

BODYBUILDER™ TOOLING EXAMPLES



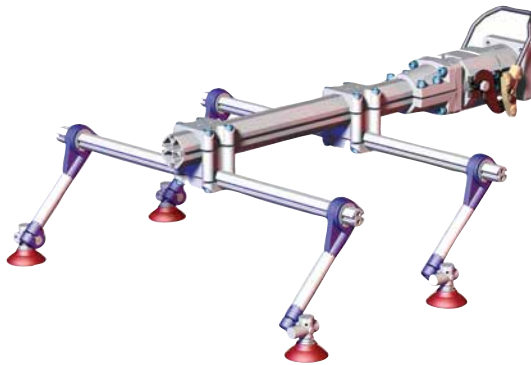
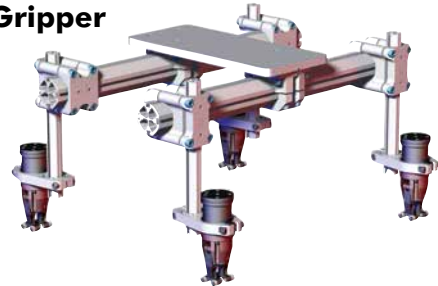
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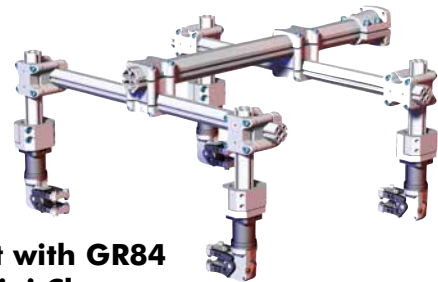


Mid Mount with GR84 Series Mini-Clamps

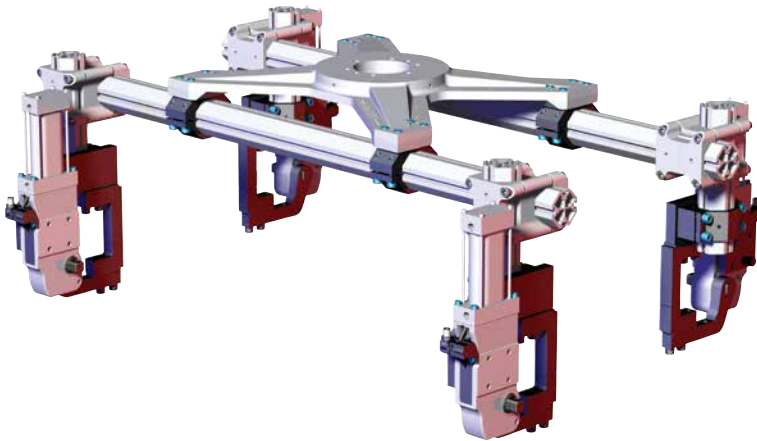
Mid Mount with GR1 Series Gripper



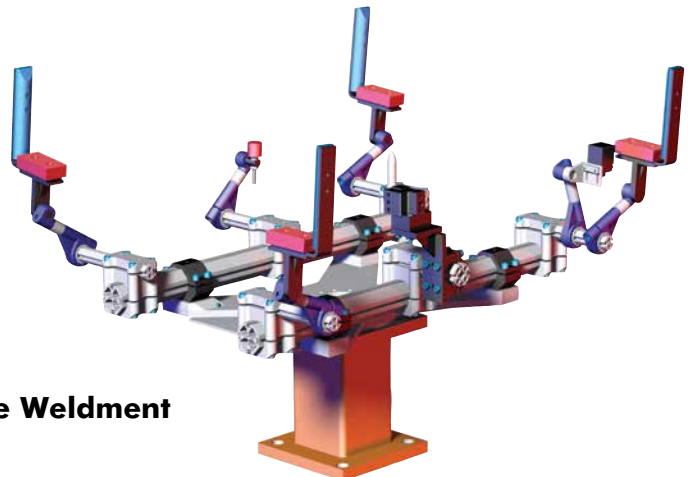
End Mount with Venturi Cup Mounts and Vacuum Cups



End Mount with GR84 Series Mini Clamp



Mid Mount with 82M50 Enclosed Power Clamps



Mid Mounted Part Nest with CPI-HTW Hold Table Weldment and Nest Pad guides

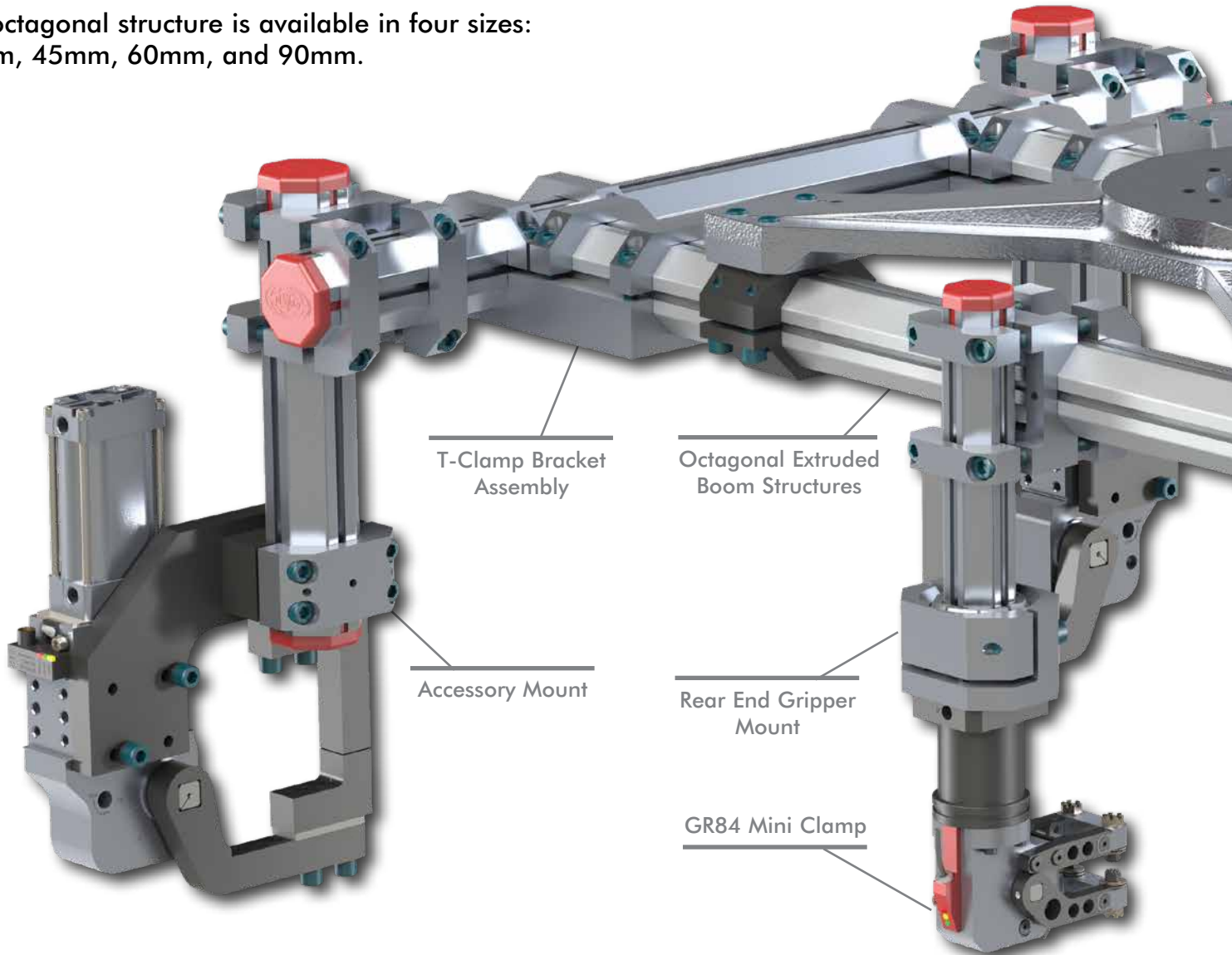
BODYBUILDER™ END EFFECTOR SYSTEM



Product Overview

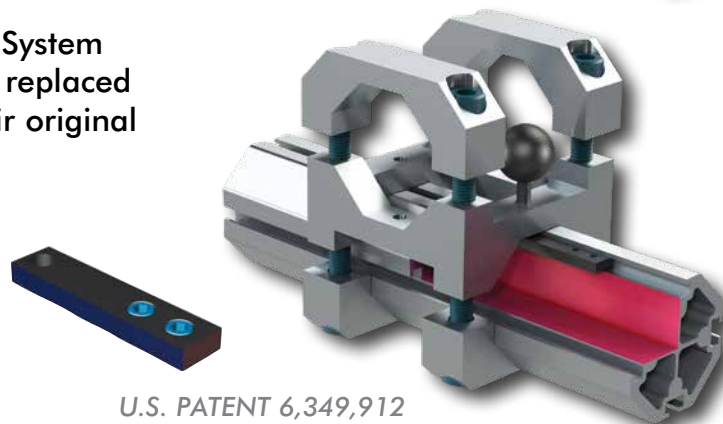
BodyBuilder™ is designed to maximize productivity, both before and after installation. The flexibility of the system allows modifications to the end effector in minutes, greatly reducing start up time to launch.

The octagonal structure is available in four sizes: 30mm, 45mm, 60mm, and 90mm.



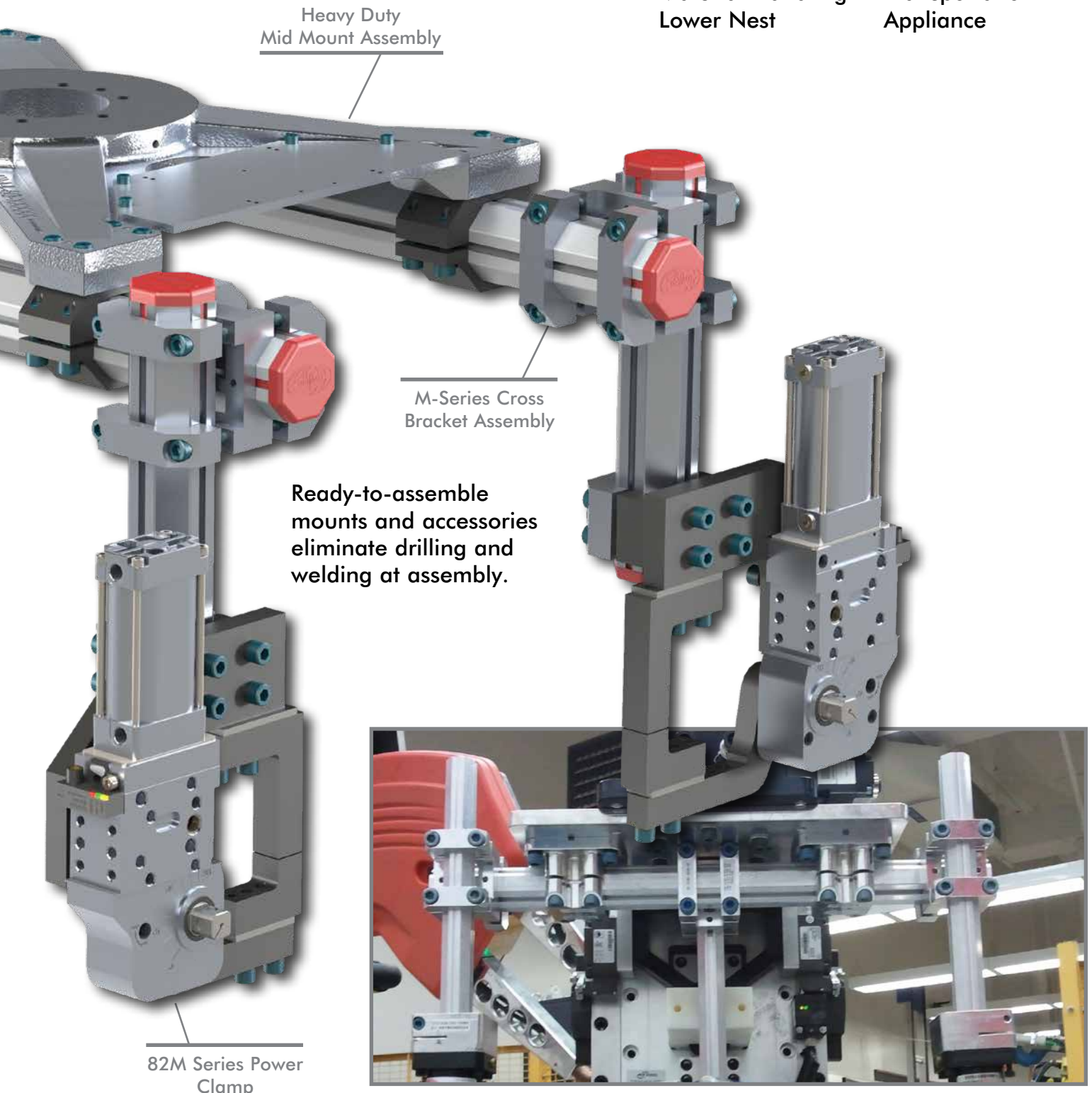
The patented BodyBuilder™ Alignment System allows the modular components to be replaced individually and easily returned to their original positions.

Alignment nut(s) are included with every Bodybuilder™ modular component, utilizing the patented alignment system.



Most commonly used in:

Applications	Markets
Robot Welding	Industrial
Pick and Place	Automotive
Material Handling	Transportation
Lower Nest	Appliance



Heavy Duty
Mid Mount Assembly

M-Series Cross
Bracket Assembly

Ready-to-assemble
mounts and accessories
eliminate drilling and
welding at assembly.

