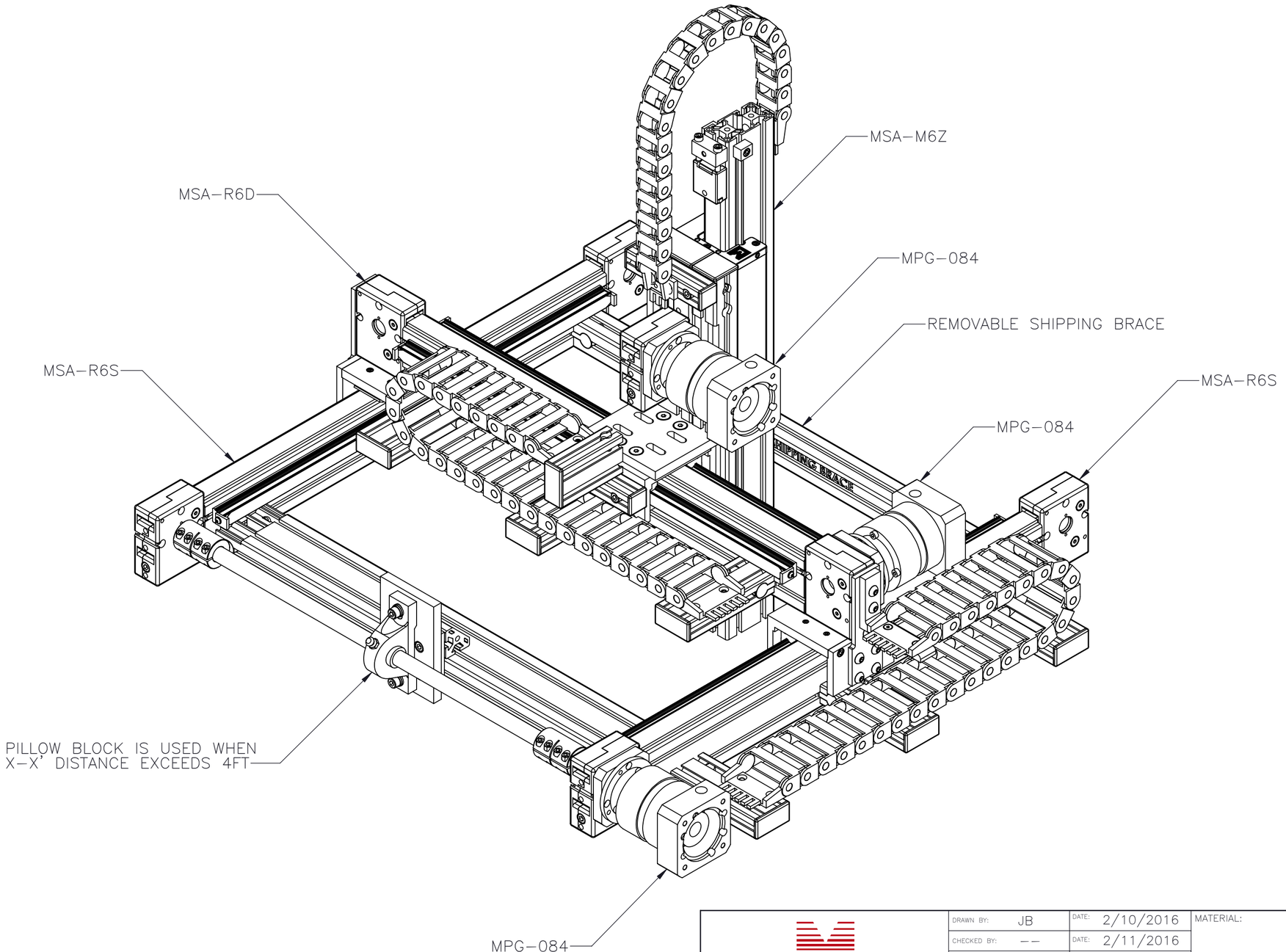
MCS–R6S– [ ] – [ ] –B [ ]

