

ENTER

TRAVEL IN INCREMENTS OF 250mm TRAVEL LIMITS: 250mm-5650mm*

SELECT

DRIVE SHAFT LOCATION, SEE PAGE 2

SHAFTING TYPE

AO=SINGLE SHAFTED

BO=DOUBLE SHAFTED

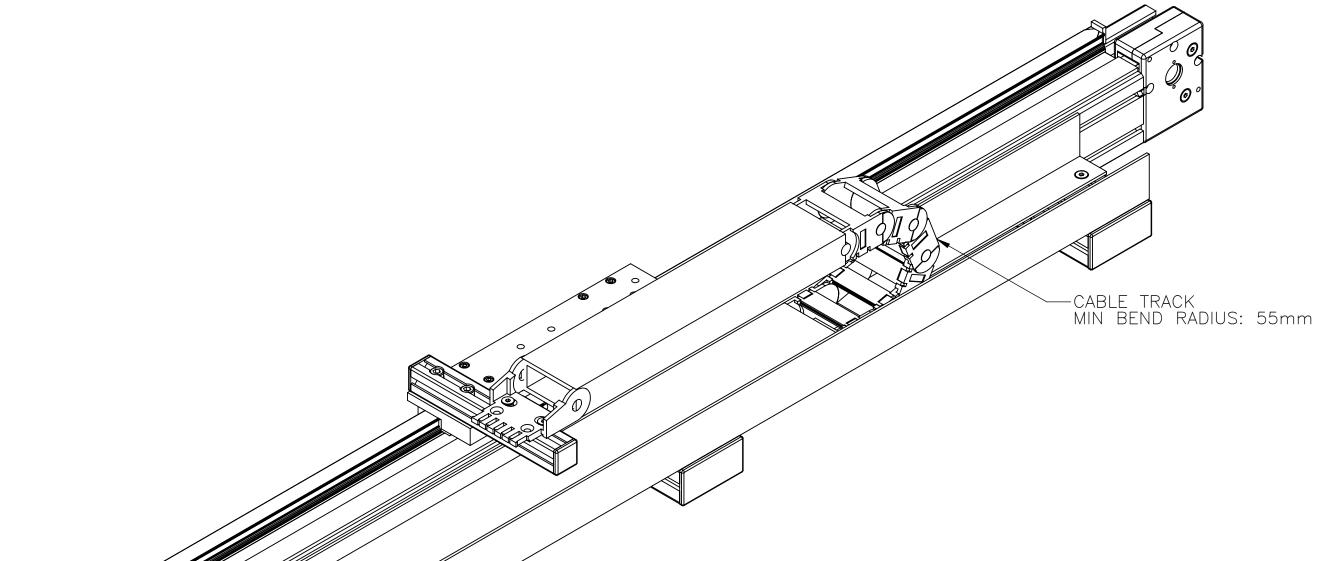
NOTE: (IF "B" IS USED THE NUMBER WILL

DESIGNATE POSITION OF SHORT SHAFT,

SECOND SHAFT WILL BE 50.8mm LONG.)

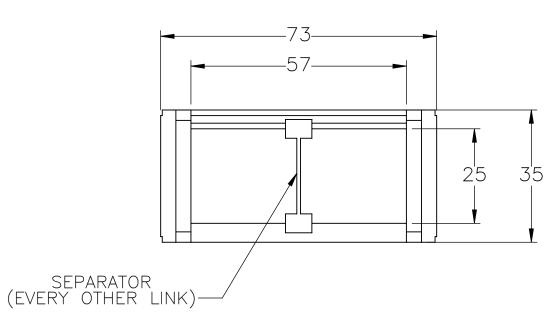
AM=SINGLE SHAFTED W/ MOTOR MOUNT

BM=DOUBLE SHAFTED W/ MOTOR MOUNT



IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON

CABLE TRACK CROSS SECTION



APPROVED:_____

PO:REFERENCE#: _____

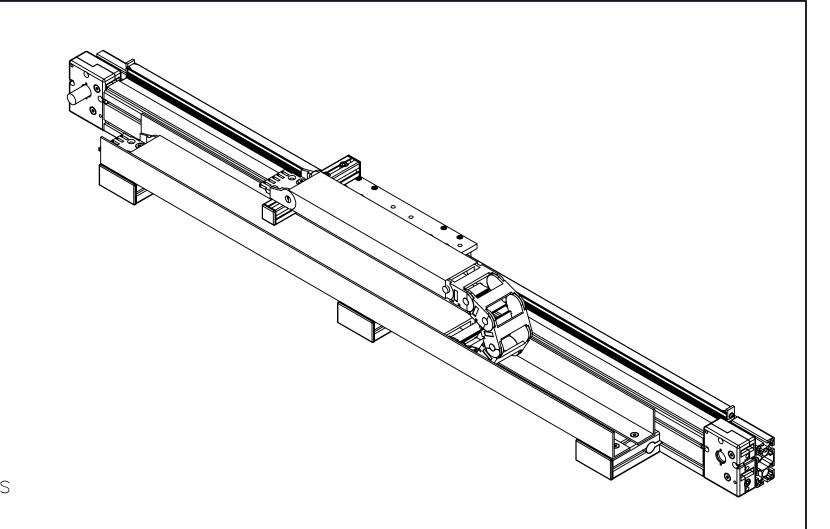
MACRON	
MACRON DYNAMICS INC)

	DRAWN BY: JA	DATE: 2/25/2020	MΑ
	CHECKED BY: ——	DATE: DD/MM/YYYY	
	last saved by: Tim	DATE: 12/29/2021	
	UNLESS OTHERWISE SPEC DIMENSIONS ARE IN MILLIME TOLERANCES UNLESS NO OTHERWISE:	TERS 1	FIN
à.	SURFACE FIN	ISH ⁶³ ∕	C
7		SHARP EDGES PPLY AFTER FINISHING	SH