82M Series Power
Clamp

BODYBUILDER™ BOOM STRUCTURE

BodyBuilder™ Octagonal Tooling | Dimensions

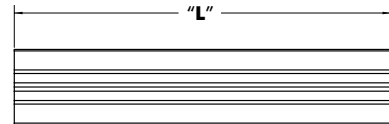
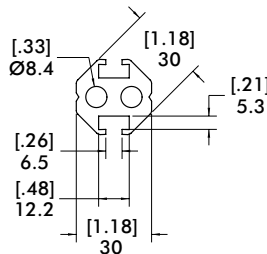
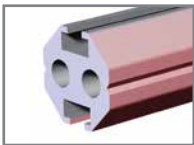


30, 45, 60, and 90mm Boom Lengths and Ordering Numbers

BODYBUILDER™ OCTAGONAL ALUMINUM BOOM LENGTHS & ORDER NUMBERS				
(L) Length	B - 30 - (L) - 0	B - 45 - (L) - 0	B - 60 - (L) - 0	B - 90 - (L) - 0
150 mm	B - 30 - 150 - 0	B - 45 - 150 - 0	B - 60 - 150 - 0	N/A
200 mm	B - 30 - 200 - 0	B - 45 - 200 - 0	B - 60 - 200 - 0	N/A
250 mm	B - 30 - 250 - 0	B - 45 - 250 - 0	B - 60 - 250 - 0	N/A
300 mm	B - 30 - 300 - 0	B - 45 - 300 - 0	B - 60 - 300 - 0	B - 90 - 300 - 0
400 mm	B - 30 - 400 - 0	B - 45 - 400 - 0	B - 60 - 400 - 0	B - 90 - 400 - 0
500 mm	B - 30 - 500 - 0	B - 45 - 500 - 0	B - 60 - 500 - 0	B - 90 - 500 - 0
600 mm	B - 30 - 600 - 0	B - 45 - 600 - 0	B - 60 - 600 - 0	B - 90 - 600 - 0
700 mm	B - 30 - 700 - 0	B - 45 - 700 - 0	B - 60 - 700 - 0	B - 90 - 700 - 0
750 mm	B - 30 - 750 - 0	B - 45 - 750 - 0	B - 60 - 750 - 0	B - 90 - 750 - 0
800 mm	B - 30 - 800 - 0	B - 45 - 800 - 0	B - 60 - 800 - 0	B - 90 - 800 - 0
900 mm	B - 30 - 900 - 0	B - 45 - 900 - 0	B - 60 - 900 - 0	B - 90 - 900 - 0
1200 mm	B - 30 - 1200 - 0	B - 45 - 1200 - 0	B - 60 - 1200 - 0	B - 90 - 1200 - 0
1500 mm	B - 30 - 1500 - 0	B - 45 - 1500 - 0	B - 60 - 1500 - 0	B - 90 - 1500 - 0
1800 mm	B - 30 - 1800 - 0	B - 45 - 1800 - 0	B - 60 - 1800 - 0	B - 90 - 1800 - 0
2100 mm	B - 30 - 2100 - 0	B - 45 - 2100 - 0	B - 60 - 2100 - 0	B - 90 - 2100 - 0
2400 mm	B - 30 - 2400 - 0	B - 45 - 2400 - 0	B - 60 - 2400 - 0	B - 90 - 2400 - 0
2700 mm	B - 30 - 2700 - 0	B - 45 - 2700 - 0	B - 60 - 2700 - 0	B - 90 - 2700 - 0
3000 mm	B - 30 - 3000 - 0	B - 45 - 3000 - 0	B - 60 - 3000 - 0	B - 90 - 3000 - 0

30mm Boom Profile Dimensions and Specifications

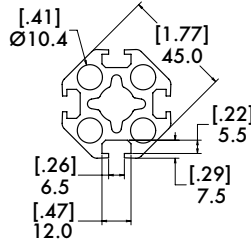
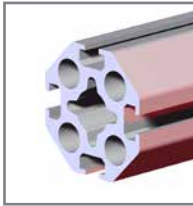
BodyBuilder™ 30mm Boom



Model Number	Weight
B - 30 - (L) - 0	1.4 kg/m [0.9 lb/ft]

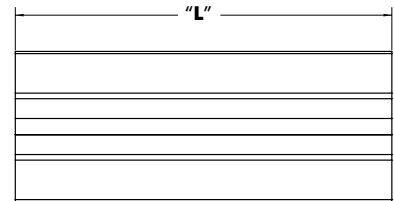
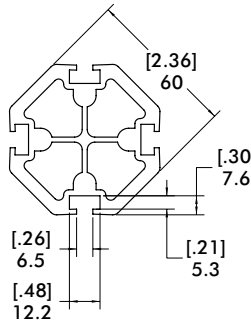
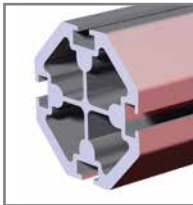
45, 60, and 90mm Boom Profile Dimensions and Specifications

BodyBuilder™ 45mm Boom



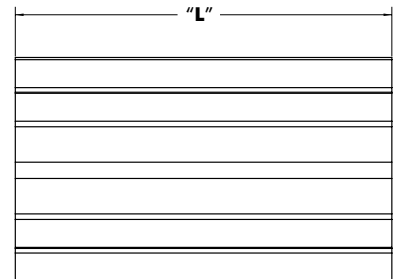
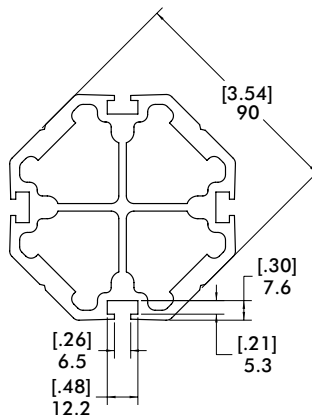
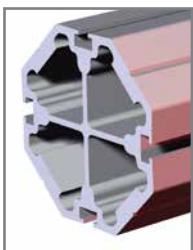
Model Number	Weight
B - 45 - (L) - 0	2.0 kg/m [1.4 lb/ft]

BodyBuilder™ 60mm Boom



Model Number	Weight
B - 60 - (L) - 0	3.3 kg/m [2.2 lb/ft]

BodyBuilder™ 90mm Boom



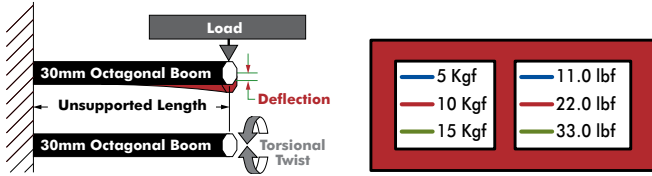
Model Number	Weight
B - 90 - (L) - 0	6.5 kg/m [4.4 lb/ft]

BODYBUILDER™ BOOM STRUCTURE

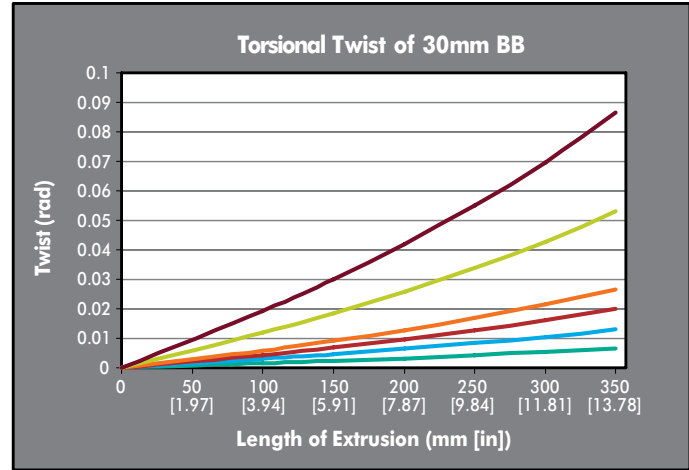
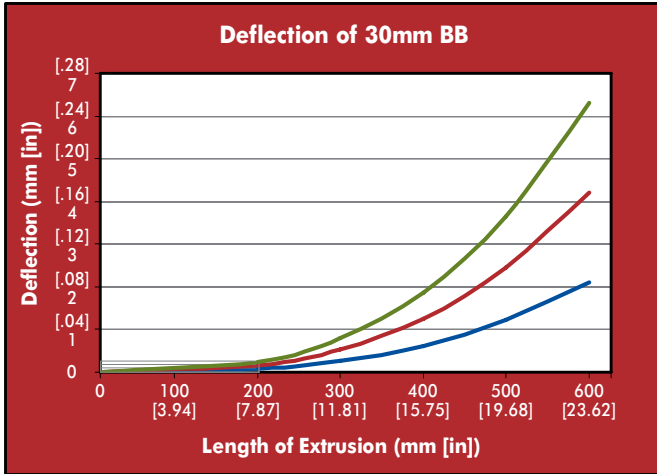
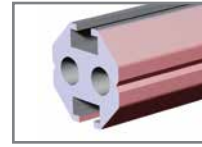
BodyBuilder™ Octagonal Tooling | Technical Specifications



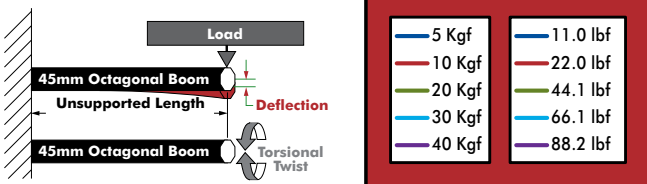
30mm Boom Deflection and Torsion Charts



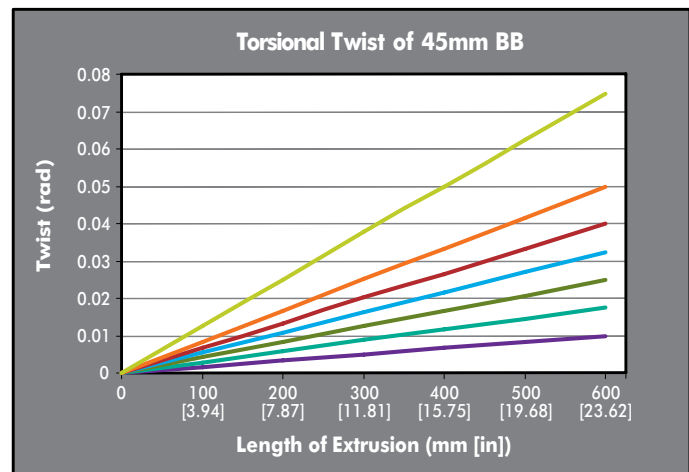
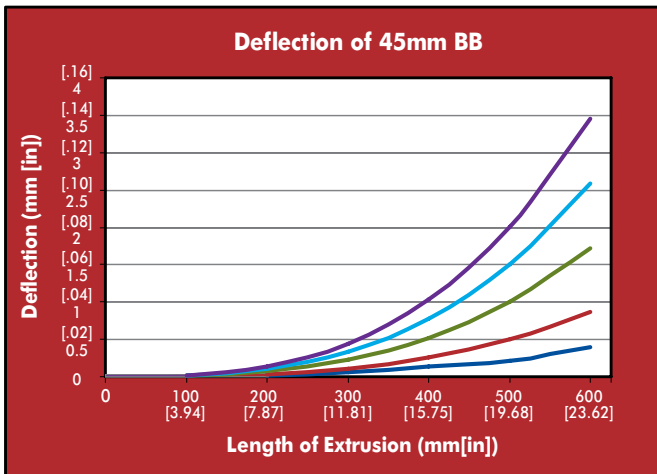
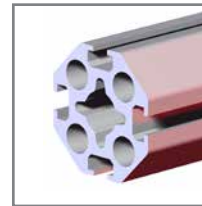
100 Kgf-cm	86.8 lbf-in
200 Kgf-cm	173.6 lbf-in
300 Kgf-cm	260.4 lbf-in
400 Kgf-cm	347.2 lbf-in
800 Kgf-cm	694.4 lbf-in
1300 Kgf-cm	1128.4 lbf-in



45mm Boom Deflection and Torsion Charts

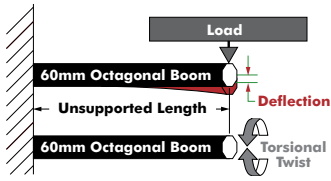


400 Kgf-cm	347.2 lbf-in
700 Kgf-cm	607.6 lbf-in
1000 Kgf-cm	867.0 lbf-in
1300 Kgf-cm	1128.4 lbf-in
1600 Kgf-cm	1388.7 lbf-in
2000 Kgf-cm	1735.9 lbf-in
3000 Kgf-cm	2603.9 lbf-in



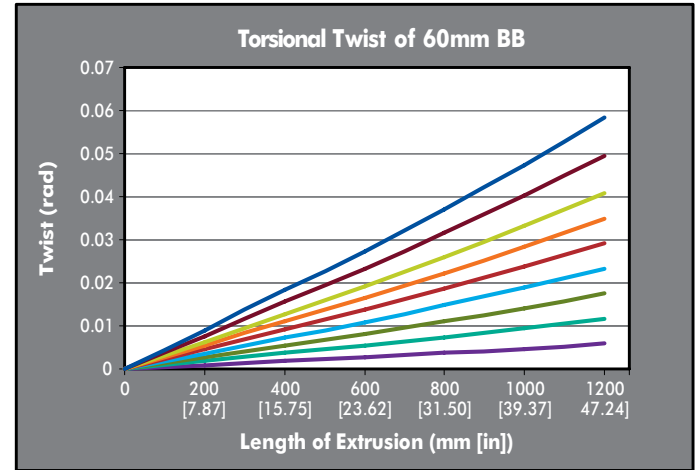
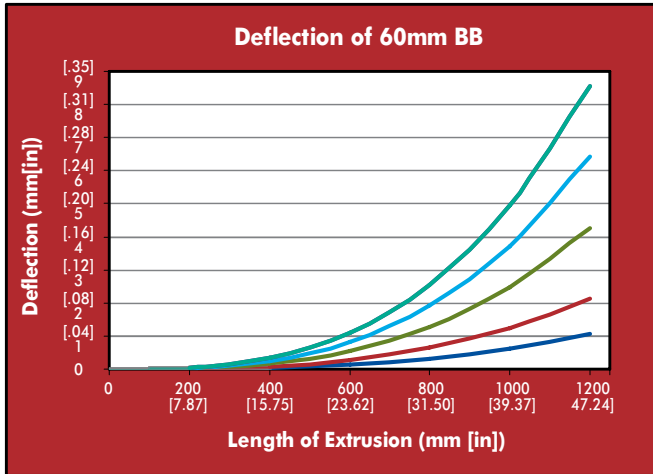
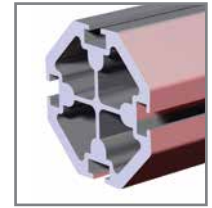
Note: Performance may vary if used with non-DESTACO components

60mm Boom Deflection and Torsion Charts

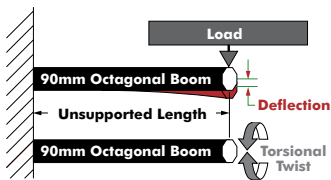


5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf
50 Kgf	110.2 lbf

400 Kgf-cm	347.2 lbf-in
800 Kgf-cm	694.4 lbf-in
1200 Kgf-cm	1041.6 lbf-in
1600 Kgf-cm	1388.7 lbf-in
2000 Kgf-cm	1735.9 lbf-in
2400 Kgf-cm	2083.1 lbf-in
2800 Kgf-cm	2430.3 lbf-in
3400 Kgf-cm	2951.1 lbf-in
4000 Kgf-cm	3471.8 lbf-in