ENTER Z–AXIS TRAVEL
TRAVEL IN INCREMENTS OF 25mm
TRAVEL LIMITS: 150mm–1000mm

ENTER Y–AXIS TRAVEL
TRAVEL IN INCREMENTS OF 25mm
TRAVEL LIMITS: 150mm–2000mm

ENTER X–AXIS TRAVEL
TRAVEL IN INCREMENTS OF 25mm
TRAVEL LIMITS: 150mm–5575mm



MACRON DYNAMICS INC

DRAWN BY: JB	DATE: 2/10/2016	
CHECKED BY: – –	DATE: 2/11/2016	
LAST SAVED BY: JBlutinger	DATE: 2/22/2016	

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:
.X ± .762
.XX ± .254
.XXX ± .127
ANG ± 0°30'

SURFACE FINISH 63

BREAK ALL SHARP EDGES
DIMENSIONAL LIMITS APPLY AFTER FINISHING

THIRD ANGLE PROJECTION

MATERIAL:

FINISH:

TITLE: MACRON R6S XYZ (BELT Z) GANTRY

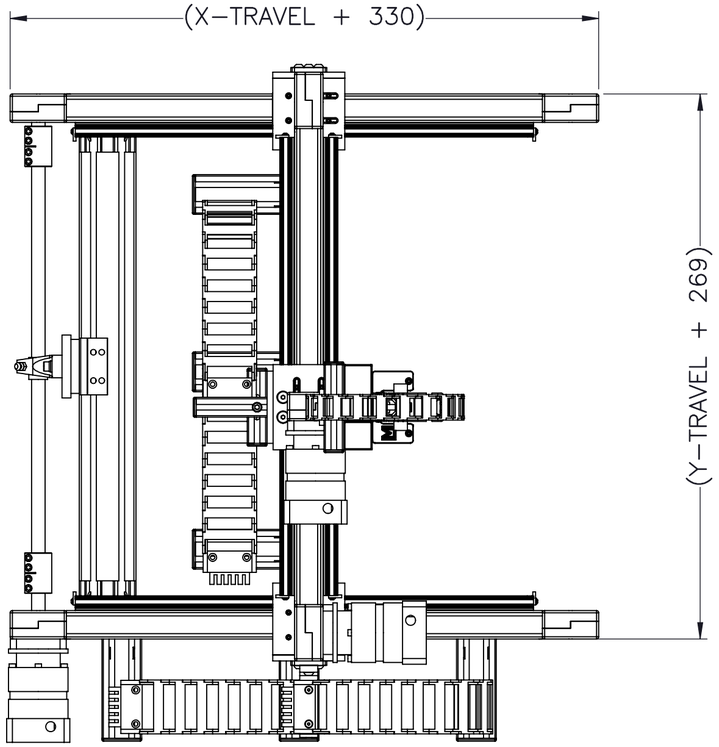
SCALE 1:1 | SHEET SIZE C

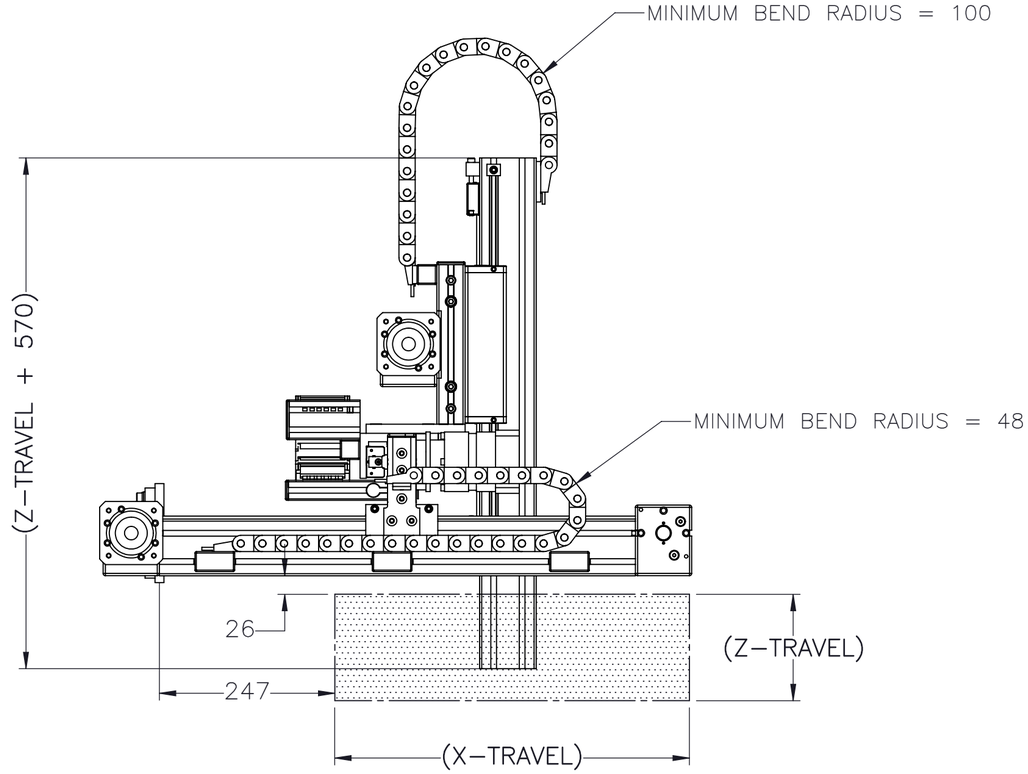
SHEET 1 OF 4

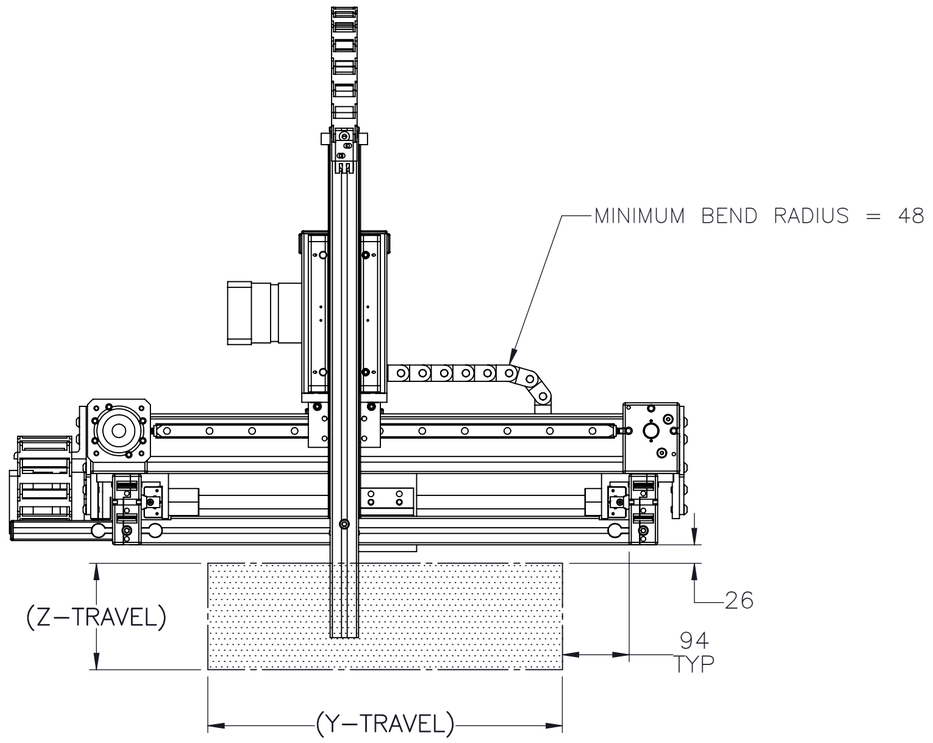
PART NUMBER MCS–R6S–X–X–BX

REV 00

GANTRY FOOTPRINT







MACRON DYNAMICS INC

DRAWN BY: JB	DATE: 2/10/2016	
CHECKED BY: – –	DATE: 2/11/2016	
LAST SAVED BY: JBlutinger	DATE: 2/22/2016	

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .03, .XX ± .010, .XXX ± .005, ANG ± 0°30'

SURFACE FINISH 63

BREAK ALL SHARP EDGES
DIMENSIONAL LIMITS APPLY AFTER FINISHING

THIRD ANGLE PROJECTION

MATERIAL:

FINISH:

TITLE: MACRON R6S XYZ (BELT Z) GANTRY

SCALE 1:1 | SHEET SIZE C

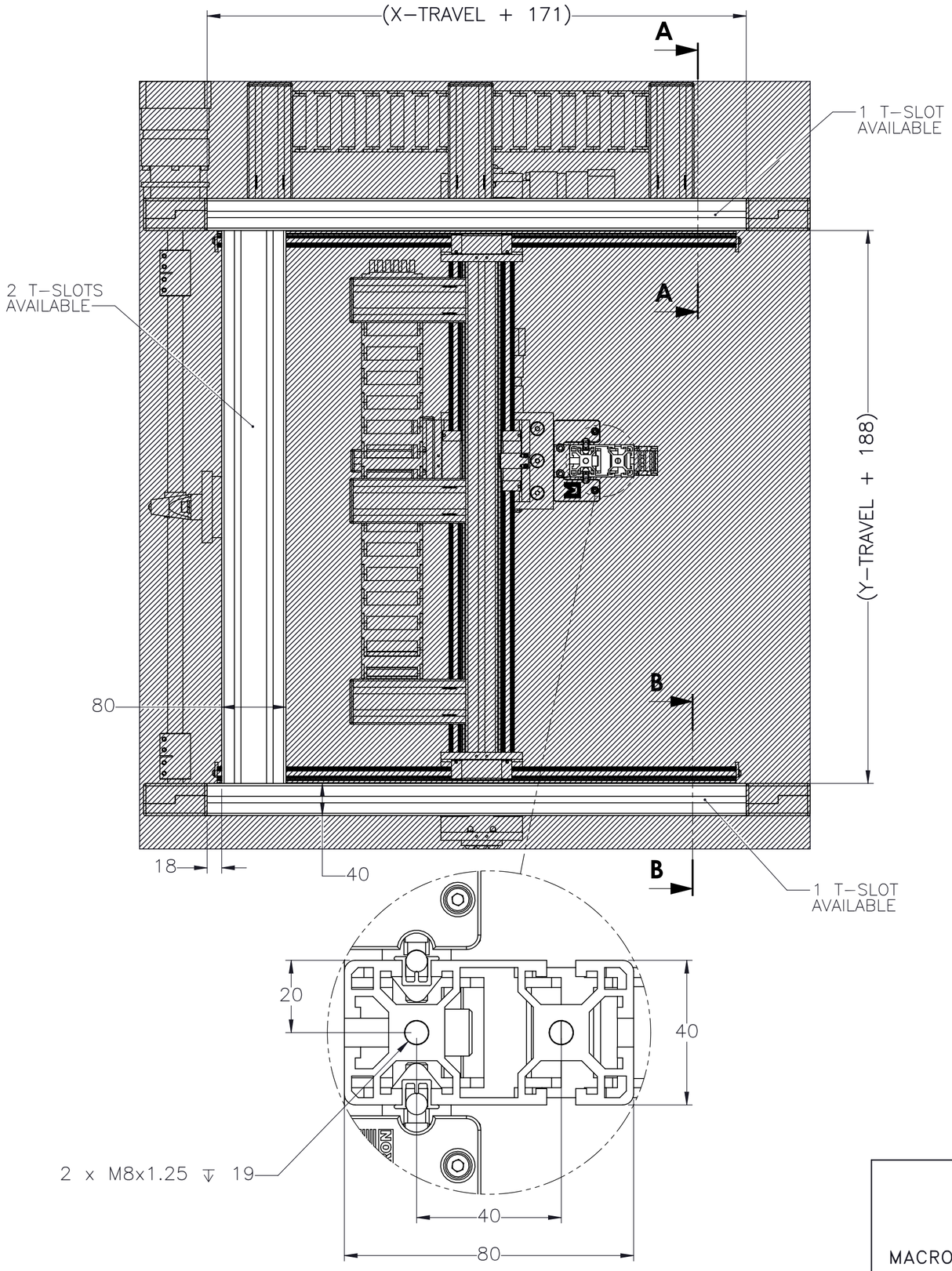
SHEET 2 OF 4

PART NUMBER MCS–R6S–X–X–BX

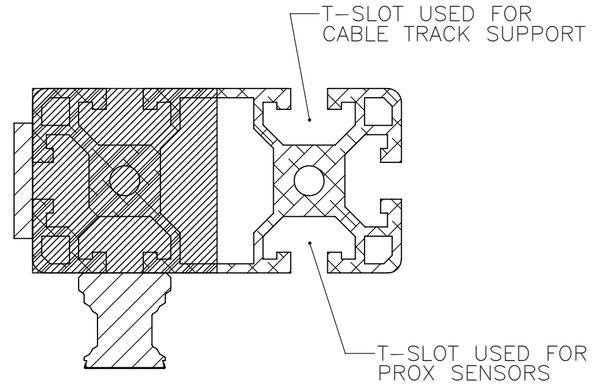
REV 00

GANTRY MOUNTING FEATURES

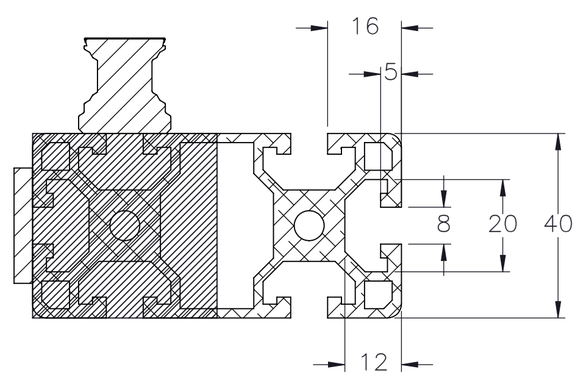
BOTTOM VIEW



DETAIL C



SECTION A-A



SECTION B-B

MACRON DYNAMICS INC

DRAWN BY: JB	DATE: 2/10/2016	MATERIAL:
CHECKED BY: --	DATE: 2/11/2016	