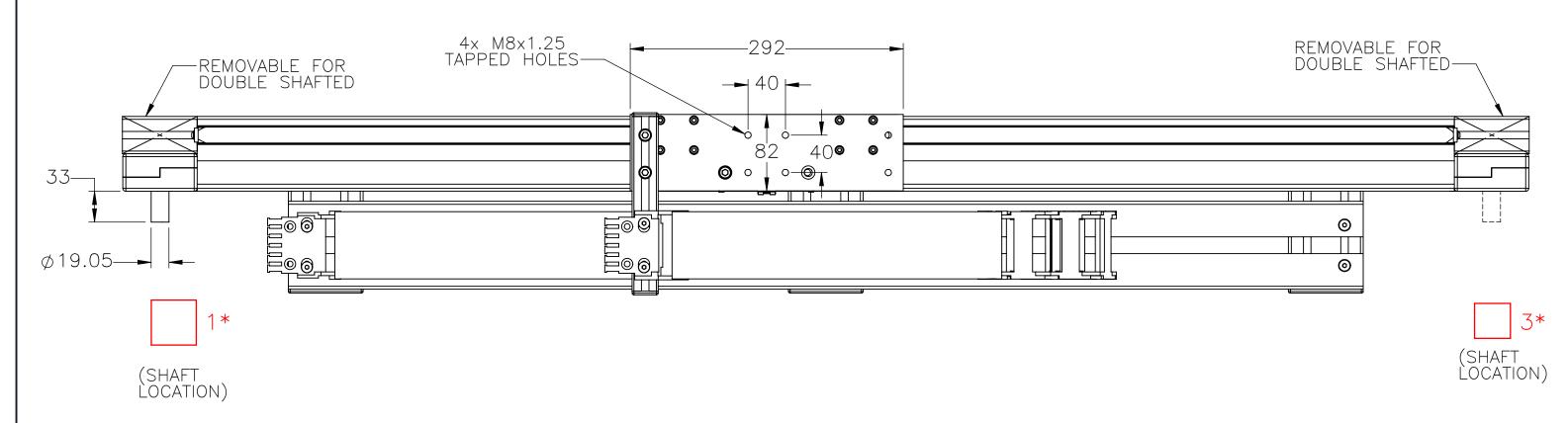
THIRD ANGLE PROJECTION

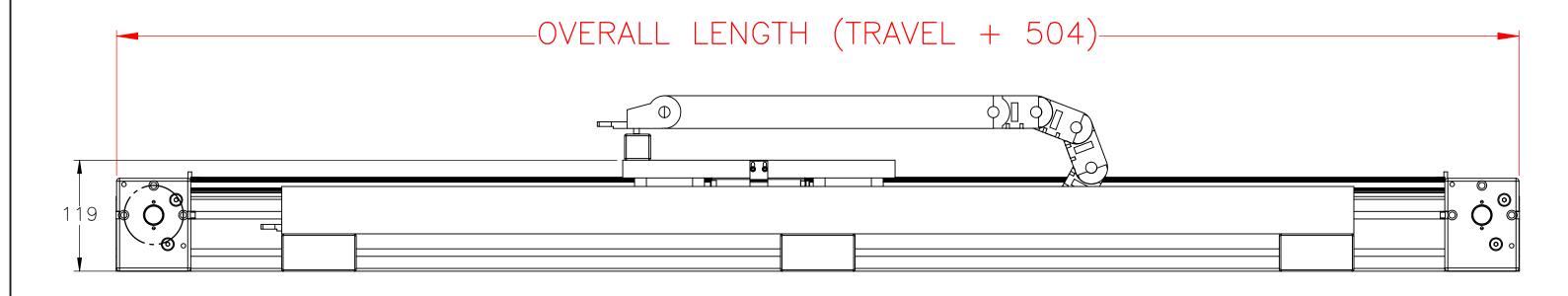
0	MATERIAL:		TITLE:	5.71
ΥΥ			MACRON	RIU
21			SYSTEM	
	FINISH:			
)'				
			SCALE 1:1	SHEET SIZE C
	SHEET	PART NUMBER		REV
IING	1 OF 3	MRA-RTU	-0-00-XX	X-XXXX

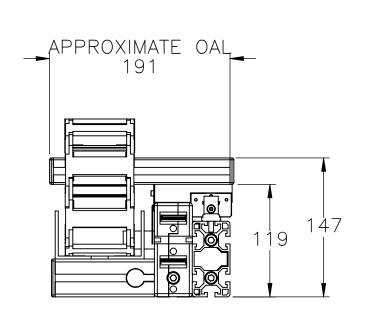
PROPERTY	BASE VALUE (T=250mm)
MOVING MASS	2.67kg(+0.0225kg/25mm)
BELT MASS	0.250 kg(+0.00313 kg/25 mm)
PULLEY PITCH DIAMETER	47.75mm (1.880")
PULLEY WIDTH	28.9mm (1.138")
PULLEY MATERIAL	STEEL
BELT WEIGHT (kg)	((TRAVEL IN METERS \times 2) + 1) \times 0.12
TRAVEL PER REV.	150mm
TRAVEL MIN.	150mm
TRAVEL MAX.	5650mm
CART WEIGHT (kg)	4.1
SYSTEM WEIGHT (kg)	(TRAVEL IN METERS x 12.5) + 10