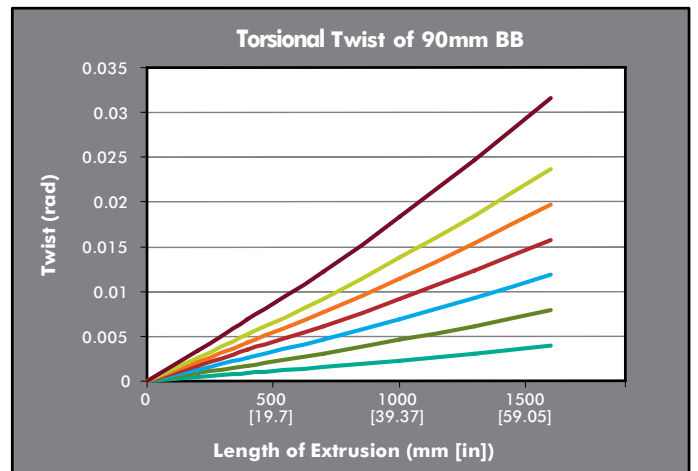
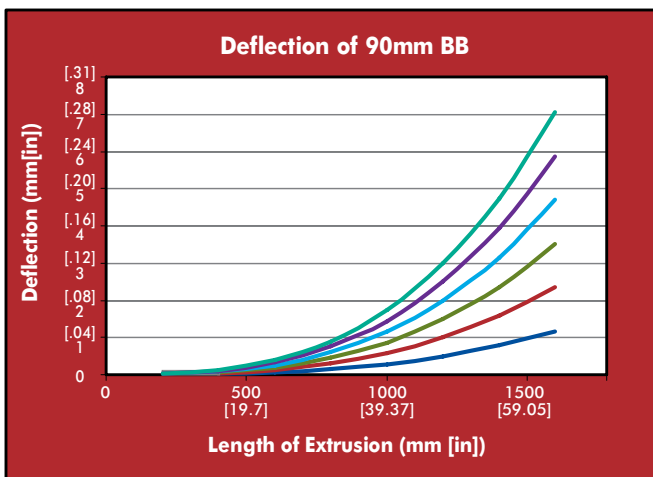
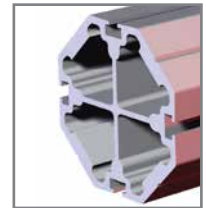


90mm Boom Deflection and Torsion Charts



10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf
50 Kgf	110.2 lbf
60 Kgf	132.3 lbf

1000 Kgf-cm	867.0 lbf-in
2000 Kgf-cm	1735.9 lbf-in
3000 Kgf-cm	2603.9 lbf-in
4000 Kgf-cm	3471.8 lbf-in
5000 Kgf-cm	4339.8 lbf-in
6000 Kgf-cm	5207.8 lbf-in
8000 Kgf-cm	6943.7 lbf-in



Note: Performance may vary if used with non-DESTACO components

BODYBUILDER™ BOOM STRUCTURE ACCESSORIES

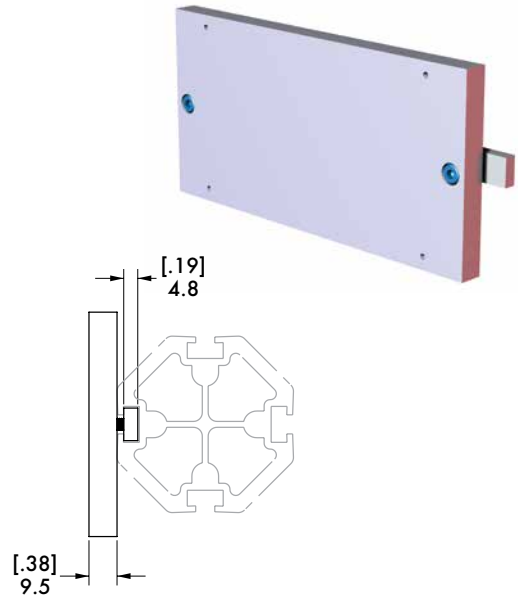
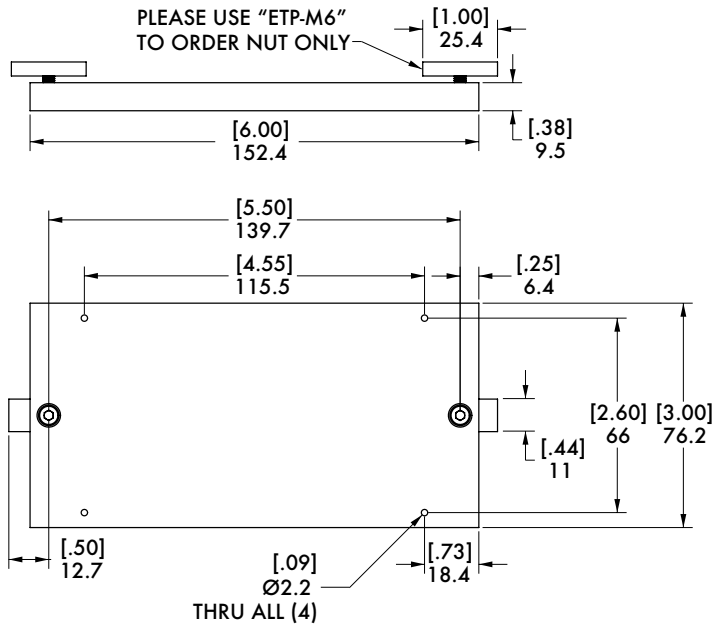
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



ETP-35 Extrusion Accessory Mount

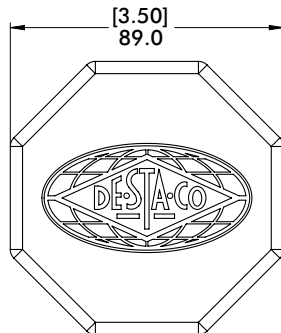


Specifications:
Material: Aluminum

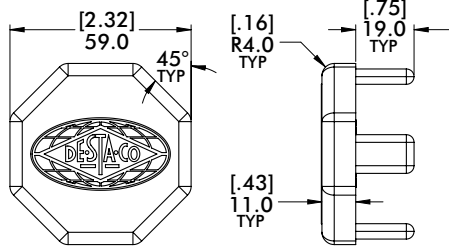


Model Number	Weight
CPI-ETP-35	.31 kg [.68 lb]

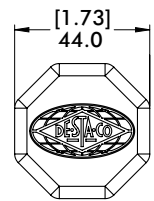
EC-60 60mm Bodybuilder Octagonal Boom End Cap



End Cap



60mm End Cap



45mm End Cap



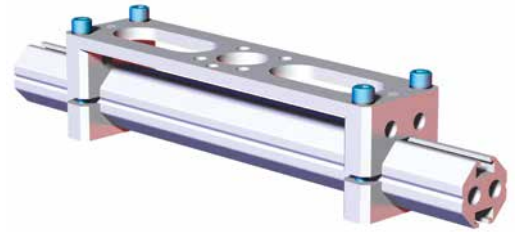
Model Number	Weight
CPI-EC-45B	.02 kg [.05 lb]
CPI-EC-60B	.04 kg [.09 lb]
CPI-EC-90B	.09 kg [.20 lb]



BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

RMM-30B-40BC-08-90 Single Extrusion 30mm Mid Mount with 40mm Bolt Circle

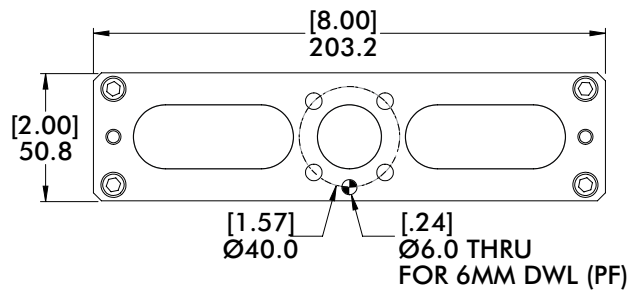
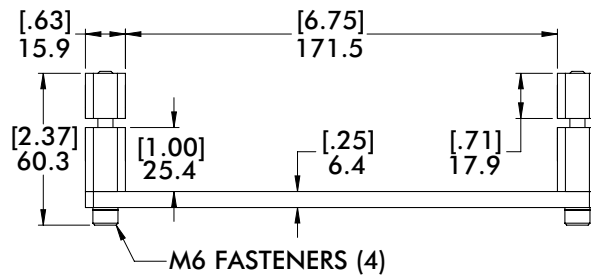
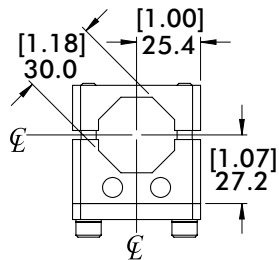
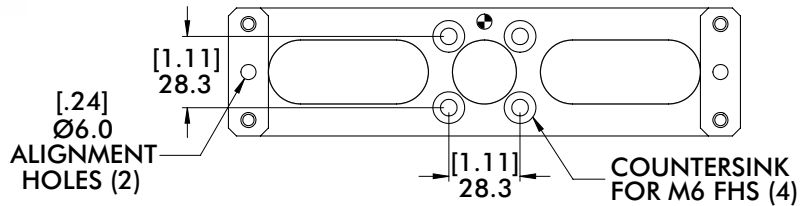
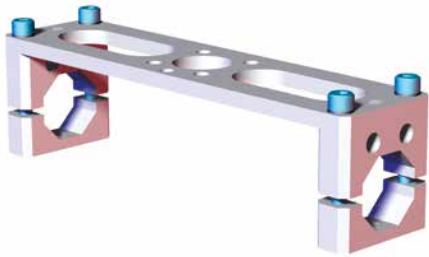


Specifications:

Max. Static Product Load:

102 Nm [75 ft-lb]

Material: Aluminum



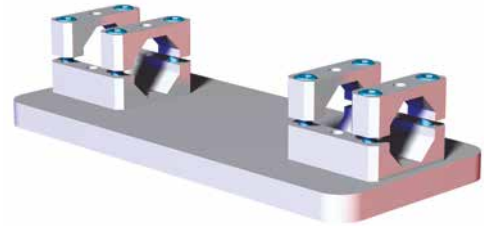
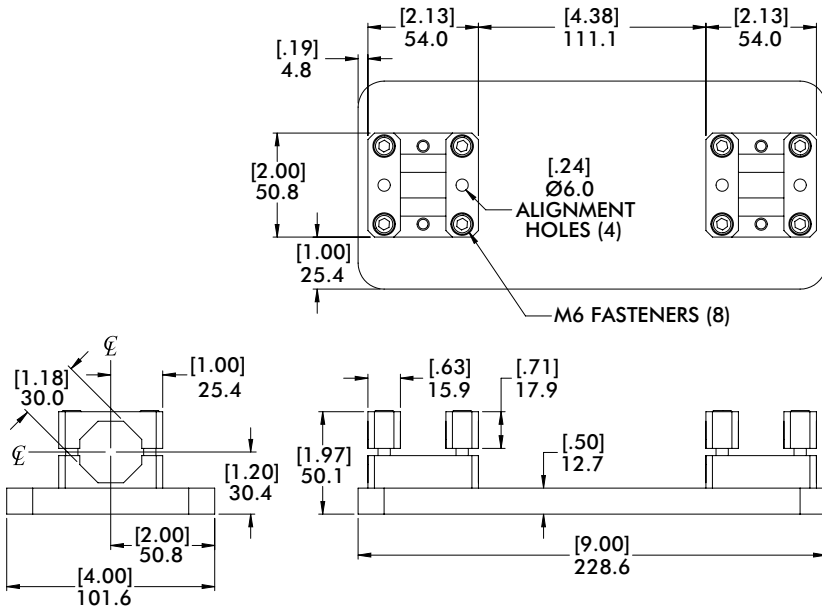
Model Number	Weight
CPI-RMM-30B-40BC-08-90	.28 kg [.62 lb]

BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



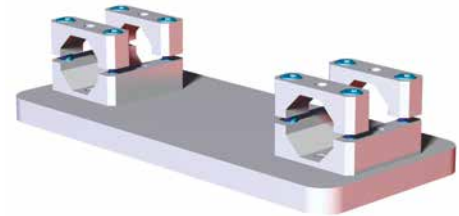
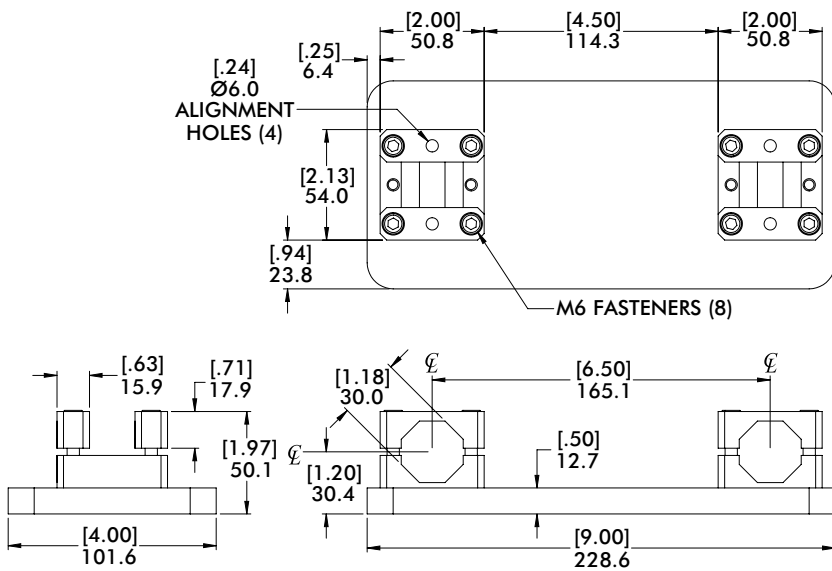
RMM-30B-SE Single Extrusion 60mm Robot Adaptor Mid Mount



Specifications:
 Max. Static Product Load:
 102 Nm [75 ft-lb] **Material:**
 Aluminum

Model Number	Weight
CPI-RMM-30B-SE	1.05 kg [2.31 lb]

