/8-18 UNF THREAD



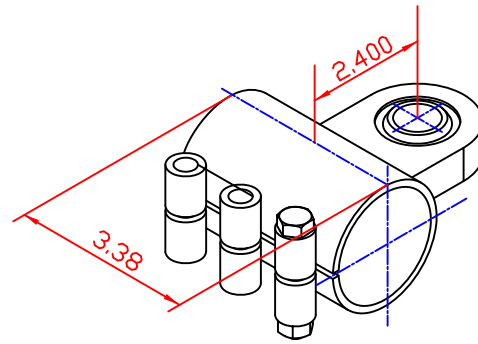
ACTUATOR TUBE END MOUNTING OPTIONS

VENTURE MFG. CO.

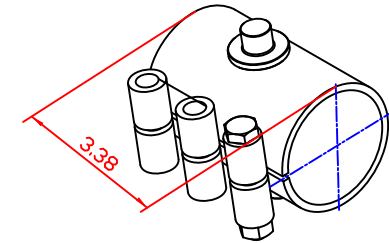
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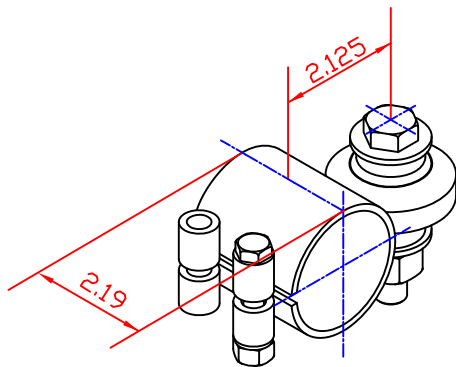
#3
STANDARD CLAMP
FOR 1/2" BOLT (818-20)



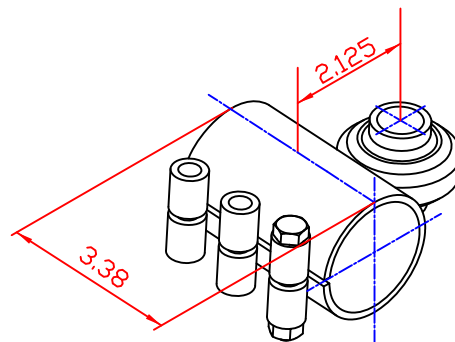
#5
HD LONG CS CLAMP
FOR 3/4" BOLT (818-51CS)



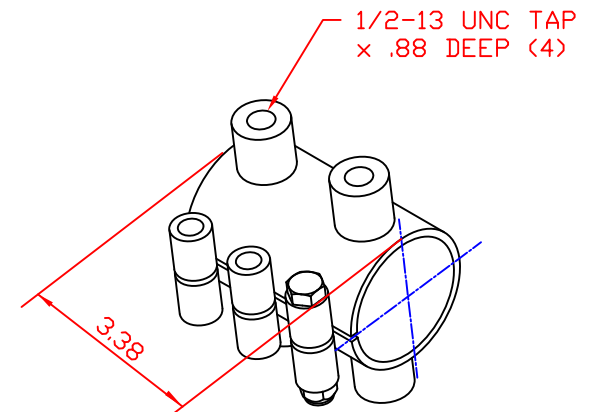
TRUNNION CLAMP
FOR 1/2" TRUNNIONS (818-55)



#4
HEAVY DUTY CLAMP
FOR 3/4" BOLT (818-50)