LAST SAVED BY: JBlutinger	DATE: 2/22/2016	FINISH:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762, .XX ± .254, .XXX ± .127, .ANG ± 0°30'

SURFACE FINISH 63

BREAK ALL SHARP EDGES
DIMENSIONAL LIMITS APPLY AFTER FINISHING
THIRD ANGLE PROJECTION

TITLE: MACRON R6S XYZ (BELT Z) GANTRY

SCALE 1:1 | SHEET SIZE C

SHEET	PART NUMBER	REV
3 OF 4	MCS-R6S-X-X-BX	00

MOTOR SIZING INFORMATION

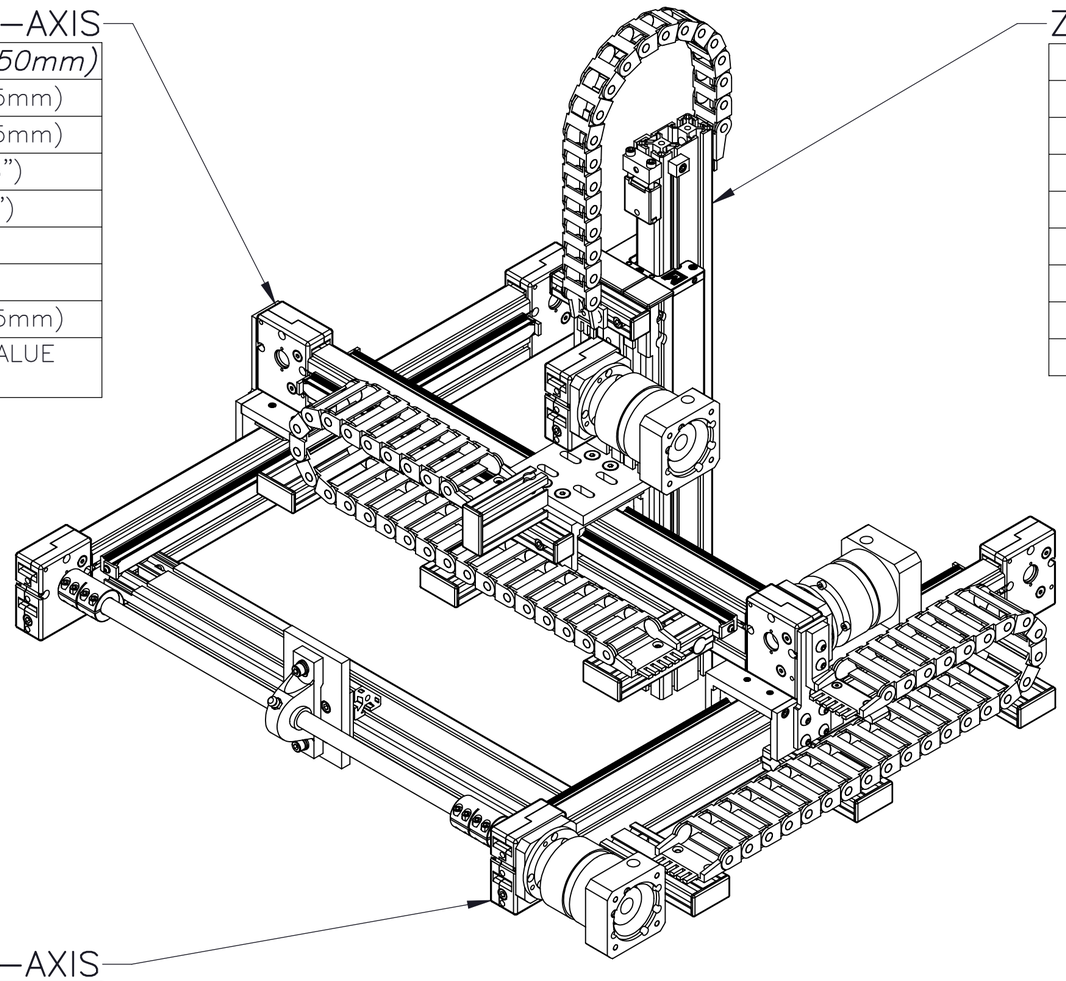
(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