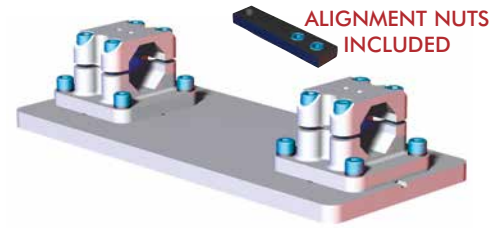
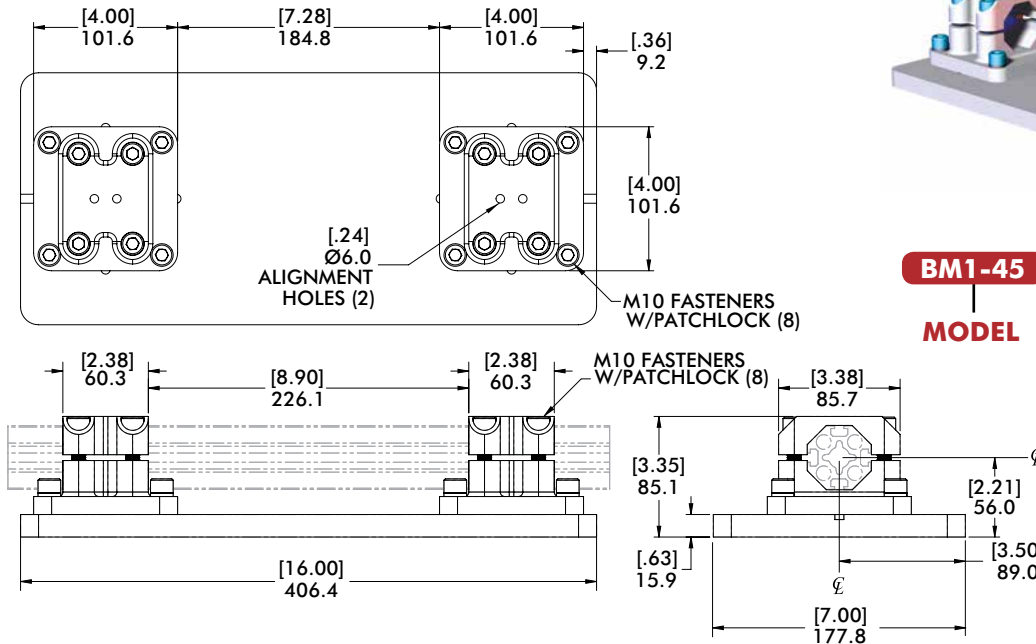
RMM-30B-DE Double Extrusion 30mm Robot Adaptor Mid Mount



Specifications:
 Max. Static Product Load:
 102 Nm [75 ft-lb] **Material:**
 Aluminum

Model Number	Weight
CPI-RMM-30B-DE	1.05 kg [2.31 lb]

BM1-45-SE Single Extrusion 45mm Mid Mount



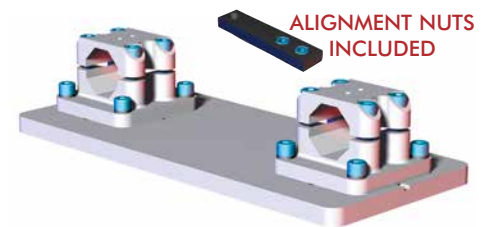
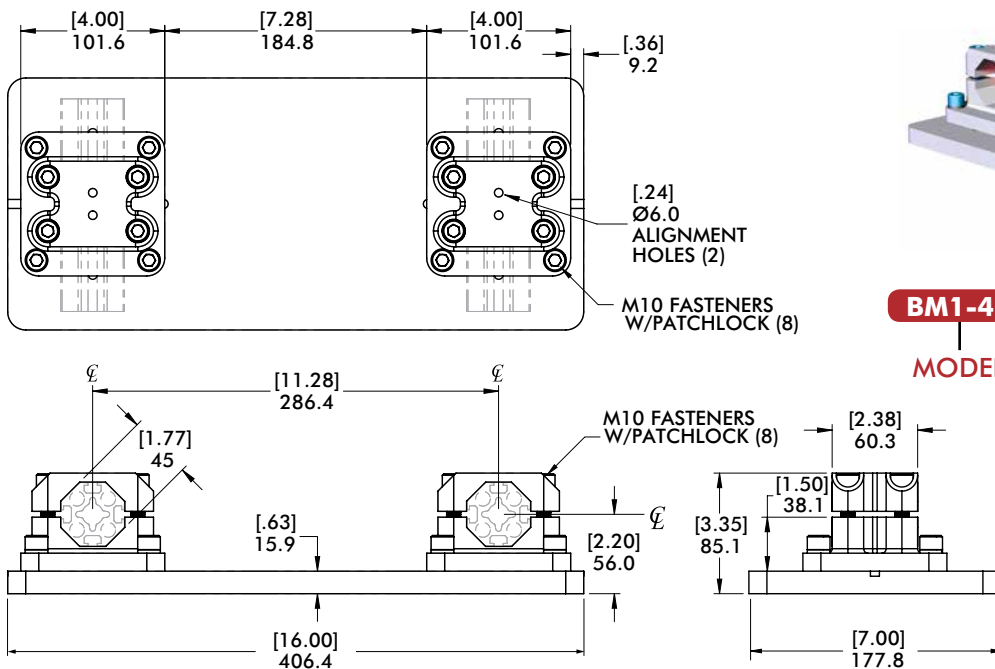
BM1-45 — **SE** — **RXX**
MODEL — **BOOM SETUP (SINGLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

Specifications:
 Max. Static Product Load:
 350 Nm [258 ft-lb]
 Material: Aluminum

Weight
 5.05 kg [11.1 lb]

Can be supplied with robot interface hole patterns. (See pages 19-21).

BM1-45-DE Double Extrusion 45mm Mid Mount



BM1-45 — **DE** — **RXX**
MODEL — **BOOM SETUP (DOUBLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

Specifications:
 Max. Static Product Load:
 350 Nm [258 ft-lb]
 Material: Aluminum

Weight
 5.05 kg [11.1 lb]

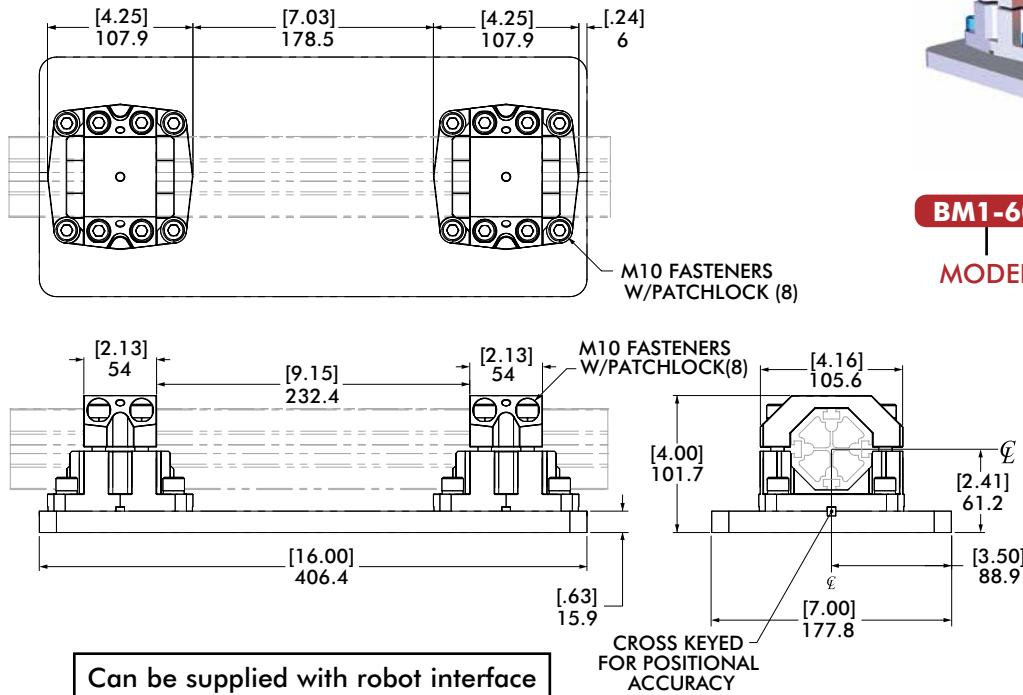
Can be supplied with robot interface hole patterns. (See pages 19-21).

BODYBUILDER™ MID MOUNT ASSEMBLIES

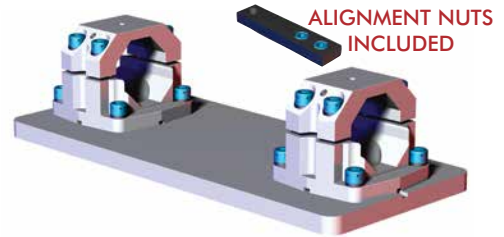
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



BM1-60-SE 60mm Single Extrusion Mid Mount Assembly



Can be supplied with robot interface hole patterns. (See pages 19-21).



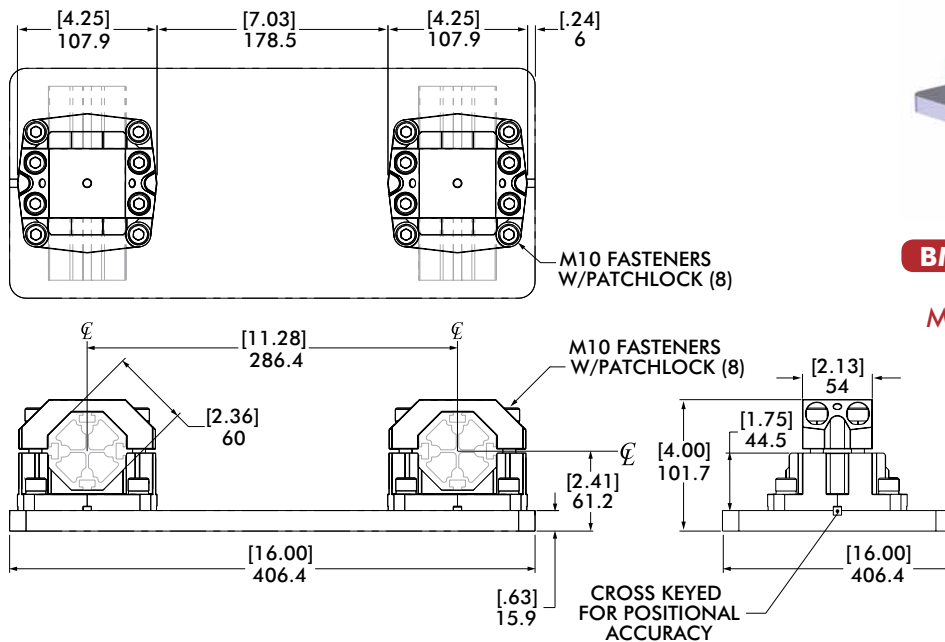
ALIGNMENT NUTS INCLUDED

BM1-60 — **SE** — **RXX**
MODEL — **BOOM SETUP (SINGLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

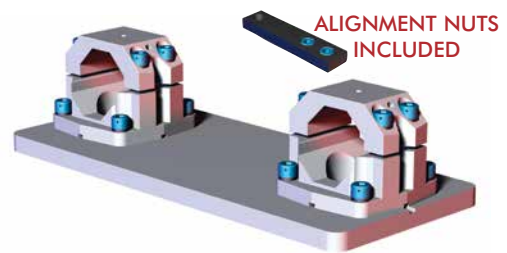
Specifications:
 Max. Static Product Load:
 675 Nm [500 ft-lb]
 Material: Aluminum

Weight
 5.2 kg [11.5 lb]

BM1-60-DE 60mm Double Extrusion Mid Mount Assembly



Can be supplied with robot interface hole patterns. (See pages 19-21).



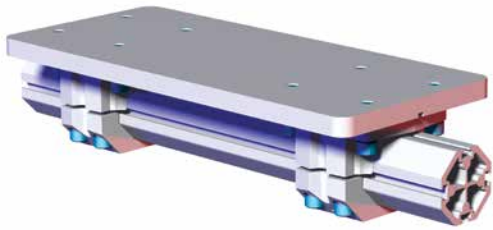
ALIGNMENT NUTS INCLUDED

BM1-60 — **DE** — **RXX**
MODEL — **BOOM SETUP (DOUBLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

Specifications:
 Max. Static Product Load:
 675 Nm [500 ft-lb]
 Material: Aluminum

Weight
 5.2 kg [11.5 lb]

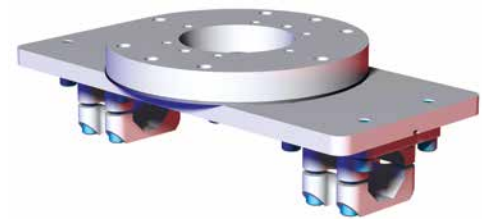
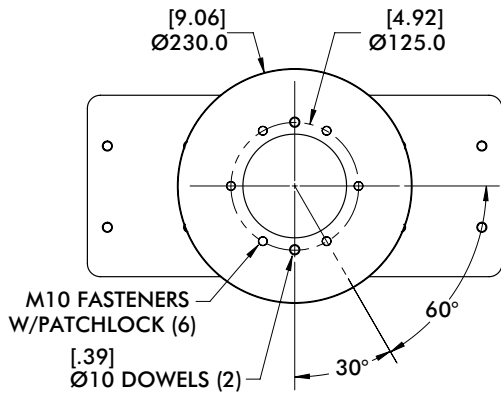
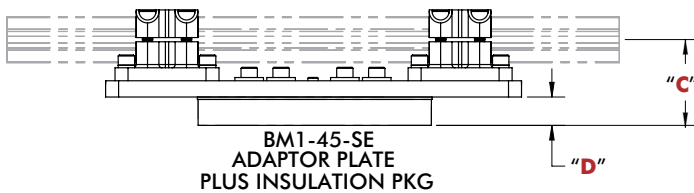
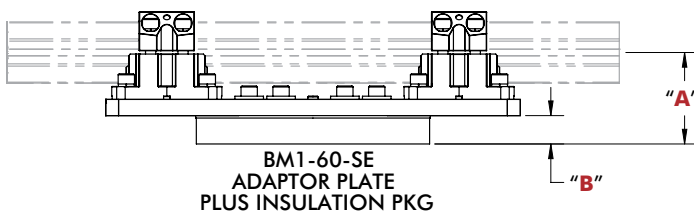
BM1-45/BM1-60 Mid Mount Assembly - Mount Plate



Specifications:
Material: Aluminum

- Features:**
- Can be machined or left blank.
 - Can be supplied with robot interface hole patterns. (See pages 19-21).

BM1-45/BM1-60 Mid Mount Assembly - Adapter Plate



All mounting patterns on pages 19-21 can be used for **BM1-60** and **BM1-45** Mid Mount Assemblies. All Ø200mm mounting patterns, when used on the **BM1-45** and **BM1-60**, includes an Adapter Plate as shown.