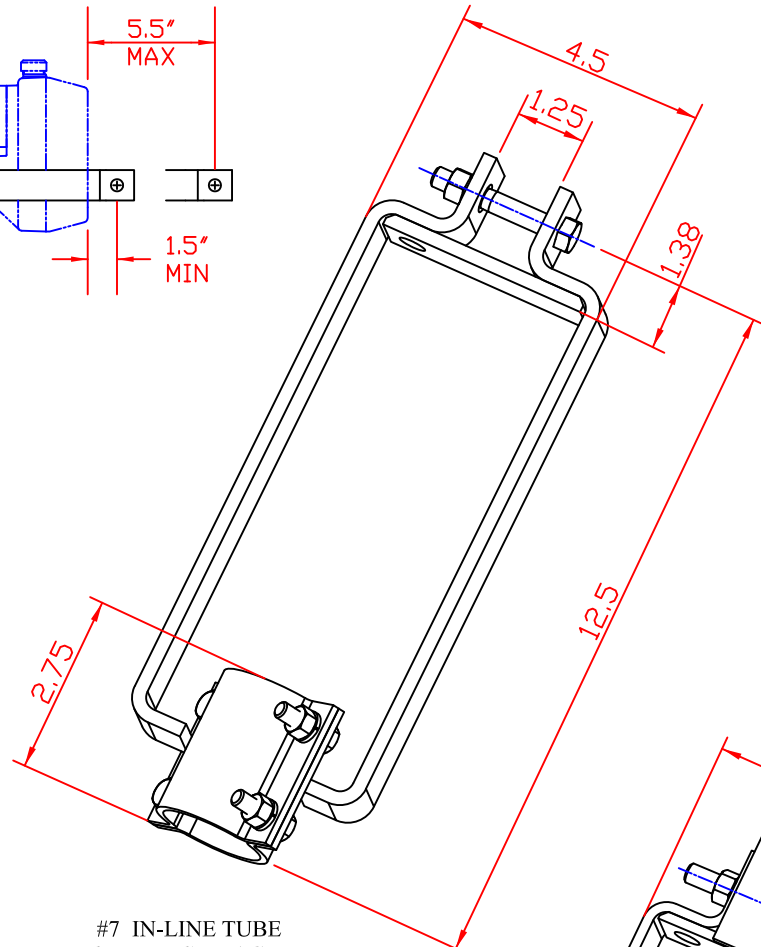
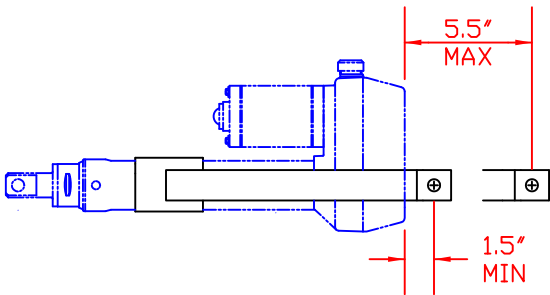
#6
HEAVY DUTY LONG CLAMP
FOR 3/4" BOLT (818-51)



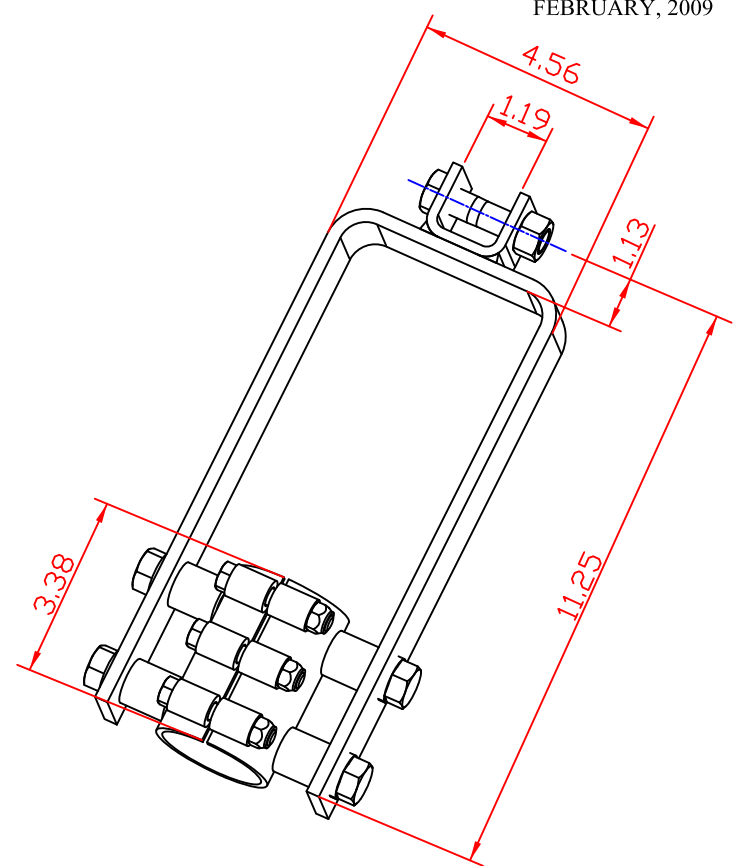
#8
HD IN-LINE CLAMP
FOR 1/2" BOLT (818-52)