MASSES DO NOT INCLUDE: CABLES FOR CABLE TRACK OR GEARBOXES

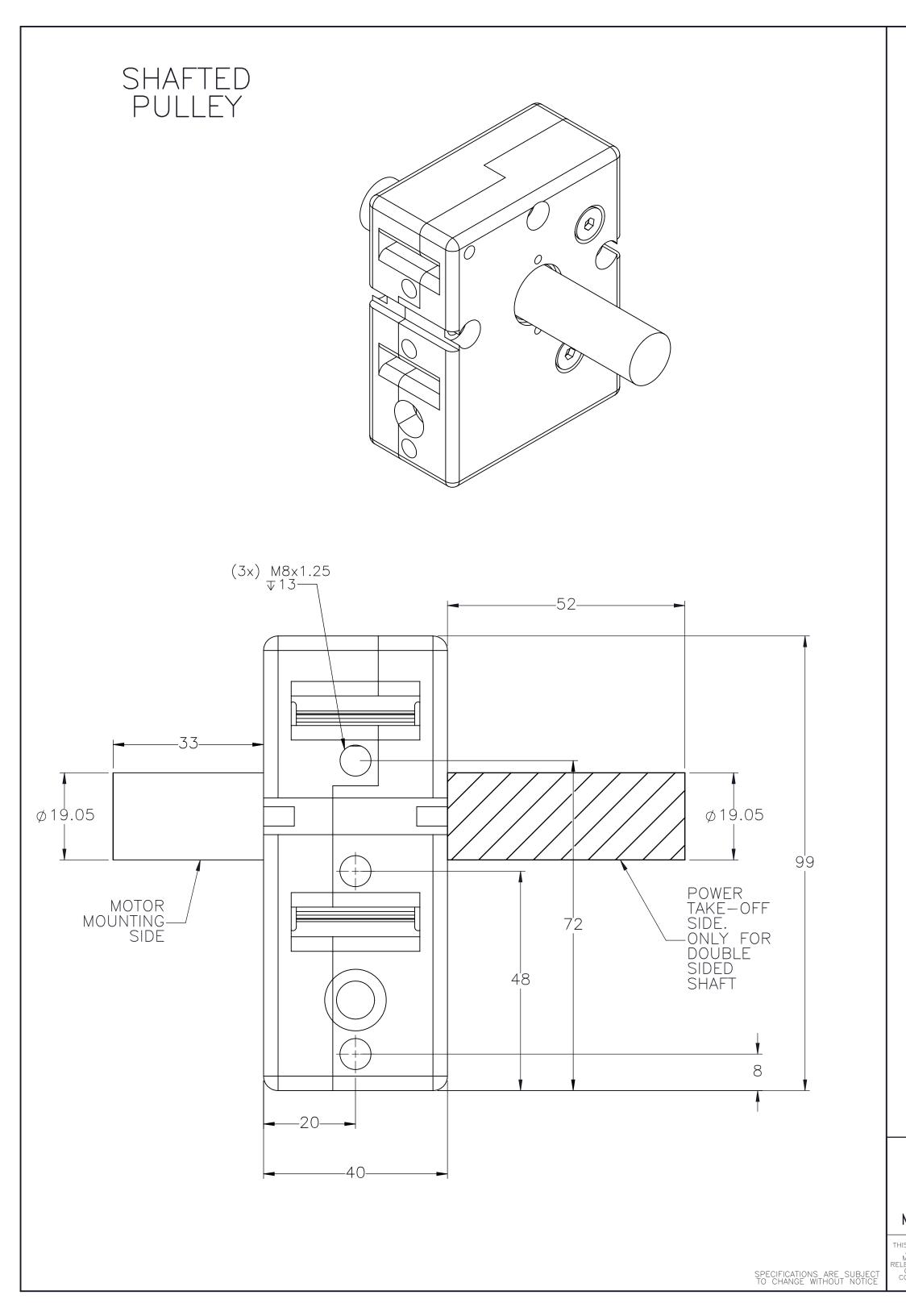




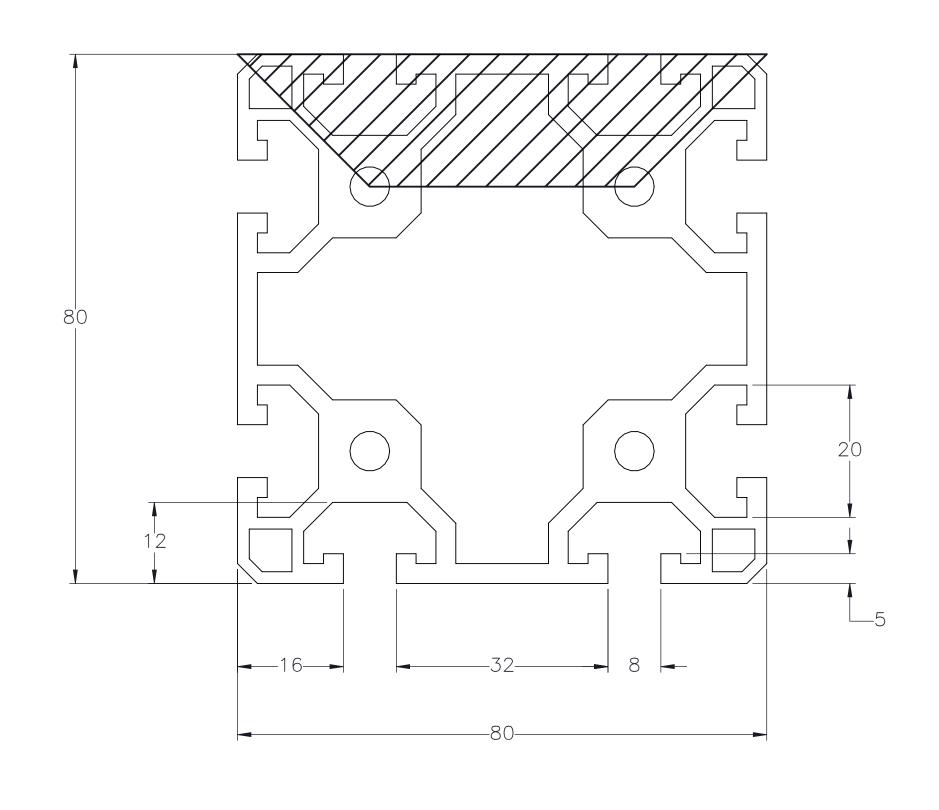


		DRAWN BY: JA	DATE: 2/25/2020	MATERIAL:	٦	TITLE:	D.T
		CHECKED BY: ——	DATE: DD/MM/YYYY			MACRON	RIU
		last saved by: Tim	DATE: 12/29/2021			SYSTEM	
	MACTON MACRON DYNAMICS INC	UNLESS OTHERWISE SPECI DIMENSIONS ARE IN INCHI TOLERANCES UNLESS NO OTHERWISE:	.X ± .03 FIED, .XX ± .010 ESXXX ± .005 ANG ± 0°30'	FINISH:			
	THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS.	SURFACE FIN	IISH ⁶³			SCALE 1:1	SHEET SIZE C
Τ	ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	DIMENSIONAL LIMITS A	SHARP EDGES APPLY AFTER FINISHING E PROJECTION		r number RA—RTU-	-0-00-XX>	<-XXXX REV

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



ACTUATOR BODY MOUNTING FEATURES T-NUT SLOTS

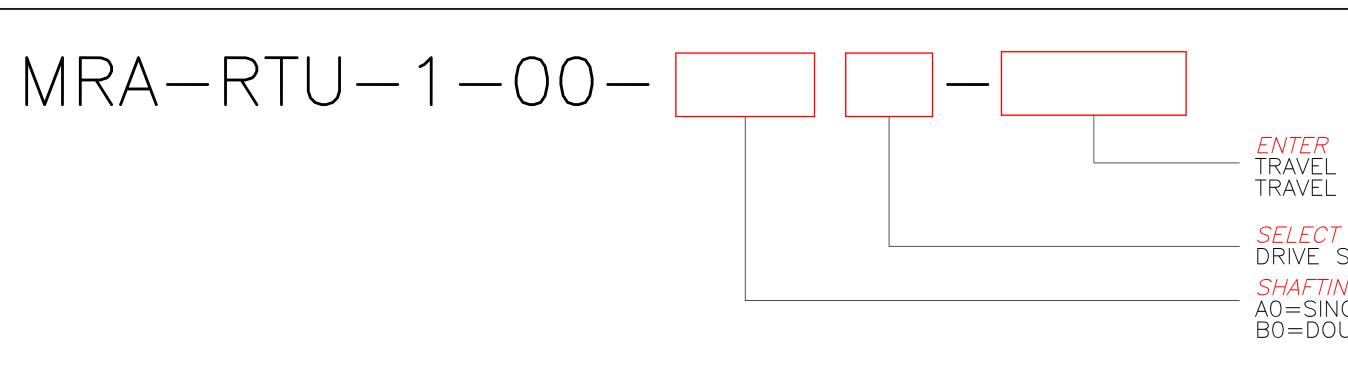




DATE: 11/26/2017 | MATERIAL: DRAWN BY: DATE: DD/MM/YYYY ast saved by: Tim DATE: 12/29/2021 UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED TOLERANCES UNLESS NOTED ANG ± 0.30°. N/A SURFACE FINISH SCALE 1:1 SHEET SIZE C PART NUMBER BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING 3 OF 3 MRA-RTU-0

THIRD ANGLE PROJECTION

00



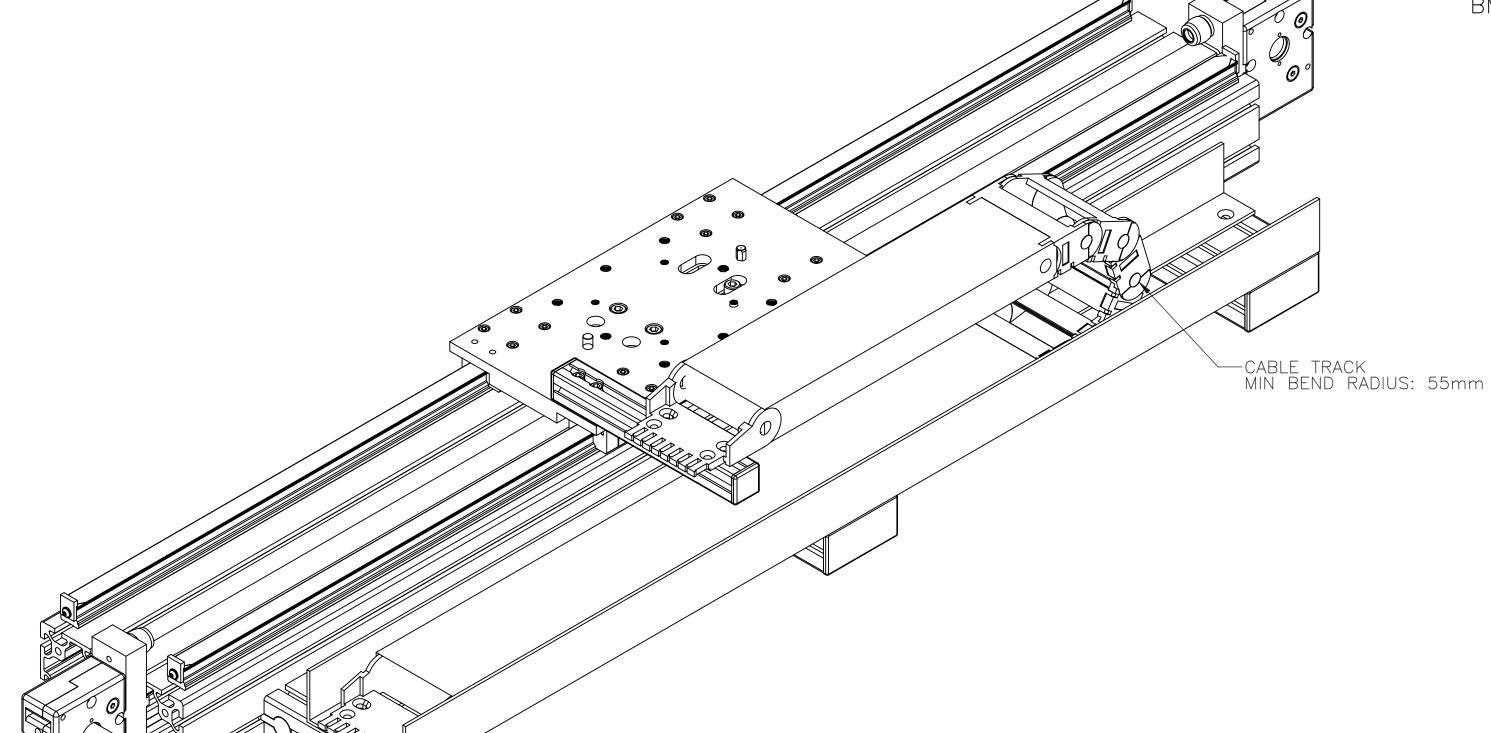
ENTER
TRAVEL IN INCREMENTS OF 25mm
TRAVEL LIMITS: 250mm-5575mm*