MID MOUNT ASSEMBLY ADAPTER PLATE

PATTERN	"A"	"B"	"C"	"D"
R01, R10, R11, R16	89.6 [3.53]	27.8 [1.09]	83.8 [3.30]	27.8 [1.09]
R07, R09	96.0 [3.78]	34.1 [1.34]	99.6 [3.92]	34.1 [1.34]

BODYBUILDER™ MID MOUNT ASSEMBLIES



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

RM4-45 45mm, RM4-60 60mm Heavy Duty Mid Mount Assembly - Dimensions

Features:

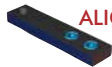
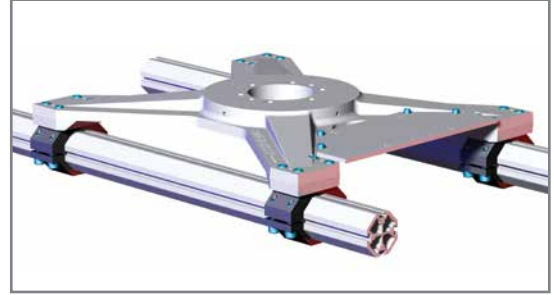
- Can be used as a direct robot interface.
- Provide robust clamping of each extrusion for maximum stability.
- Standard robot interface patterns provided. Plate can also be left blank.

Specifications:

Max. Static Product Load:
453.6 kg [1000 lb]

Material:

Mid Mount:
Cast Aluminum
Clamps: Steel



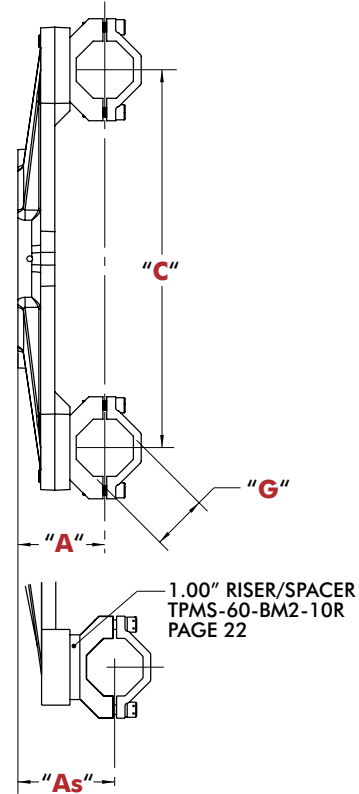
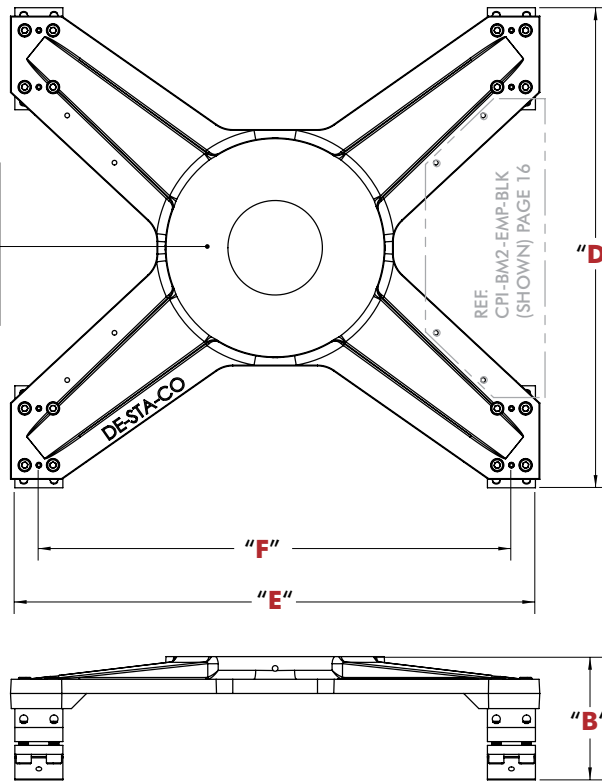
ALIGNMENT NUTS INCLUDED

ROBOT INTERFACE PLATE SHOWN BLANK.
PLEASE REFER TO PAGES 20-22 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

NOTE:
SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

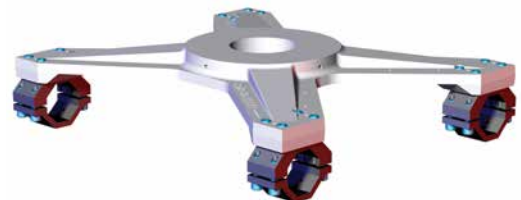
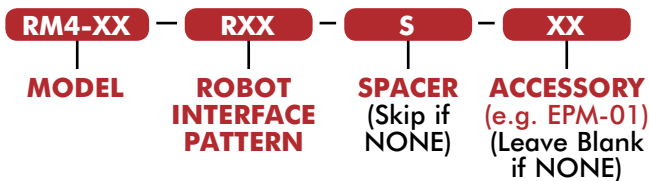
INSULATION PACKAGE INCLUDES:
(1) INSULATION PLATE, BUSHINGS AND WASHERS



1.00" RISER/SPACER
TPMS-60-BM2-10R
PAGE 22

HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

Model	"A"	"As"	"B"	"C"	"D"	"E"	"F"	"G"	Weight
RM4-45 (45mm)	85.6 [3.37]	111 [4.37]	117.6 [4.63]	400 [15.75]	490 [19.29]	560 [22.05]	500.0 [19.69]	45	13.6 kg [30.0 lb]
RM4-60 (60mm)	91.9 [3.62]	117.3 [4.62]	131.7 [5.185]	400.0 [15.75]	508 [20.00]	560.8 [22.85]	500.0 [19.69]	60	15.5 kg [34.2 lb]

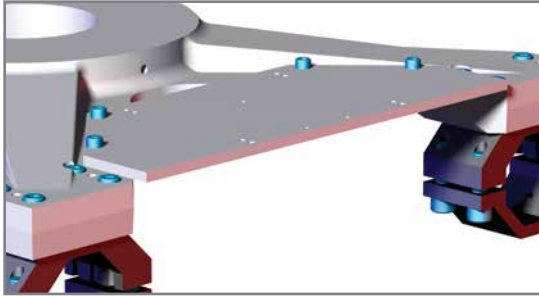




BODYBUILDER™ MID MOUNT ACCESSORY PLATE

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

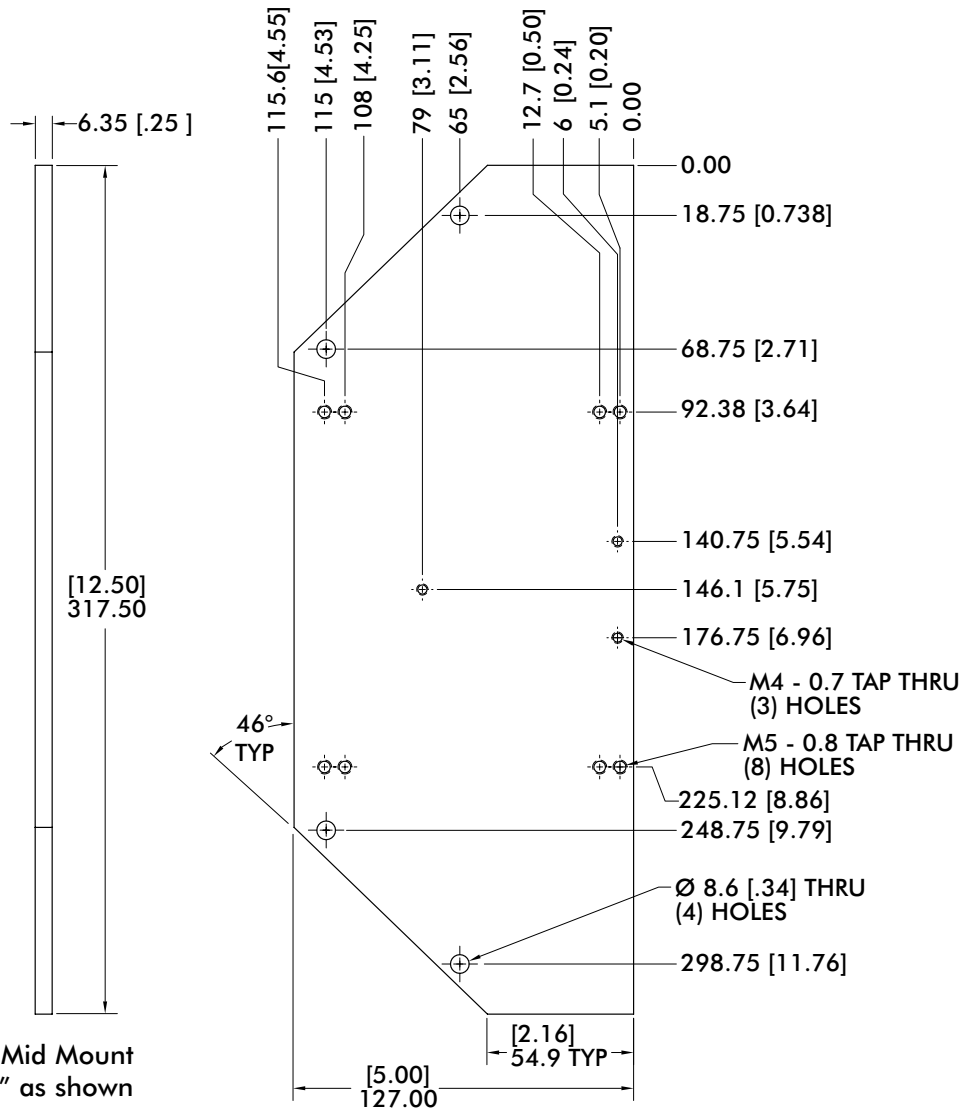
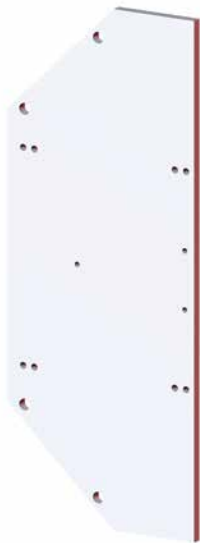
BM2-EPM Accessory Mount Plate



Specifications:
Material: Aluminum

Features:

- Mount directly to the RM4-45 or RM4-60 Heavy Duty Mid-Mount Assembly.
- Used to mount pneumatic manifolds and electric proximity blocks.



When ordering with Heavy Duty Mid Mount Please add designation "EPM-01" as shown RM4-XX-RXX-EPM-01 or add designation "EPM-BLK" to order blank RM4-XX-RXX-EPM-BLK

To order separately use Model Number

(A)	Pattern	Model RM4-45/60	Weight
EPM-01	Standard	CPI-BM2-EPM-01	.63 kg [1.39 lb]
EPM-BLK	Blank	CPI-BM2-EPM-BLK	

BODYBUILDER™ STRUCTURE MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



BM3-90 90mm Heavy Duty Mid Mount Assembly - Dimensions

Features:

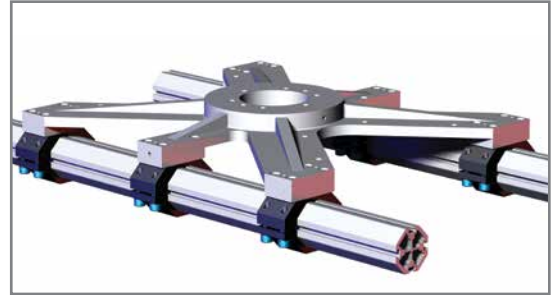
- Can be used as a direct robot interface.
- Provide robust clamping of each extrusion for maximum stability.
- Standard robot interface patterns provided. Plate can also be left blank.

Specifications:

Max. Static Product Load:
589.7 kg [1300 lb]

Material:

Mid Mount:
Cast Aluminum
Clamps: Steel



ROBOT INTERFACE PLATE SHOWN BLANK.

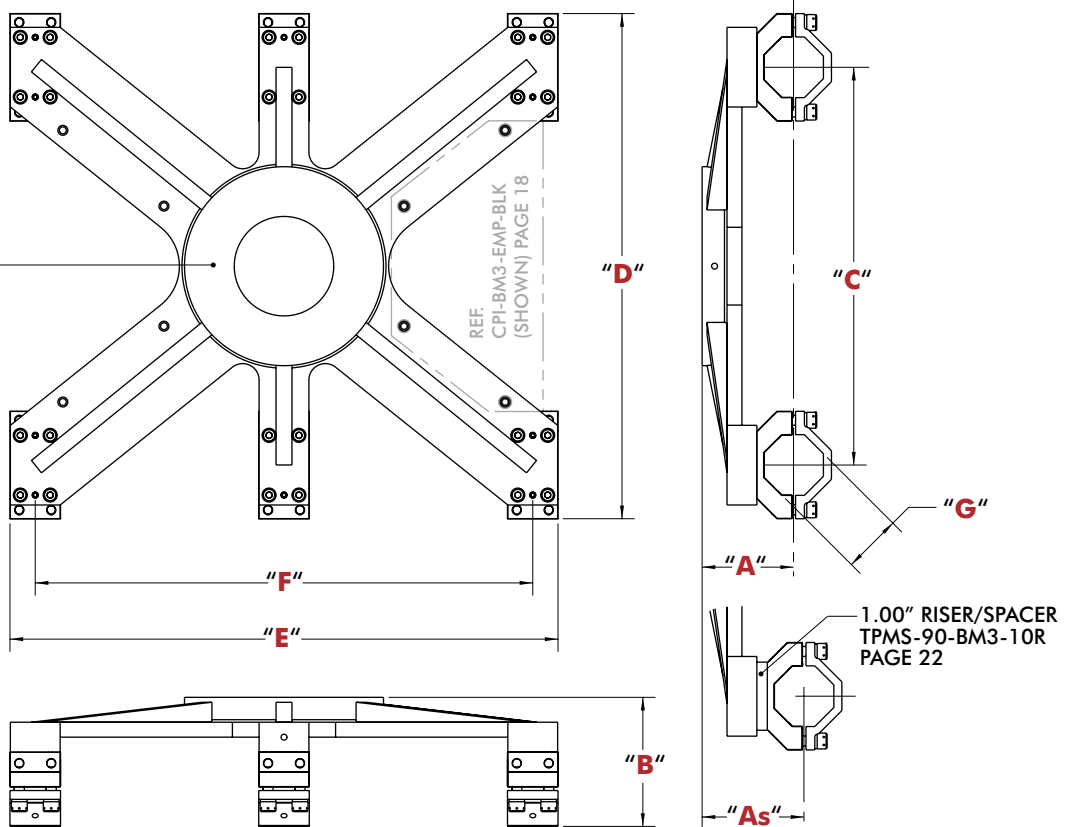
PLEASE REFER TO PAGES 19-21 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