2" DIA. TUBE MOUNTING OPTIONS

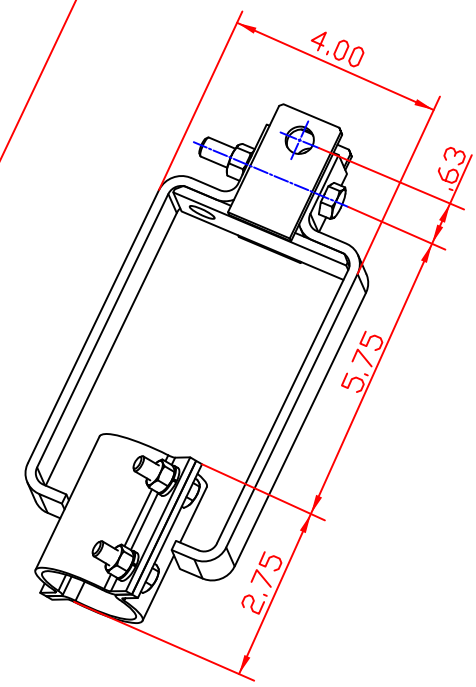
NOTE: EACH SUPPLIED WITH ALL MOUNTING HARDWARE



#7 IN-LINE TUBE
MOUNTING BRACKET
FOR 1/2" BOLT
844-50



#2 HEAVY DUTY IN-LINE
TUBE MOUNTING BRACKET
FOR 1/2" BOLT
844-52



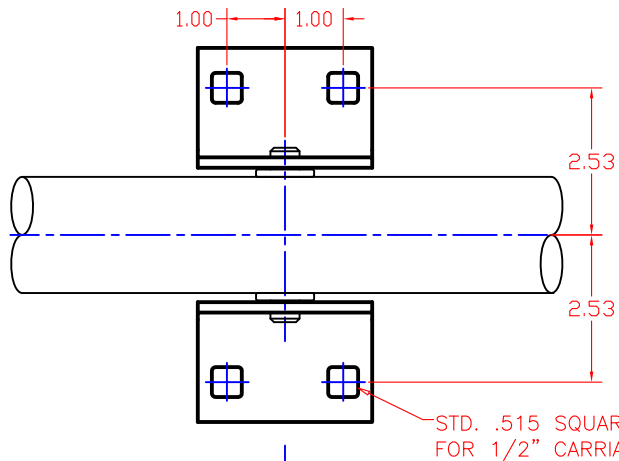
UNIVERSAL IN-LINE TUBE
MOUNTING BRACKET
844-51

2" DIA. TUBE MOUNTING OPTIONS

NOTE: EACH SUPPLIED WITH ALL
MOUNTING HARDWARE

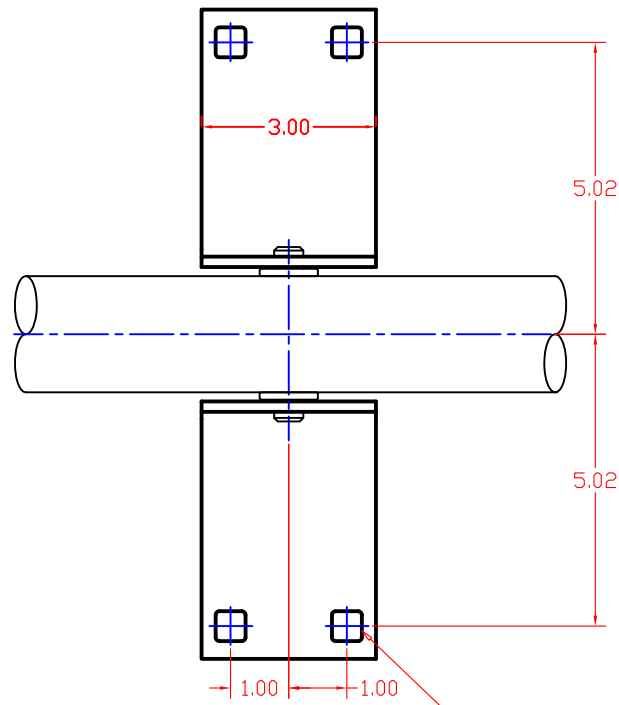
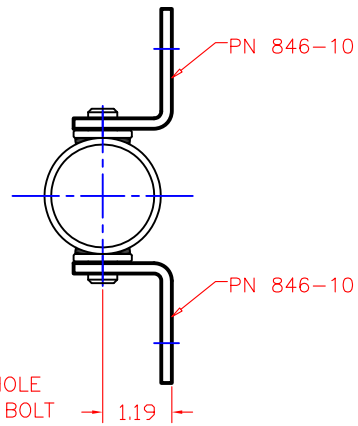
SHEET NO. 4