DRIVE SHAFT LOCATION, SEE PAGE 2

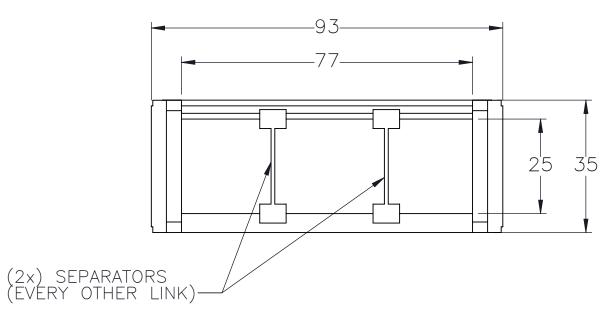
SHAFTING TYPE A0=SINGLE SHAFTED B0=DOUBLE SHAFTED

AM=SINGLE SHAFTED W/ MOTOR MOUNT BM=DOUBLE SHAFTED W/ MOTOR MOUNT

IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON



CABLE TRACK CROSS SECTION

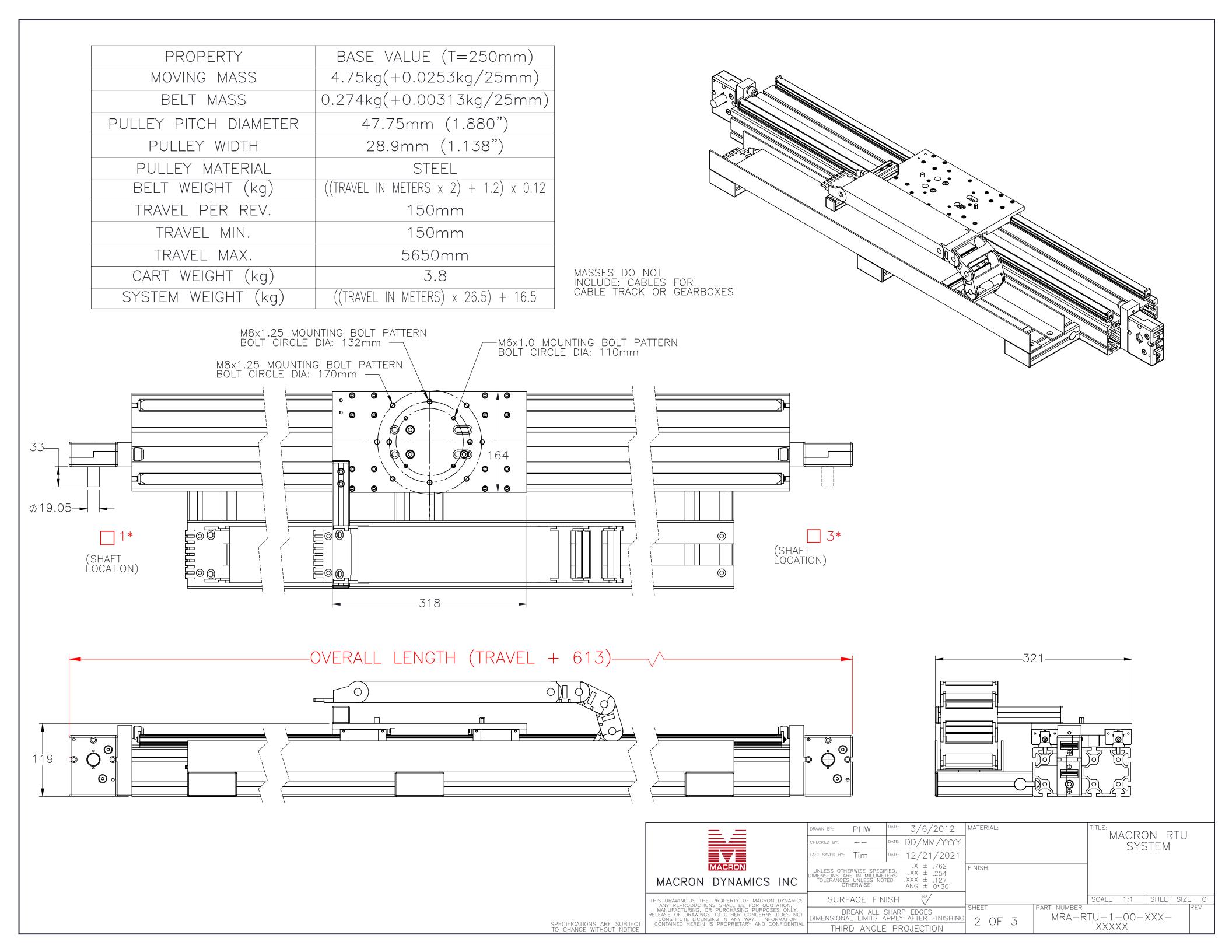


PO:REFERENCE#:

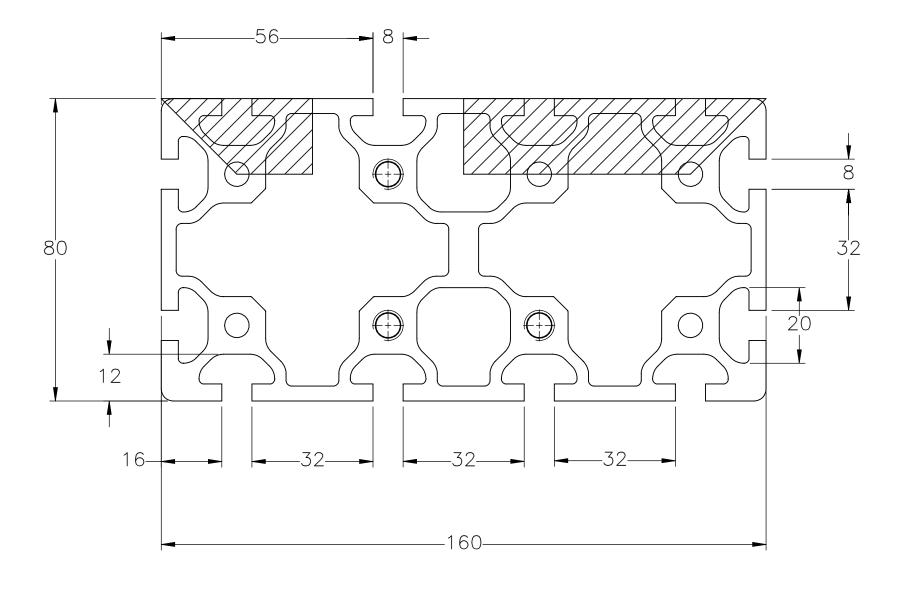
	MACRON	
MACRON	DYNAMICS	

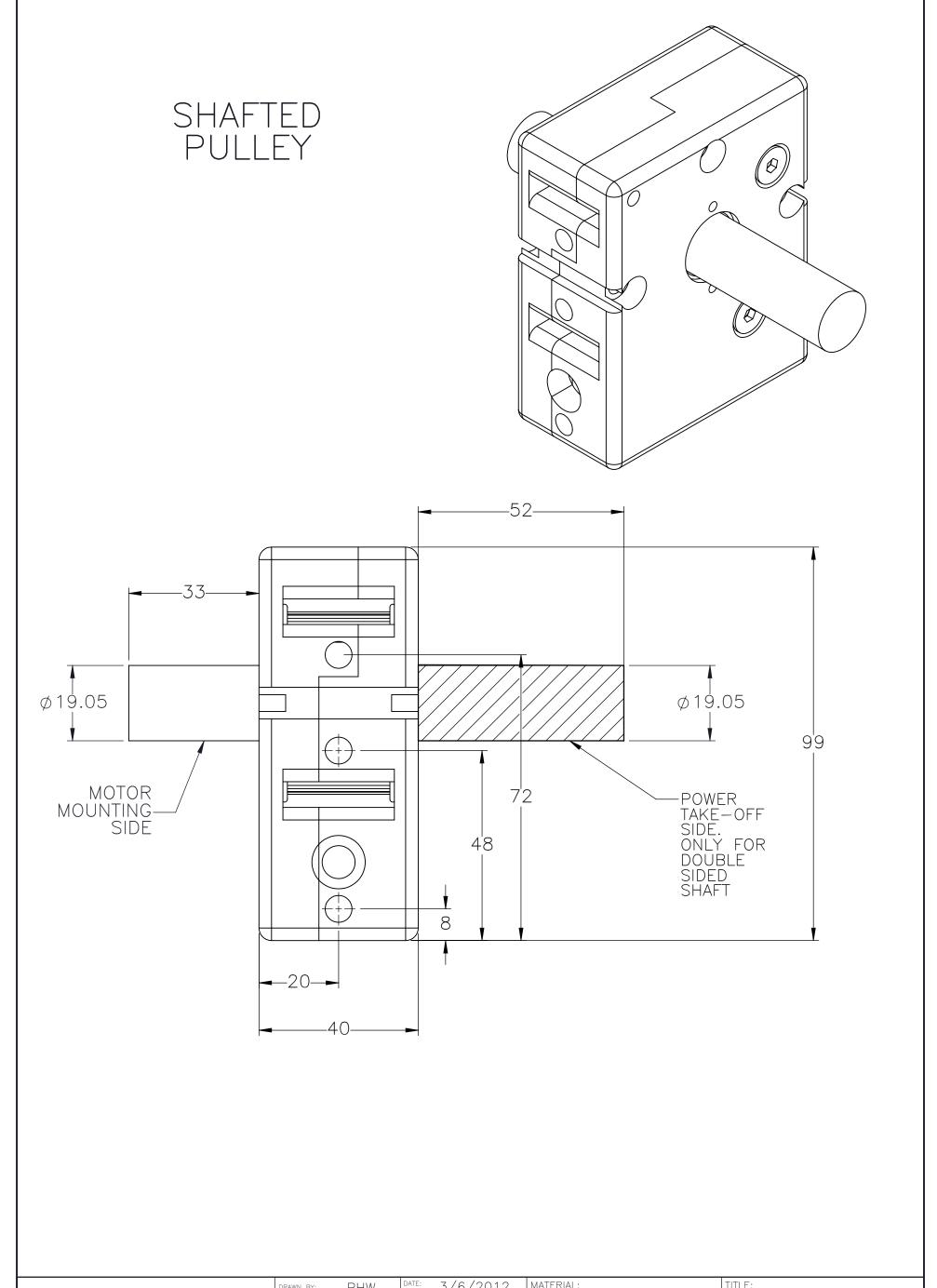
= <i>=</i>	DRAWN BY: TH	DATE: 3/6/
=	CHECKED BY: ——	DATE: DD/MN
	last saved by: Tim	DATE: 12/21
MACRON DYNAMICS INC	UNLESS OTHERWISE SPECII DIMENSIONS ARE IN MILLIME TOLERANCES UNLESS NO OTHERWISE:	TER. CAA +
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION.	SURFACE FIN	ISH 63
MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION	BREAK ALL S DIMENSIONAL LIMITS A	SHARP EDGES APPLY AFTER I
CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	THIRD ANGLE	PROJECTION PROJECTION PRO

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SURFACE FIN	NSH	63/						SCALE	1:1	SHEET		
BREAK ALL DIMENSIONAL LIMITS		P EDGES / AFTER F	FINISHING	SHEE	ΛF	3	PART NUMBER MRA-R	TU-1-	-00-X	(XX-	F	REV
THIRD ANGL	E PR	ROJECTIO	NC		\bigcirc 1	\mathcal{O}		XXXX	XX			



ACTUATOR BODY MOUNTING FEATURES T-NUT SLOTS







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	DATE: 12/21/2021			9 1	0 1 2 1 1 1
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SURFACE FINIS	SH ⁶³ /			SCALE 1:1	SHEET SIZE C
NSIONAL LIMITS AF	PPLY AFTER FINISHING				XXX—
S	IONS ARE IN MILLIMET ERANCES UNLESS NOTI OTHERWISE: SURFACE FINI BREAK ALL S NSIONAL LIMITS AI	SS OTHERWISE SPECIFIED, IONS ARE IN MILLIMETERS. ERANCES UNLESS NOTED OTHERWISE: AND \$\frac{1}{2}\$ ANG \$\frac{1}{2}\$ O'-30' SURFACE FINISH BREAK ALL SHARP EDGES	SS OTHERWISE SPECIFIED, XX ± .254 IONS ARE IN MILIMETERS XXX ± .254 ERANCES UNLESS NOTED XXX ± .127 ANG ± 0.30' SURFACE FINISH BREAK ALL SHARP EDGES NSIONAL LIMITS APPLY AFTER FINISHING 3 OF 3	SS OTHERWISE SPECIFIEDXX ± .254 IN MILLIMETERSXXX ± .254 ERANCES UNLESS NOTED .XXX ± .127 OTHERWISE: .ANG ± 0.30' SURFACE FINISH	SS OTHERWISE SPECIFIED, .XX ± .254 IN MILLIMETERSXXX ± .254 ERANCES UNLESS NOTED .XXX ± .127 ANG ± 0·30' SURFACE FINISH BREAK ALL SHARP EDGES NSIONAL LIMITS APPLY AFTER FINISHING 3 OF 3 WRA-RTU-1-00-

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

	MRA-RT	1-2-	-	$\bigcap\bigcap\bigcap$	
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GEARBOX MODEL
VC-T-090-____
RATIO:

ENTER X-AXIS TRAVEL

-CABLE TRACK MIN BEND RADIUS: 125mm

TRAVEL IN INCREMENTS OF 250mm TRAVEL LIMITS: 250mm-5325mm*

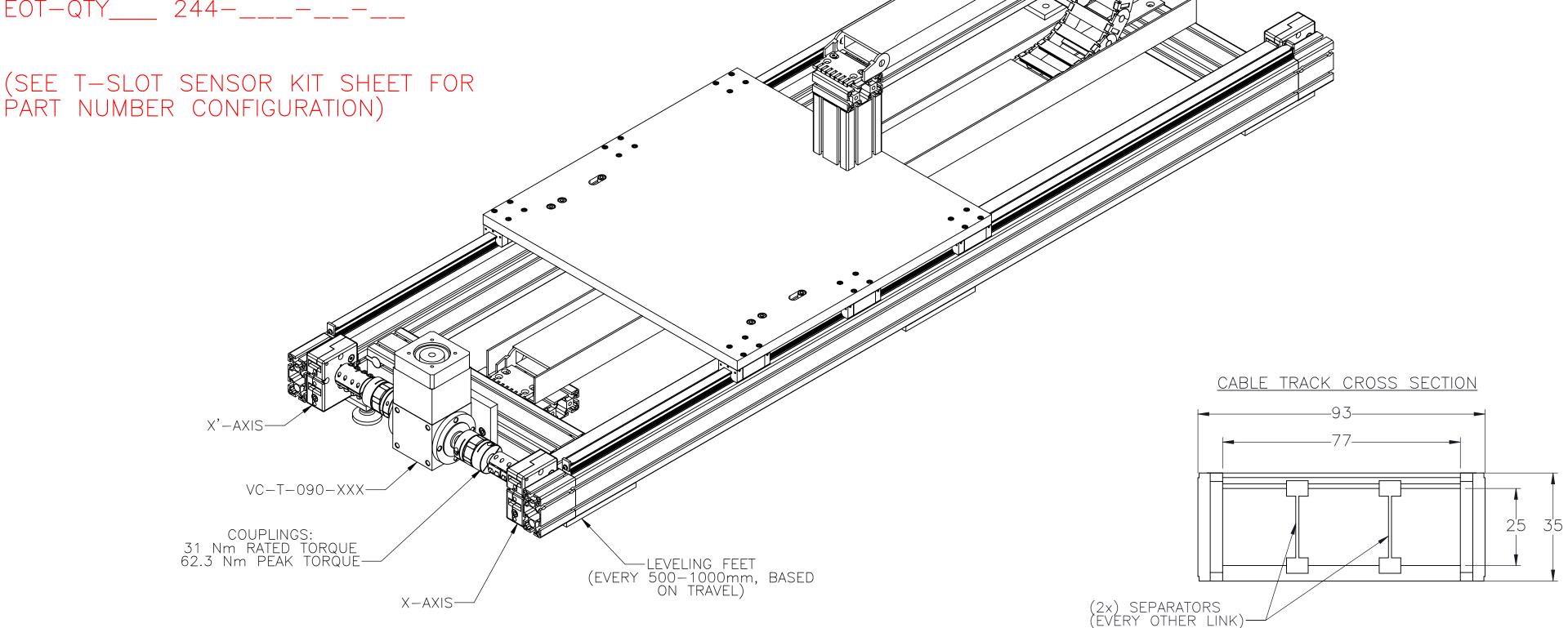
*IF TRAVEL IS
OUTSIDE LIMITS
LISTED, CONTACT
MACRON*

MOTOR INFORMATION

MANUFACTURER:

MODEL:

SENSOR INFORMATION X-AXIS:
HOME-QTY____ 244-____
EOT-QTY___ 244-____



APPROVED: _____

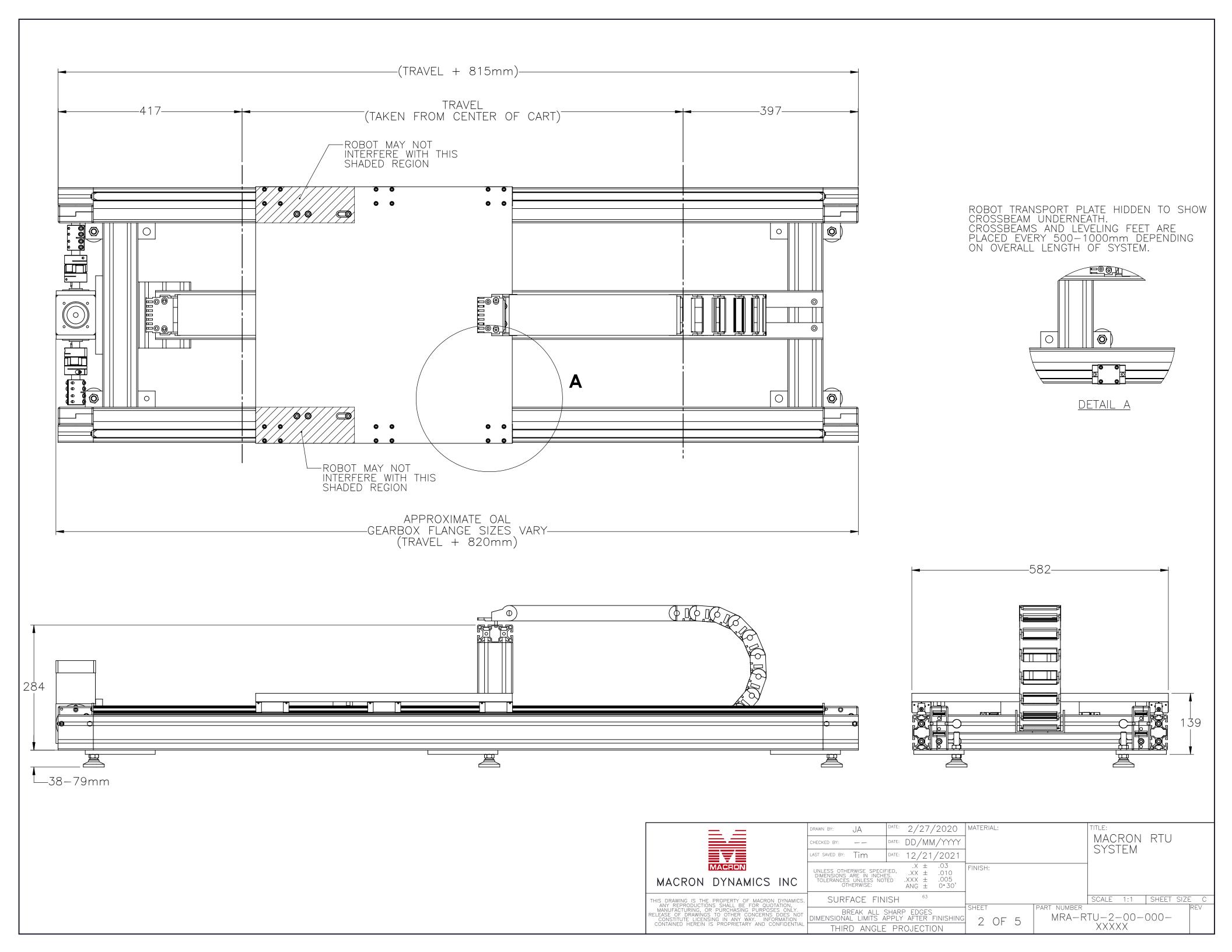
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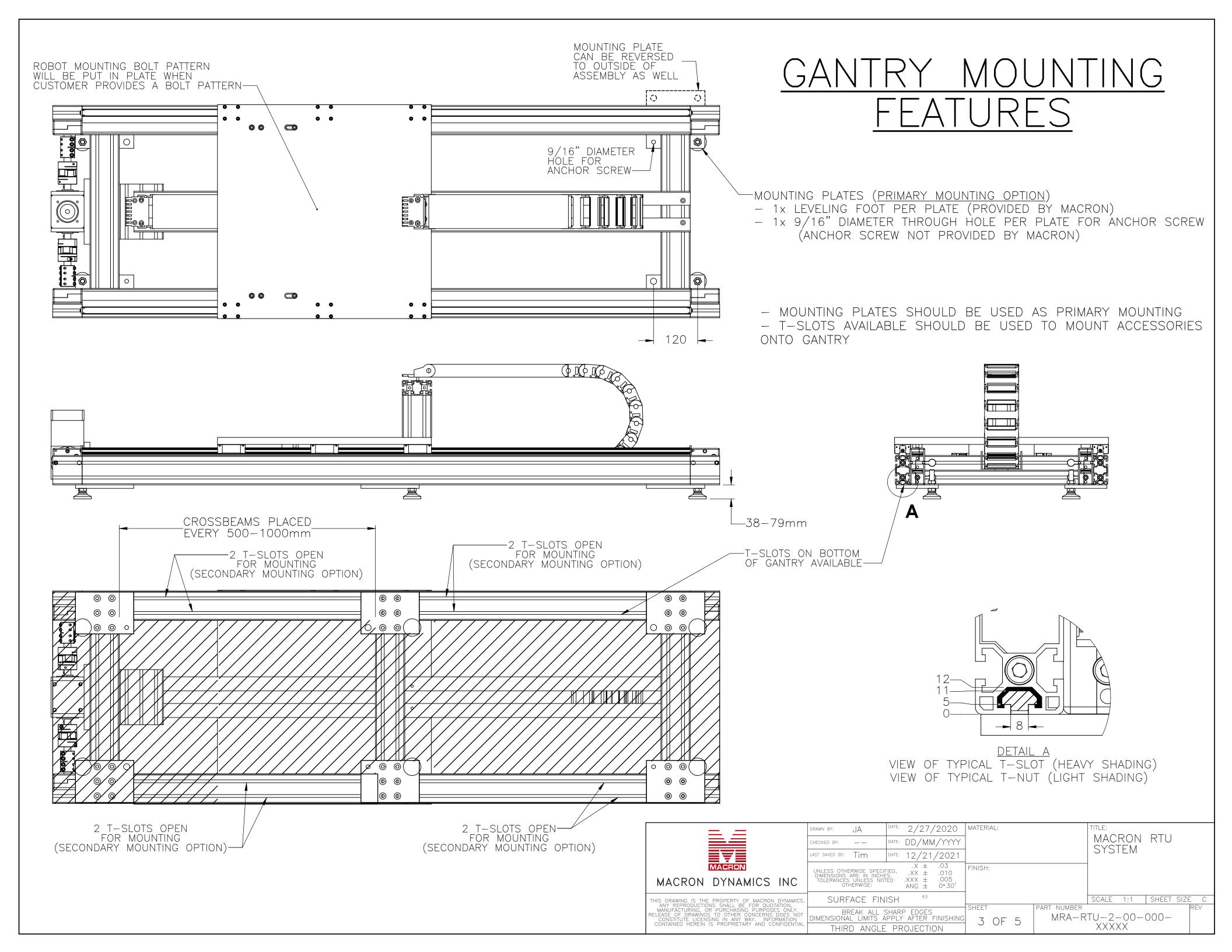
PO:REFERENCE#: _____



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DRAWN BY: JA	DATE: 2/27/2020	MATERIAL:			TITLE:		
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UNLESS OTHERWISE SPEC DIMENSIONS ARE IN MILLIME TOLERANCES UNLESS NO OTHERWISE:	ETERS + .434	FINISH:					
SURFACE FIN	IISH 63/				SCALE 1:1	SHEET SIZE	
DIMENSIONAL LIMITS A	SHARP EDGES APPLY AFTER FINISHING PROJECTION	SHEET 1 OF	5	PART NUMBER MRA-R	TU-2-00-		REV