NOTES:

SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

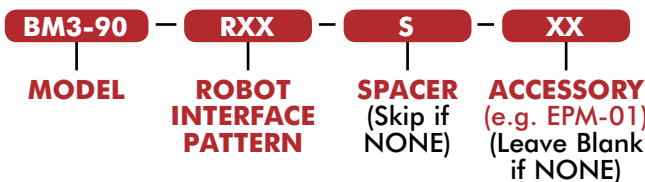
ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

INSULATION PACKAGE INCLUDES:
(1) INSULATION PLATE, BUSHINGS AND WASHERS



HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

Model	"A"	"As"	"B"	"C"	"D"	"E"	"F"	"G"	Weight
BM3-90	107.8 [4.24]	133.2 [5.24]	165.3 [6.51]	600.0 [23.62]	738.0 [29.06]	750.0 [29.53]	700.0 [29.53]	90	24.1 kg [53.1 lb]

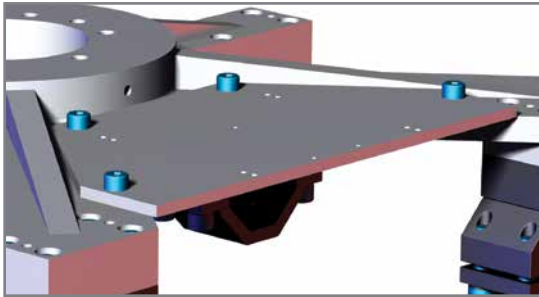




BODYBUILDER™ MID MOUNT ACCESSORY PLATE

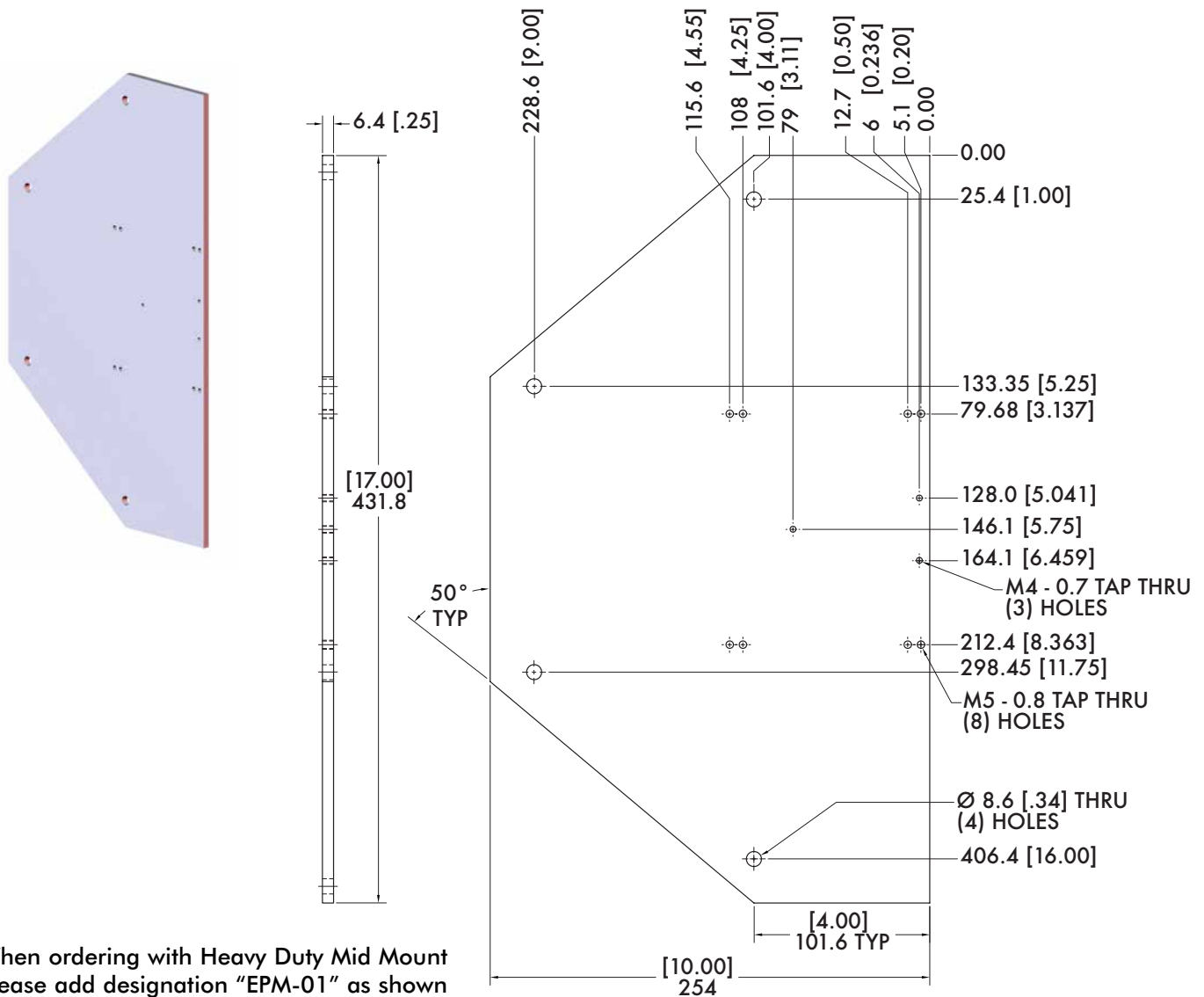
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

BM3-EPM Accessory Mount Plate



Specifications:
Material: Aluminum

- Features:**
- Mount directly to the BM3-90 Heavy Duty Mid-Mount Assembly.
 - Used to mount pneumatic manifolds and electric proximity blocks.



When ordering with Heavy Duty Mid Mount
Please add designation "EPM-01" as shown
BM3-90-RXX-EPM-01 or
add designation "EPM-BLK" to order blank
BM3-90-RXX-EPM-BLK
To order separately use Model Number

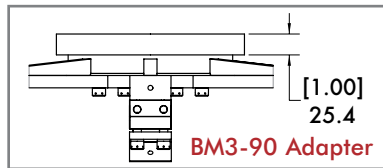
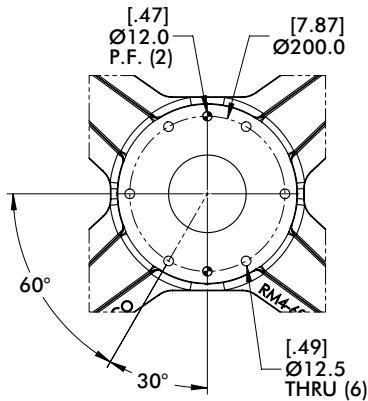
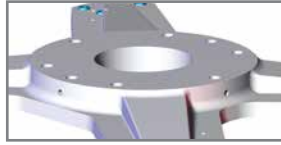
Model Number	Weight
CPI-BM3-EPM-xx	1.54 kg [3.39 lb]

BODYBUILDER™ MID MOUNT BOLT PATTERNS

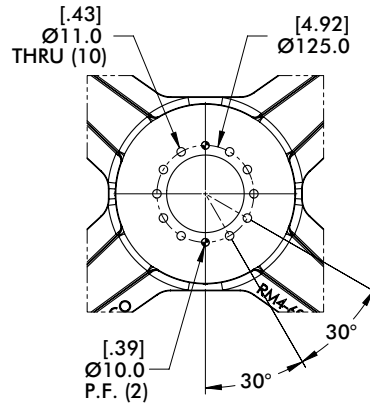
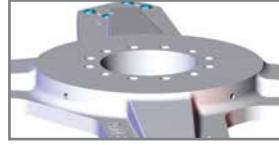
BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns



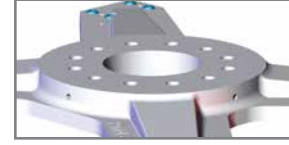
R01 (Ø200mm Bolt Circle)



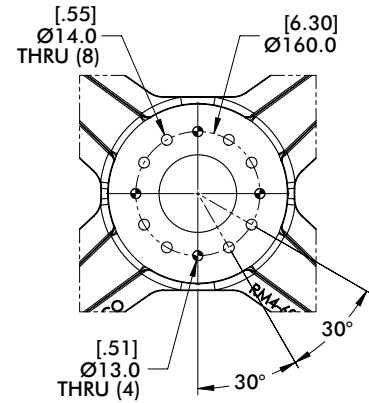
R02 (Ø125mm Bolt Circle)



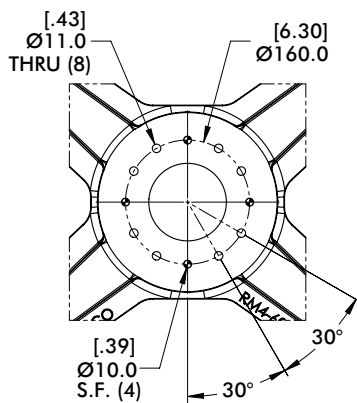
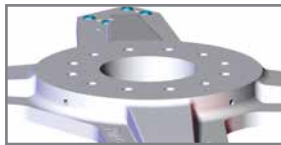
R03 (Ø160mm Bolt Circle)



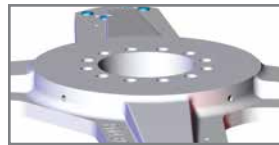
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



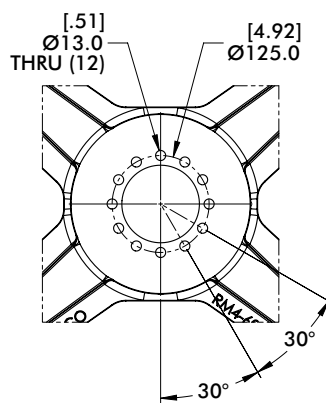
R04 (Ø160mm Bolt Circle)



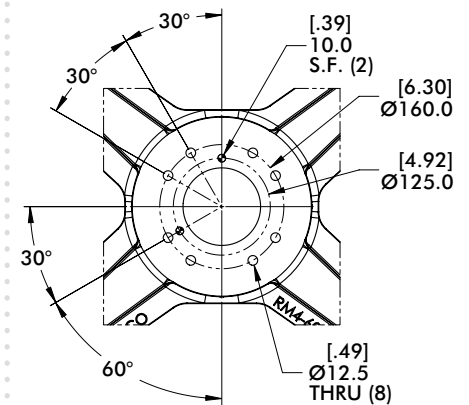
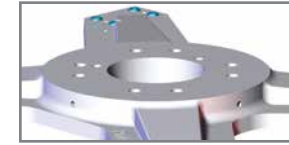
R05 (Ø125mm Bolt Circle)



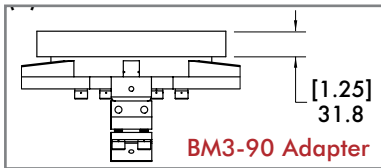
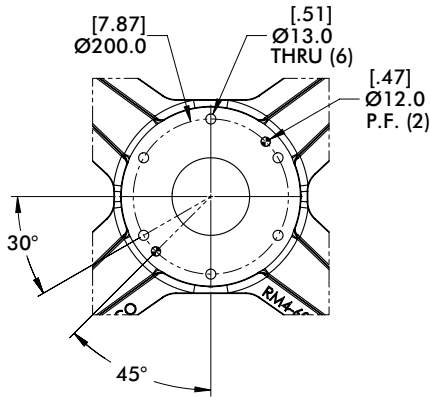
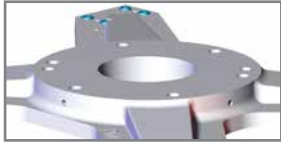
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



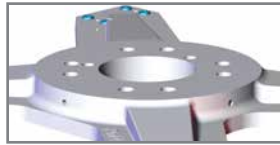
R06 (Ø125/160mm Bolt Circle)



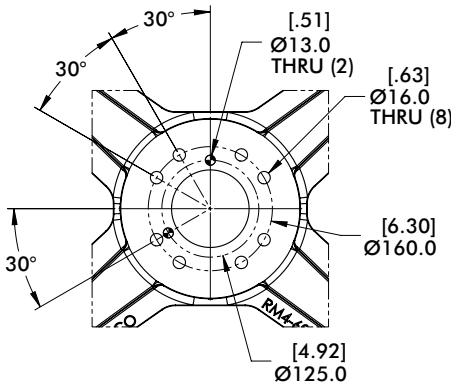
R07 (Ø200mm Bolt Circle)



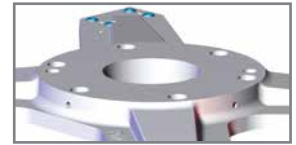
R08 (Ø125/160mm Bolt Circle)



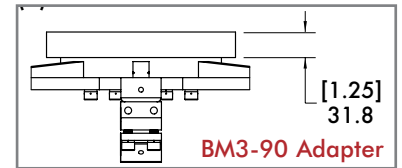
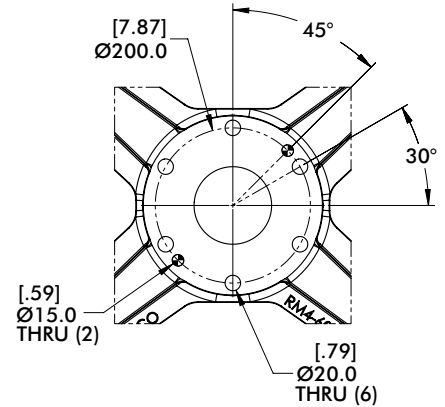
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



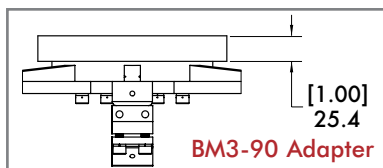
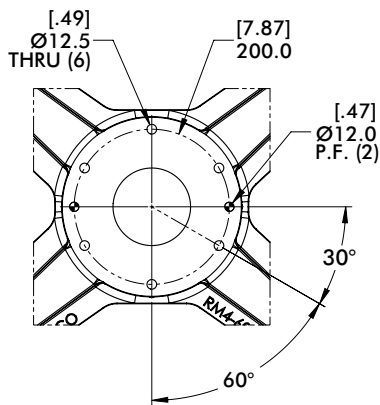
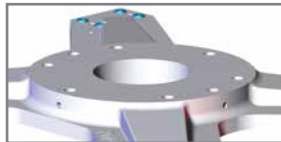
R09 (Ø200mm Bolt Circle)



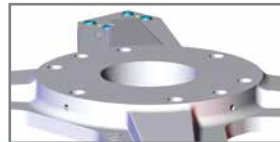
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