VENTURE MFG. CO.
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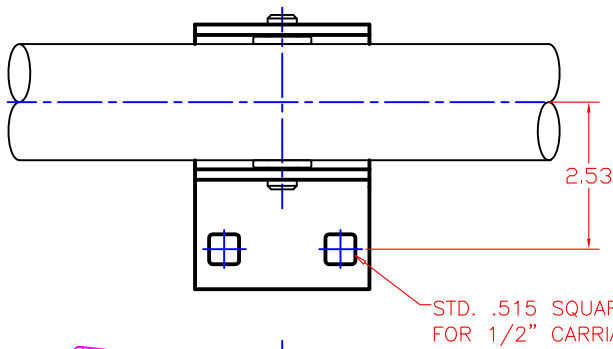
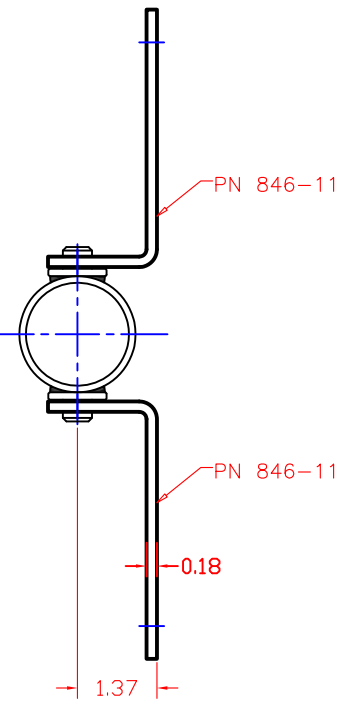
STD. .515 SQUARE HOLE FOR 1/2" CARRIAGE BOLT