MOTOR SIZING INFORMATION

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

PROPERTY	BASE VALUE (T=250mm)	
MOVING MASS	54.02kg(+0.0253kg/25mm)	
BELT MASS	0.394kg(+0.0093kg/25mm)	
PULLEY PITCH Ø	47.75mm (1.88")	
PULLEY WIDTH	28.9mm (1.14")	
PULLEY MATERIAL	STEEL	
TRAVEL PER REV	150mm	
CONN SHAFT MATERIAL MASS	0.814kg	

X-AXIS	MOVING MASS (TF		RAVE	$AVEL \times 0.001) + 53.77 = kg$									
BELT MASS			$[(2 \times TRAVEL) \times .000186] + 0.301 = kg$										
_	MACTON DYNAMICS INC	DIMENSION: TOLERANC		DATE: DATE: IED, S. ED	2/27, DD/MN 12/21 .x ± .xx ± .xx ± .xxx ± ANG ±	/YYYY	MATERI FINISH:				TITLE: MACROI SYSTEM		
ANY REPRODUCTION MANUFACTURING, OR RELEASE OF DRAWINGS CONSTITUTE LICENSI	PROPERTY OF MACRON DYNAMICS. NS SHALL BE FOR QUOTATION, R PURCHASING PURPOSES ONLY. TO OTHER CONCERNS DOES NOT ING IN ANY WAY. INFORMATION S PROPRIETARY AND CONFIDENTIAL	DIMENSION	RFACE FINI BREAK ALL S NAL LIMITS AI RD ANGLE	SHARF PPLY	AFTER	FINISHING	SHEET 4	OF		PART NUMBER MRA-R	SCALE 1:1 TU-2-00 XXXXX	SHEET -000	SIZE C REV

SPECIFICATIONS

Sensor Type	Inductive			
Sensor Size	Fits all 8mm			
Selisul Size	wide T-Slots			
Operating Voltage	10-30 VDC			
Voltage Drop Across Conducting Sensor	≤1.8 V at 100 mA			
Number of Conductors (AWG)	3x26 AWG			
Temperature Range	-40°C to 105°C			

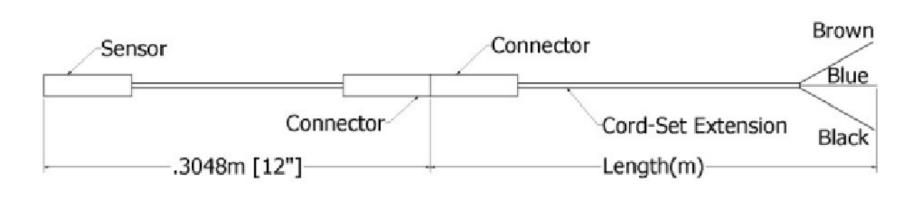
Part Number Configuration

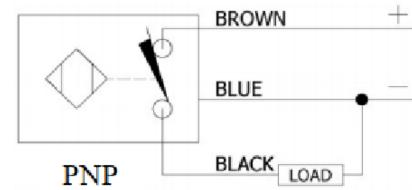
244-_ _ -_ _

PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

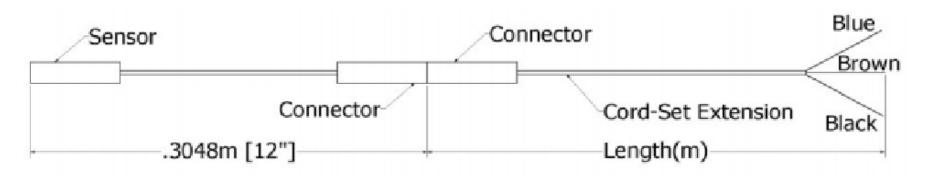
Example: PNP, normally closed, cord-set extension length 6 meters = 244-PNP-NC-06

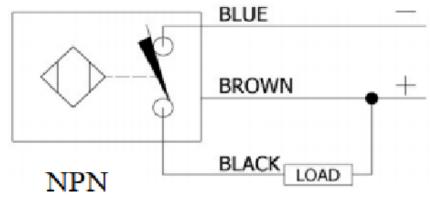
PNP Diagrams

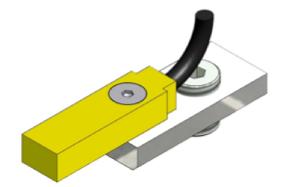




NPN Diagrams



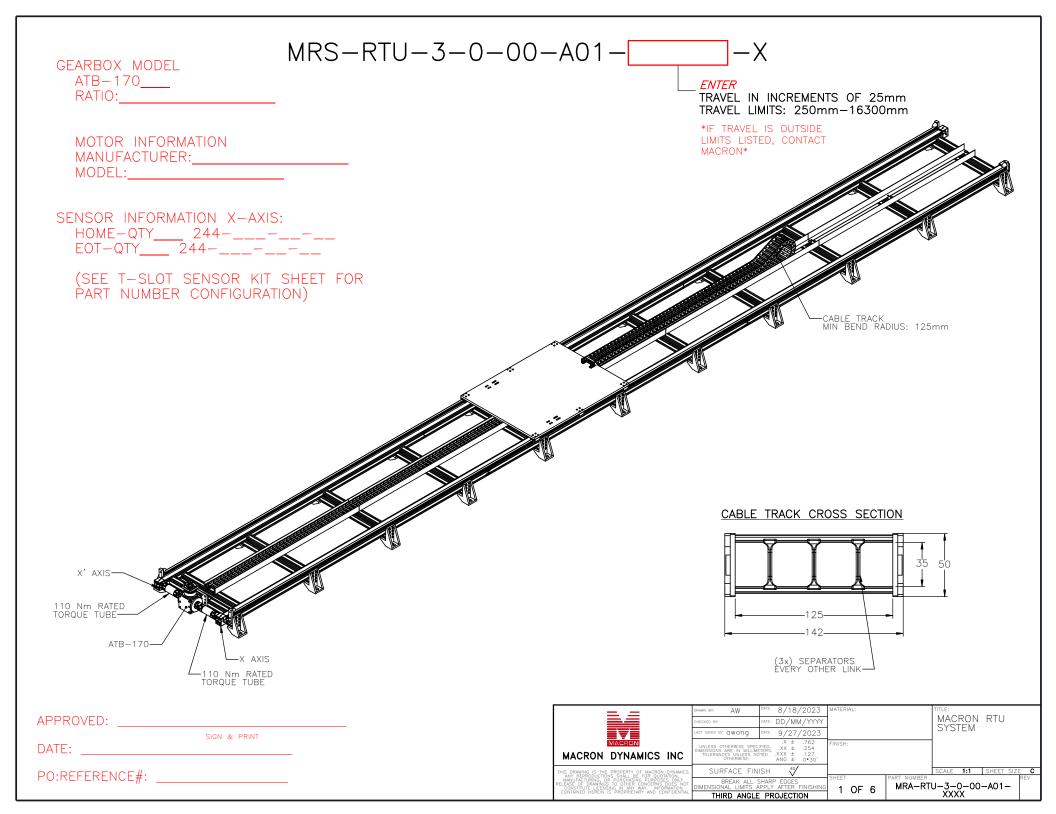




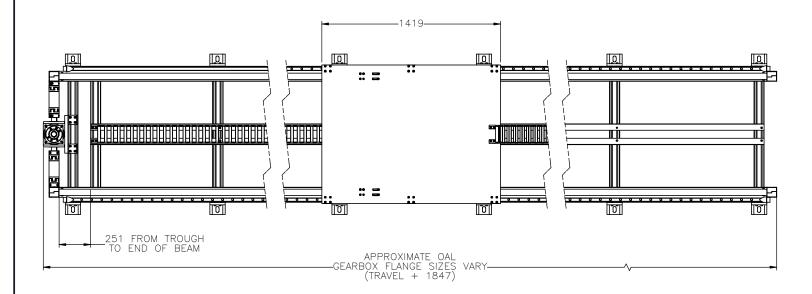


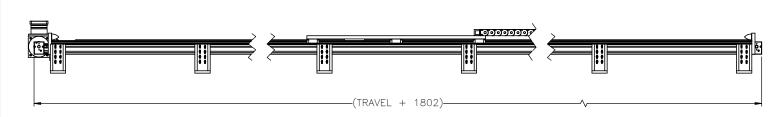
KIT INCLUDES - SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE