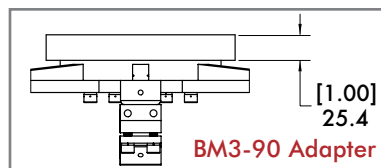
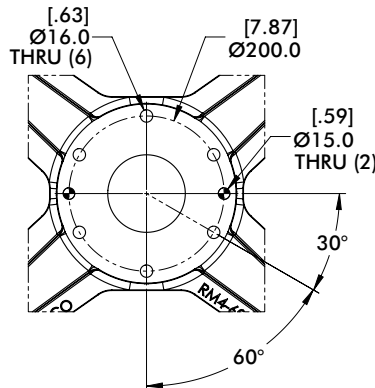
R10 (Ø200mm Bolt Circle)



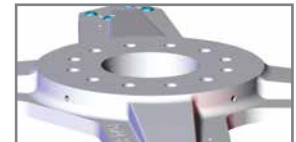
R11 (Ø200mm Bolt Circle)



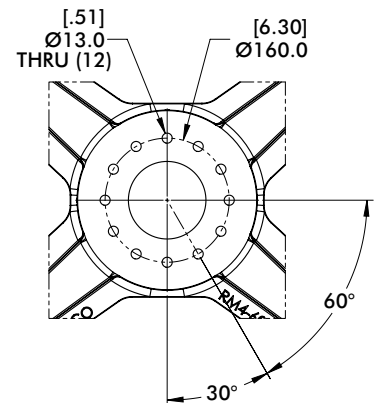
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R12 (Ø160mm Bolt Circle)



Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"

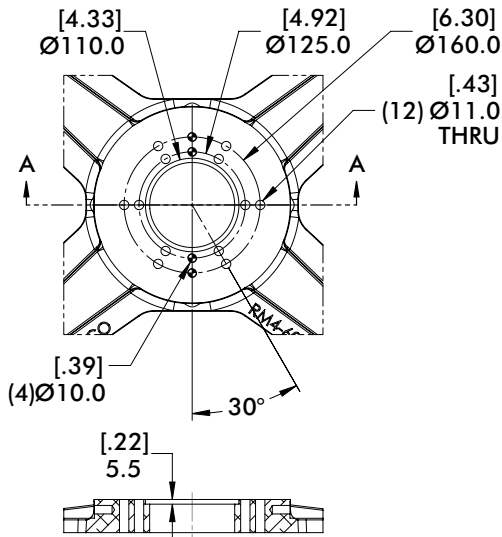
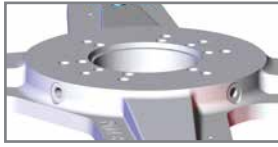


BODYBUILDER™ MID MOUNT BOLT PATTERNS

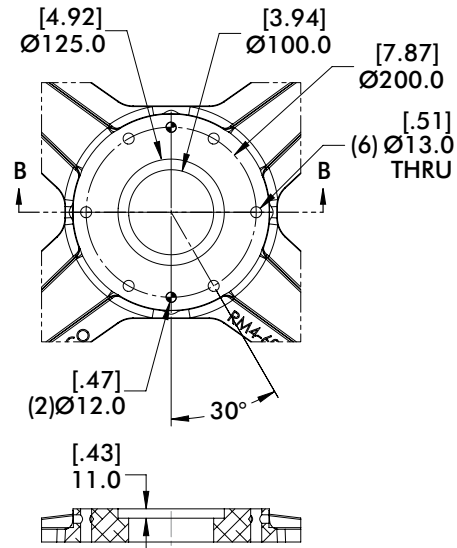
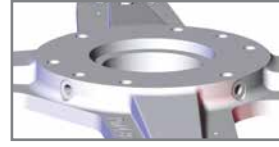


BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns

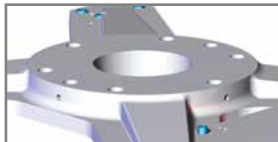
**R13 (Ø125/160mm Bolt Circle)
(Ø110mm Pilot, 5.5mm Deep)**



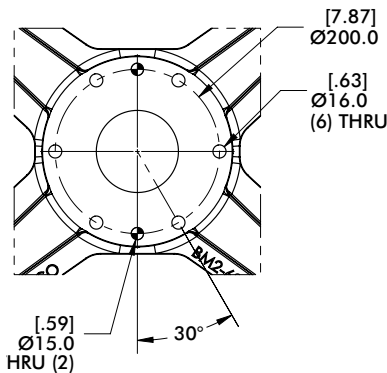
**R14 (Ø200mm Bolt Circle)
(Ø125mm Pilot, 11mm Deep)**



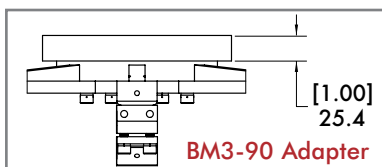
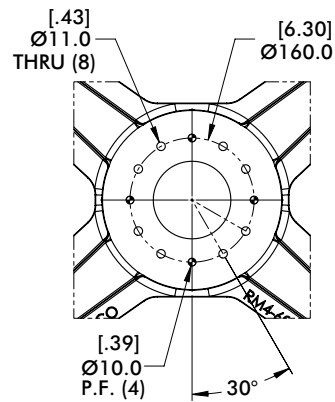
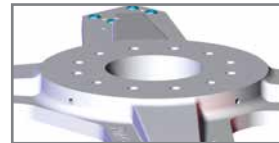
R16 (Ø200mm Bolt Circle)



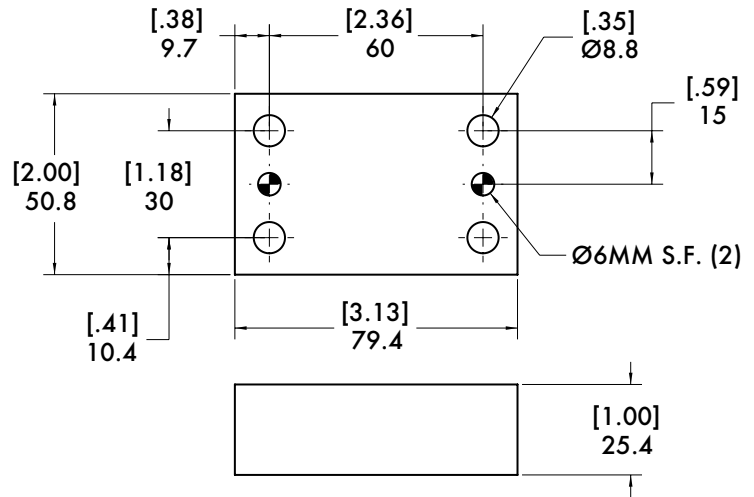
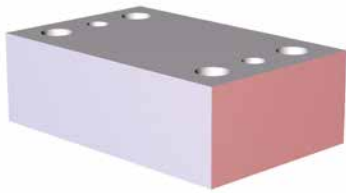
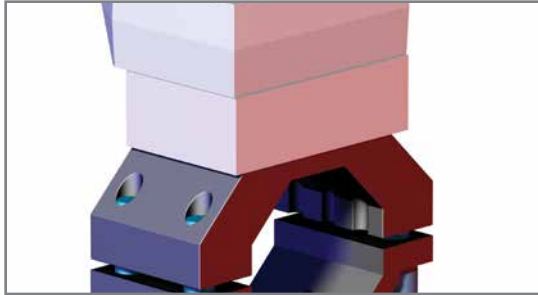
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R17 (Ø160mm Bolt Circle)



RM4-60 Heavy Duty Mid Mount Assembly - 1.00" Riser/Spacer



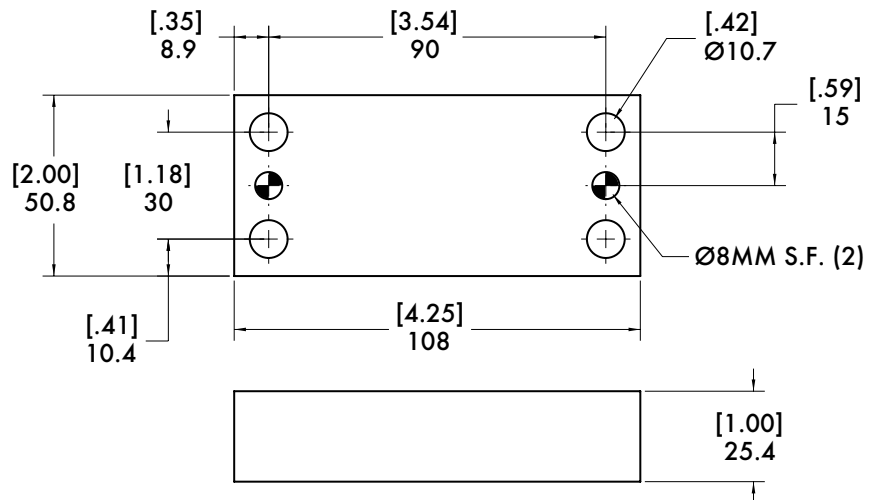
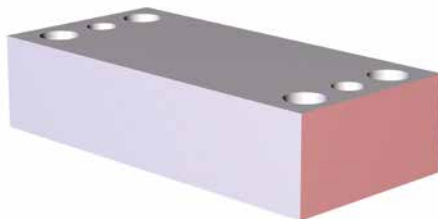
When ordering with Heavy Duty Mid Mount add designation (S) as shown:

RM4-60-RXX-S

To order Riser separately use Model Number.

Riser for	Model	Weight	Specifications:
RM4-45/60	TPMS-60-BM2-10R	.26 kg [.56 lb]	Material: Aluminum

BM3-90 Heavy Duty Mid Mount Assembly - 1.00" Riser/Spacer



When ordering with Heavy Duty Mid Mount add designation (S) as shown:

BM3-90-RXX-S

To order Riser separately use Model Number.

Model Number	Weight	Specifications:
TPMS-90-BM3-10R	.34 kg [.76 lb]	Material: Aluminum

BODYBUILDER™ HOLD TABLE



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

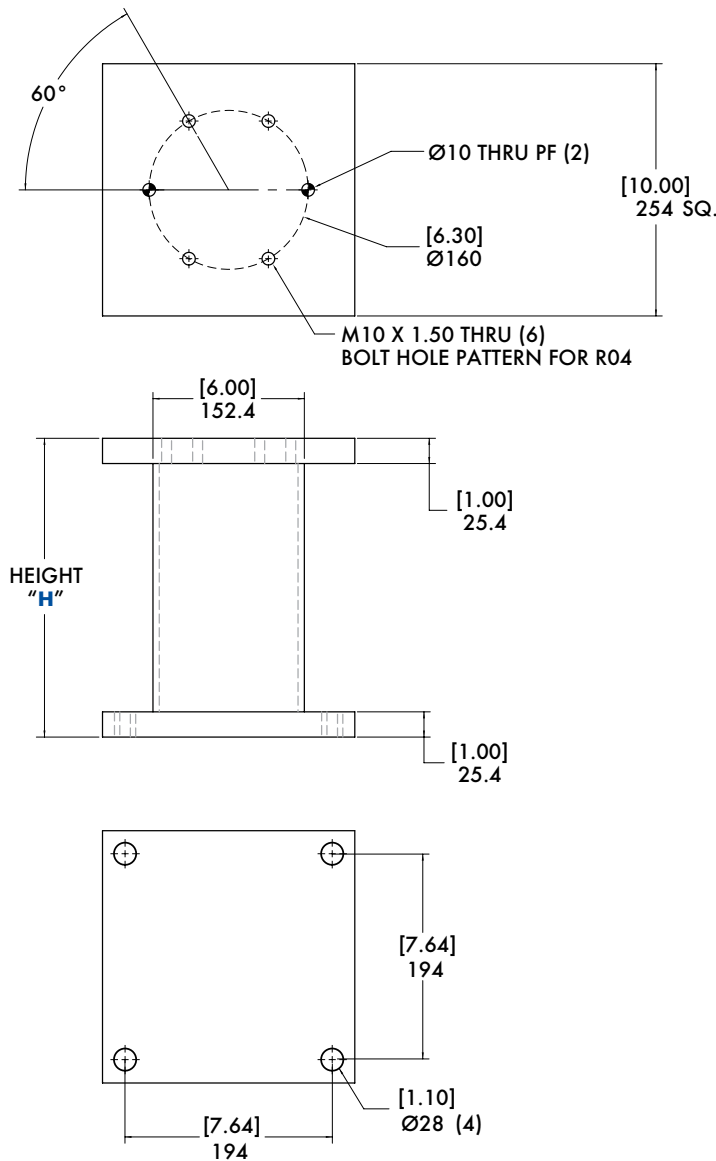
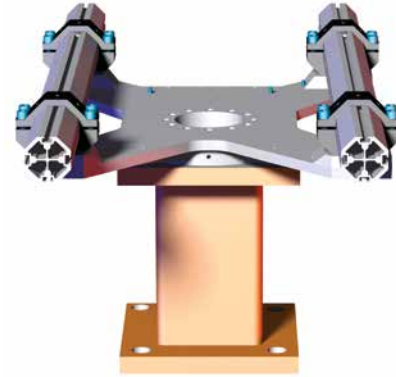
HTW 6" SQ. Pedestal Hold Table Weldment

Features:

- Pedestal Hold Table Weldment when used in conjunction with Mid Mount assemblies serves as a pedestal base for a robust parts nest.