STANDARD MTG. OPTION ~ PN 846-20



STD. .515 SQUARE HOLE FOR 1/2" CARRIAGE BOLT

EXTENDED MTG. OPTION ~ PN 846-21



STD. .515 SQUARE HOLE FOR 1/2" CARRIAGE BOLT

TRAVEL IN EITHER DIRECTION

SIDE MTG. OPTION ~ PN 846-22

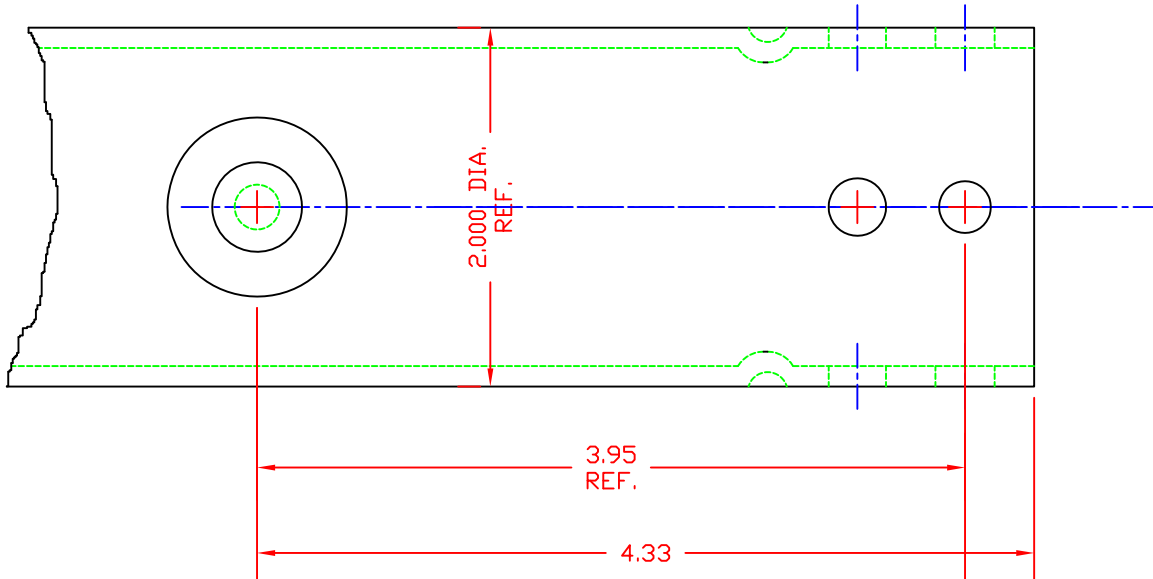
TRUNION MOUNTING OPTIONS

SHEET NO. 5

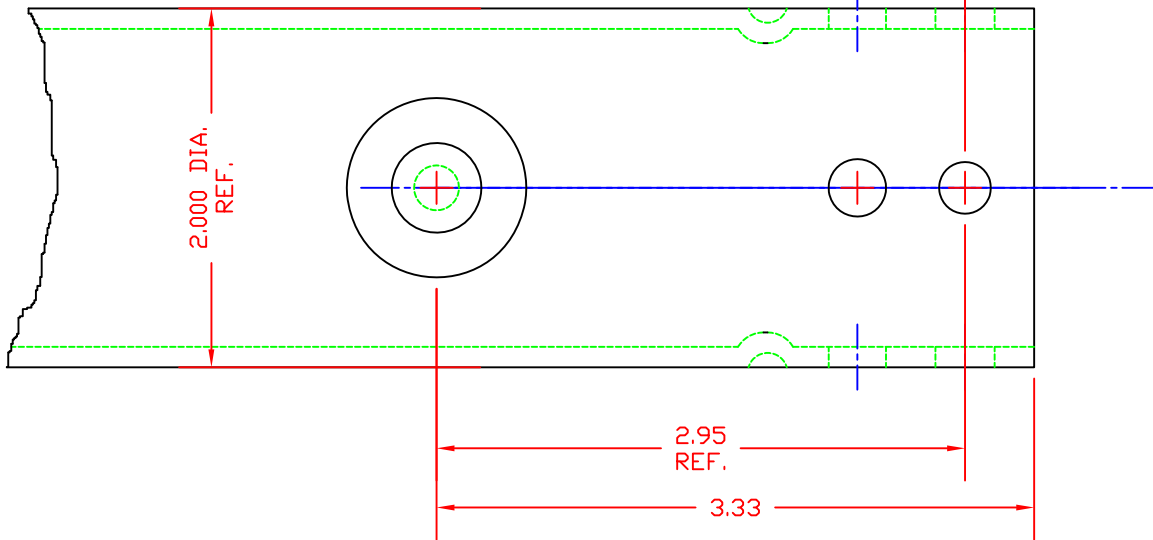
VENTURE MFG. CO.

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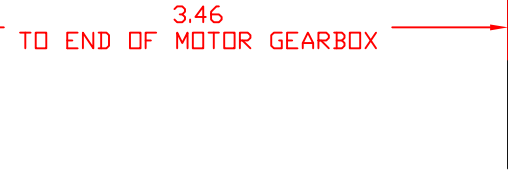
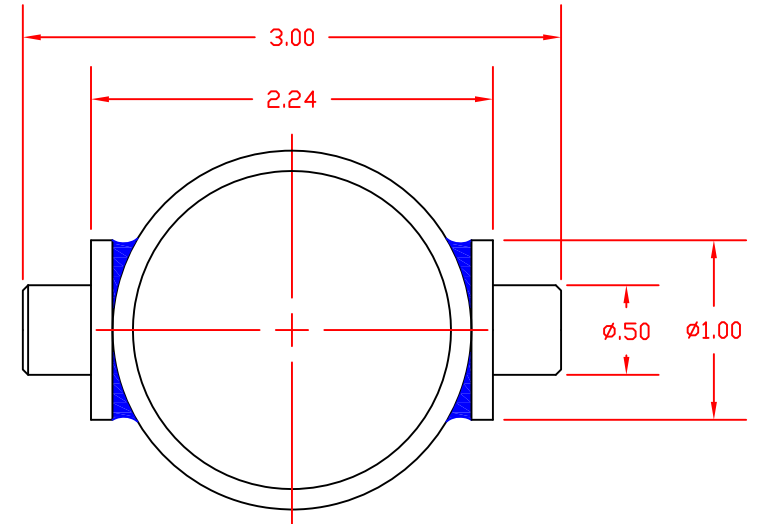
FEBRUARY, 2009



TRUNNION MOUNTING – BALL SCREW



TRUNNION MOUNTING – ACME SCREW



TRUNNION MOUNTING

MA-800 SPECS SHEET #6

DATE MAY 1998	VENTURE MFG. CO.		
SCALE FULL	A-800T		