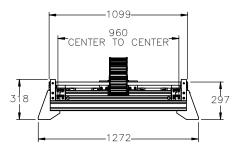
= <i>=</i>	DRAWN BY: JA	DATE: 2/27/2020	MATERIAL:			TITLE:		
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	LAST SAVED BY: JA	DATE: 12/21/2021				KIT		
MACRON	UNLESS OTHERWISE SPEC DIMENSIONS ARE IN MILLIME	CIFIED,	FINISH:					
MACRON DYNAMICS INC	TOLERANCES UNLESS NO OTHERWISE:	DTED						
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY.	SURFACE FIN	ISH 63/	CHEET			SCALE 1:1	SHEET SIZE	С
RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION	BREAK ALL S DIMENSIONAL LIMITS A	SHARP EDGES APPLY AFTER FINISHING	SHEET 5 OF		PART NUMBER	SOR CALL—C		EV
CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	THIRD ANGLE	PROJECTION		0)LIVO	JOIN OMEL C		



GANTRY FOOTPRINT



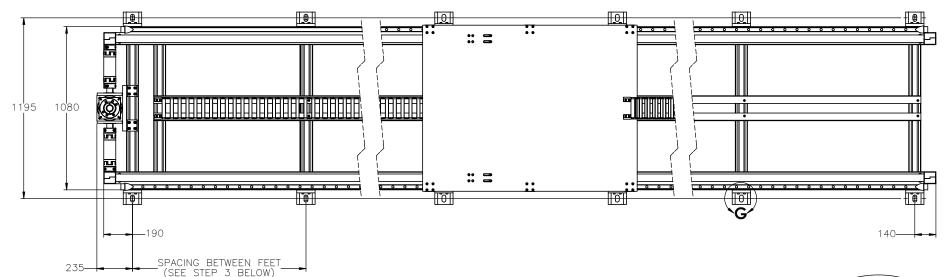




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	LAST SAVED BY: awong	DATE: 9/27/2023			SYSTEM	
MACRON DYNAMICS INC	UNLESS OTHERWISE SPECII DIMENSIONS ARE IN MILLIME TOLERANCES UNLESS NO OTHERWISE:	TERS^^ = .204	FINISH:			
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS.	SURFACE FIN	ISH 63			SCALE 1:1	SHEET SIZE C
ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION		SHARP EDGES APPLY AFTER FINISHING	I I	MRA-RTI	J-3-0-00	-A01-
CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	THIRD ANGLE	PROJECTION	1 2 05 0		XXXX	

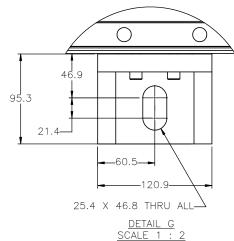
GANTRY MOUNTING FEATURES

TOP VIEW



TO DETERMINE SPACING BETWEEN MOUNTING FEET FRAMES

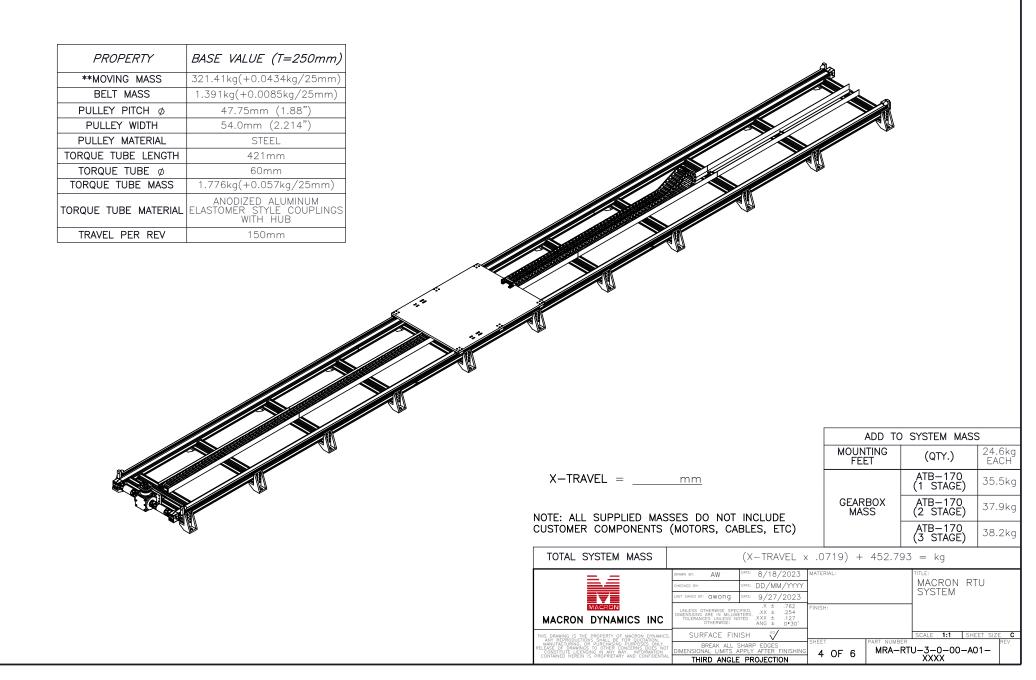
- 1) FIND "TL" (TOTAL LENGTH) = X-TRAVEL + 1802mm
- 2) FIND "NF" (NUMBER OF FEET) = ("TL"-330) / 1000 (ROUND UP) (EXAMPLE: (8000mm + 1802mm - 330) / 1000 = 9.47 = 10 FEET FRAMES
- 3) SPACING BETWEEN FEET = ("TL" 330) / "NF" (EXAMPLE: (9802mm 330) / 10 = 948.5 \approx 949mm)



= =	DRAWN BY: AW	DATE: 8/18/2023	MATERIAL:	TITLE:
	CHECKED BY:	DATE: DD/MM/YYYY		MACRON RTU SYSTEM
	LAST SAVED BY: awong	DATE: 9/27/2023		SISIEM
MACRON DYNAMICS INC	UNLESS OTHERWISE SPEC DIMENSIONS ARE IN MILLIMI TOLERANCES UNLESS NO OTHERWISE:	X ± .762 IFIED, XX ± .254 DTED XXX ± .127 ANG ± .0•30'	FINISH:	
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS.	SURFACE FIN	ISH 53		SCALE 1:1 SHEET SIZE C
ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	DIMENSIONAL LIMITS A	SHARP EDGES PPLY AFTER FINISHING PROJECTION	3 OF 6 PART NUMBER	TU-3-0-00-A01-

MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)



SPECIFICATIONS

Sensor Type	Inductive
S Si	Fits all 8mm
Sensor Size	wide T-Slots
Operating Voltage	10-30 VDC
Voltage Drop Across Conducting Sensor	≤1.8 V at 100 mA
Number of Conductors (AWG)	3x26 AWG
Temperature Range	-40°C to 105°C

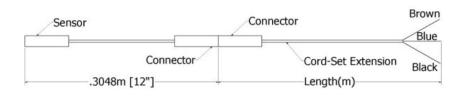
Part Number Configuration

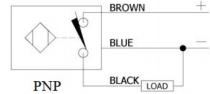
244- - -

PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

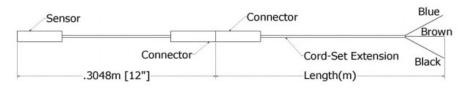
Example: PNP, normally closed, cord-set extension length 6 meters = 244-PNP-NC-06

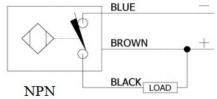
PNP Diagrams





NPN Diagrams









KIT INCLUDES - SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE

= =	DRAWN BY: AW	DATE: 8/18/2023	MATERIAL:		TITLE:	
	CHECKED BY:	DATE: DD/MM/YYYY			T-SLOT	SENSOR
	LAST SAVED BY: awong	DATE: 9/27/2023			KIT	
MACRON DYNAMICS INC	UNLESS OTHERWISE SPEC DIMENSIONS ARE IN MILLIME TOLERANCES UNLESS NO OTHERWISE:	X ± 762 EFERS, XX ± 254 ETERS XXX ± 127 ANG ± 0-30'	FINISH:			
HIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS.	SURFACE FIN	ISH 63/			SCALE 1:1	SHEET SIZE C
ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. BLEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL	DIMENSIONAL LIMITS A	SHARP EDGES PPLY AFTER FINISHING PROJECTION	5 OF 6	PART NUMBER		REV
	ITTIND ANGLE	FROOLCTION				