Y–AXIS

PROPERTY	*BASE VALUE (T=150mm)*
**MOVING MASS	2.94kg(+0.02kg/25mm)
BELT MASS	0.28kg(+0.02kg/25mm)
PULLEY PITCH ∅	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm
***SYSTEM MASS	6.56kg(+0.29kg/25mm)
**ADD SYSTEM WEIGHT OF Z–AXIS TO VALUE ***INCLUDES MPG–084 (2.3kg)	

Z–AXIS

PROPERTY	*BASE VALUE (T=150mm)*
MOVING MASS	3.54kg(+0.11kg/25mm)
BELT MASS	0.19kg(+0.01kg/25mm)
PULLEY PITCH ∅	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm
*SYSTEM MASS	10.24kg(+0.12kg/25mm)
*INCLUDES MPG–084 (2.3kg)	



X–AXIS

PROPERTY	*BASE VALUE (T=150mm)*
****MOVING MASS	4.17kg(+0.02kg/25mm)
BELT MASS	0.56kg(+0.03kg/25mm)
PULLEY PITCH ∅	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
CONN SHAFT LENGTH	Y–TRAVEL + 100mm
CONN SHAFT ∅	19.05mm (.75")
CONN SHAFT MASS	0.55kg(+0.06kg/25mm)
CONN SHAFT MATERIAL	STEEL
TRAVEL PER REV	150mm
****ADD SYSTEM MASS OF Y & Z–AXIS TO VALUE	

X–TRAVEL = _____ mm

Y–TRAVEL = _____ mm

Z–TRAVEL = _____ mm

Z–AXIS	MOVING MASS	(Z–TRAVEL x .0046) + 2.85 = kg
	SYSTEM MASS {1}	(Z–TRAVEL x .0049) + 9.52 = kg
	BELT MASS	(Z–TRAVEL x .0003) + 0.15 = kg
Y–AXIS	MOVING MASS	(Y–TRAVEL x .0008) + 2.82 + {1} = kg
	SYSTEM MASS {2}	(Y–TRAVEL x .0114) + 4.85 = kg
	BELT MASS	(Y–TRAVEL x .0006) + 0.19 = kg
X–AXIS	MOVING MASS	(X–TRAVEL x .0008) + 4.05 + {1} + {2} + {3} = kg
	BELT MASS	(X–TRAVEL x .0012) + 0.38 = kg
	CONN SHAFT MASS {3}	(Y–TRAVEL x .0022) + 0.22 = kg

MACRON DYNAMICS INC

DRAWN BY: JB	DATE: 2/10/2016	MATERIAL:
CHECKED BY: ––	DATE: 2/11/2016	FINISH:
LAST SAVED BY: JBlutinger	DATE: 2/29/2016	TITLE: MACRON R6S XYZ (BELT Z) GANTRY

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762, .XX ± .254, .XXX ± .127, ANG ± 0°30'

SURFACE FINISH 63

BREAK ALL SHARP EDGES
DIMENSIONAL LIMITS APPLY AFTER FINISHING

THIRD ANGLE PROJECTION

SCALE 1:1 | SHEET SIZE C

SHEET	PART NUMBER	REV
4 OF 4	MCS–R6S–X–X–BX	00