Specifications:

Material: Steel



CPI-HTW-"H" HOLD TABLE WELDMENT

"H"	Model Number	Weight
250	CPI-HTW-250	32.43 kg [71.30lb]
300	CPI-HTW-300	33.75 kg [74.40lb]
350	CPI-HTW-350	35.16 kg [77.50lb]
400	CPI-HTW-400	36.56 kg [80.60lb]
450	CPI-HTW-450	37.97 kg [83.70lb]
500	CPI-HTW-500	39.37 kg [86.81lb]
550	CPI-HTW-550	40.78 kg [89.91lb]
600	CPI-HTW-600	42.19 kg [93.01lb]
650	CPI-HTW-650	43.59 kg [96.11lb]
700	CPI-HTW-700	45.00 kg [99.21lb]
750	CPI-HTW-750	46.41 kg [102.31lb]
800	CPI-HTW-800	47.81 kg [105.41lb]
850	CPI-HTW-850	49.22 kg [108.51lb]
900	CPI-HTW-900	50.62 kg [111.61lb]

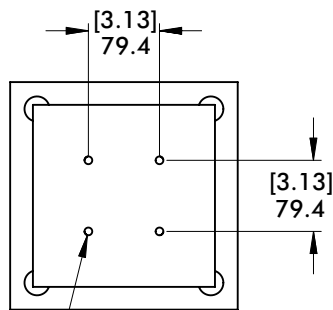


HTW-4 4" SQ. Pedestal Hold Table Weldment

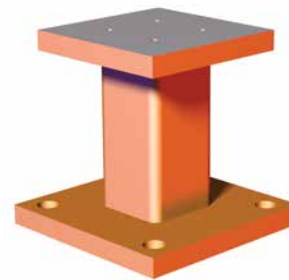
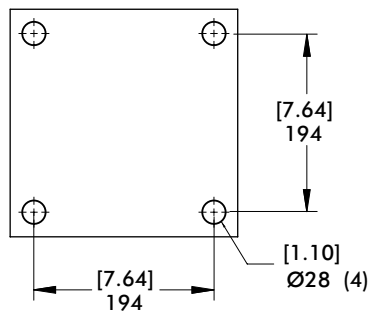
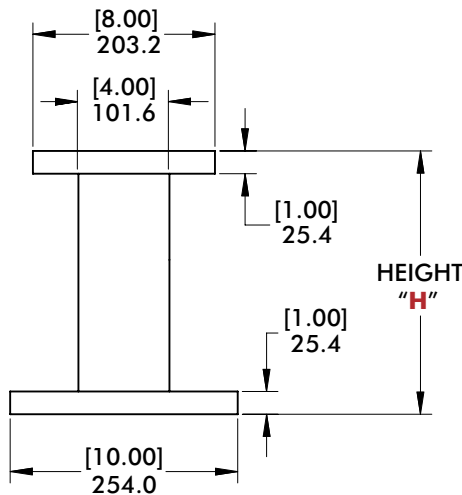
Specifications:
Material: Steel

Features:

- Pedestal Hold Table Weldment when used in conjunction with 45mm or 60mm flange and end mount assemblies serves as a pedestal base for a robust parts nest.



M10 X 1.50 THRU (6)
HOLE PATTERN FOR
TBC-60-00 AND
TBC-45-00



CPI-HTW-“H”-4 HOLD TABLE WELDMENT

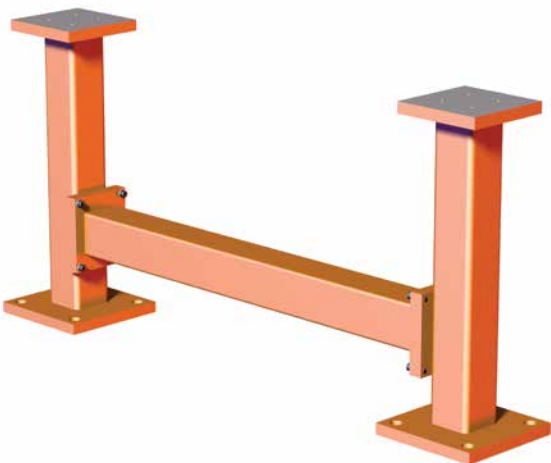
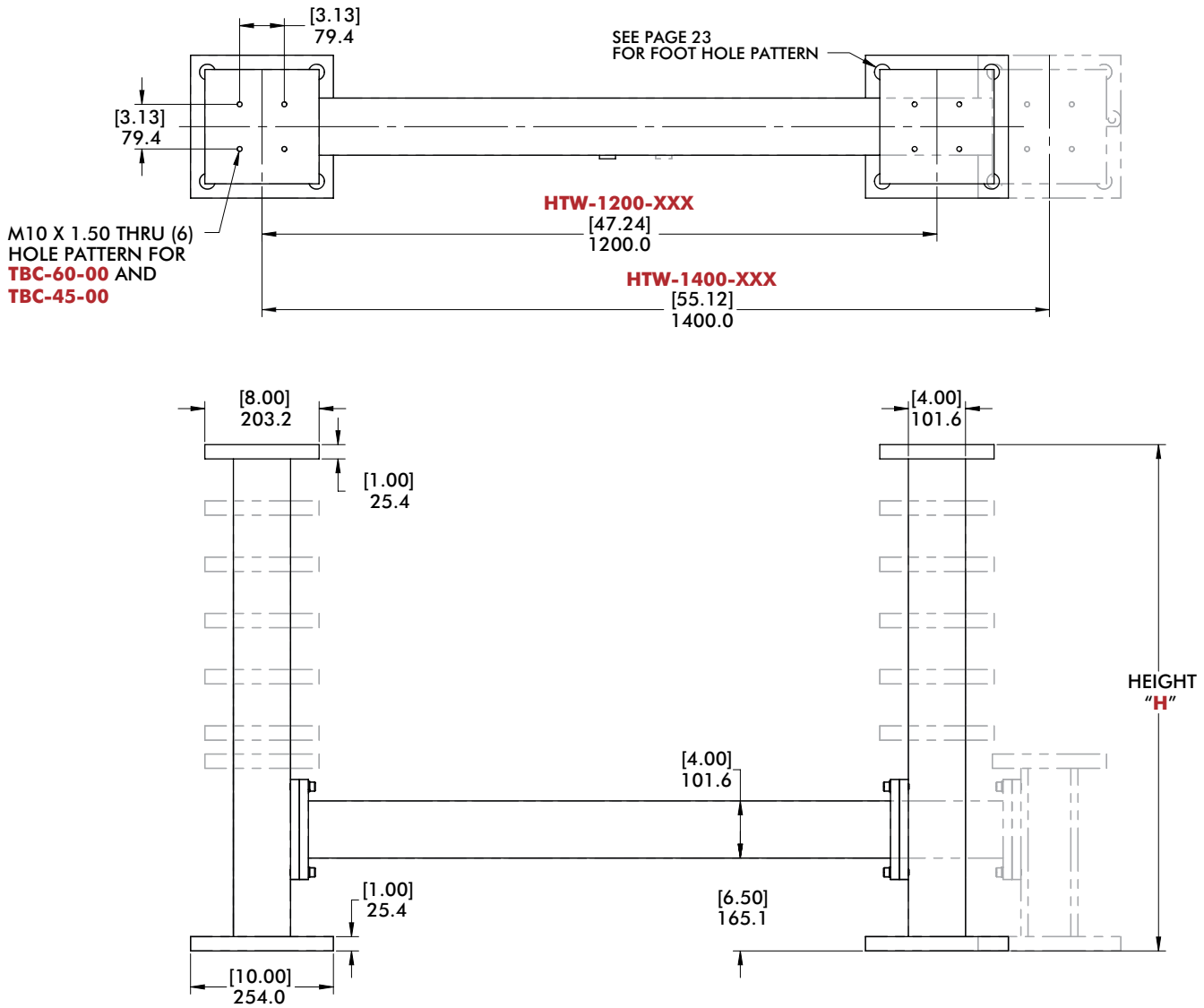
“H”	Model Number	Weight
250	CPI-HTW-250-4	24.02 kg [52.97lb]
300	CPI-HTW-300-4	24.93 kg [54.96lb]
350	CPI-HTW-350-4	25.83 kg [56.95lb]
400	CPI-HTW-400-4	26.73 kg [58.94lb]
450	CPI-HTW-450-4	27.63 kg [60.93lb]
500	CPI-HTW-500-4	28.54 kg [62.92lb]
550	CPI-HTW-550-4	29.44 kg [63.82lb]
600	CPI-HTW-600-4	30.35 kg [66.90lb]
650	CPI-HTW-650-4	31.25 kg [68.89lb]
700	CPI-HTW-700-4	32.15 kg [70.88lb]
750	CPI-HTW-750-4	33.05 kg [72.87lb]
800	CPI-HTW-800-4	33.96 kg [74.87lb]
850	CPI-HTW-850-4	34.86 kg [76.86lb]
900	CPI-HTW-900-4	35.76 kg [78.85lb]

BODYBUILDER™ HOLD TABLE

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



HTW-1200/1400 Pass-Thru Hold Table Weldment



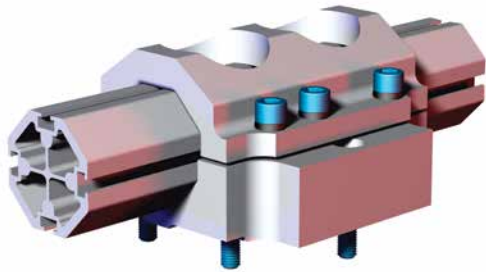
CPI-"MODEL"- "H" PASS THROUGH TABLE WELDMENT				
" H "	"Model"	Weight	"Model"	Weight
350	HTW-1200	84.62 kg [186.55lb]	HTW-1400	88.39 kg [194.87lb]
400	HTW-1200	86.42 kg [190.53lb]	HTW-1400	90.02 kg [198.85lb]
500	HTW-1200	90.04 kg [198.50lb]	HTW-1400	93.81 kg [206.82lb]
600	HTW-1200	93.65 kg [206.46lb]	HTW-1400	97.42 kg [214.78lb]
700	HTW-1200	97.26 kg [214.42lb]	HTW-1400	101.04 kg [222.74lb]
800	HTW-1200	100.87 kg [222.39lb]	HTW-1400	104.65 kg [230.71lb]
900	HTW-1200	104.49 kg [230.35lb]	HTW-1400	108.26 kg [238.67lb]



BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

ATI-151-90HD-60BB 60mm Mid Mount



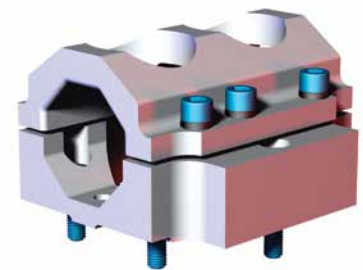
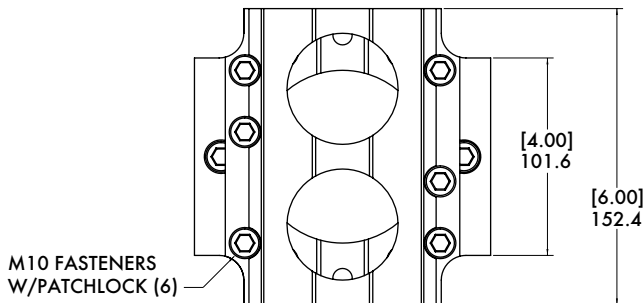
Specifications:

Max. Static Product Load:
746 Nm [550 ft-lb]

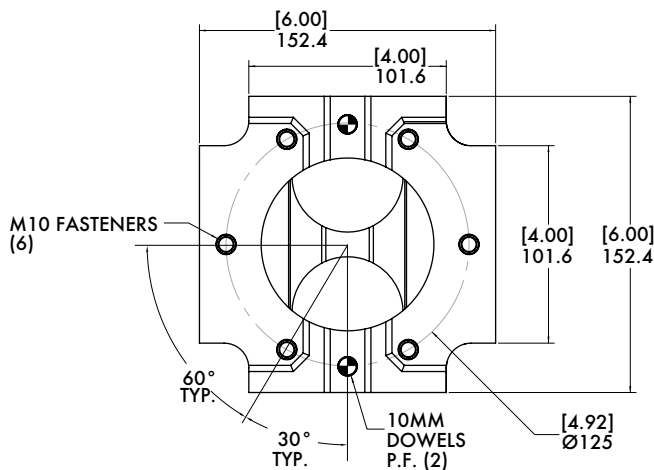
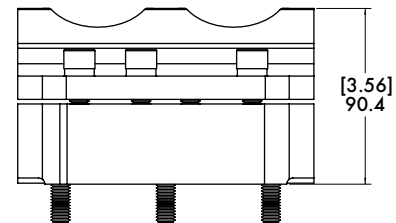
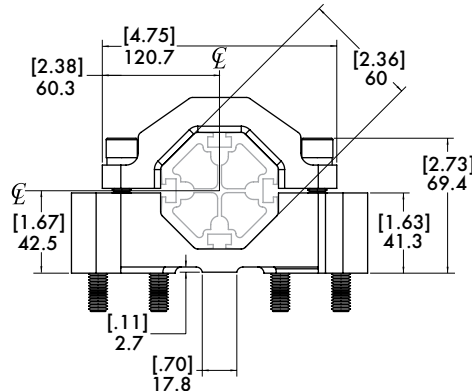
Material: Aluminum

Features:

- Can be used as direct robot interface.



Fasteners included, Dowels not included



Model Number	Weight
CPI-ATI-151-90HD-60BB	3.22 kg [7.10 lb]

BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



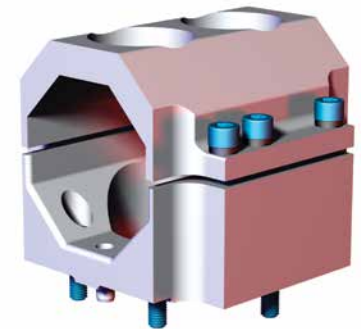
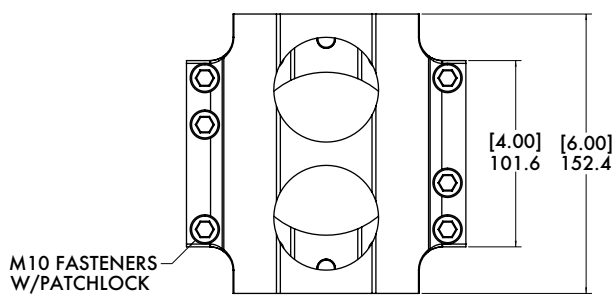
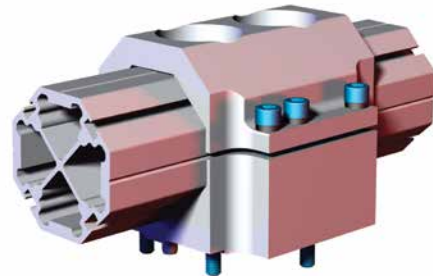
ATI-151-90HD-90BB 90mm Mid Mount

Features:

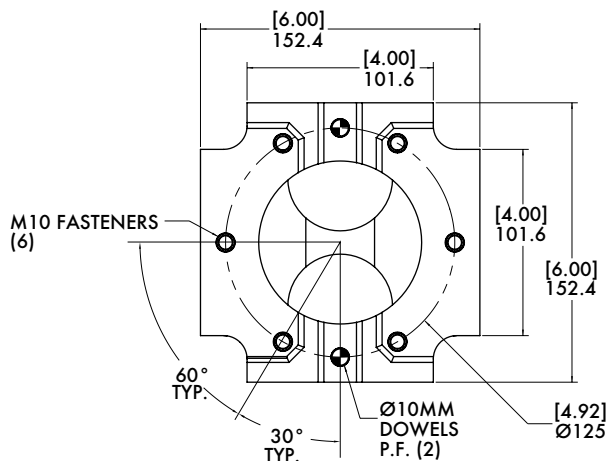
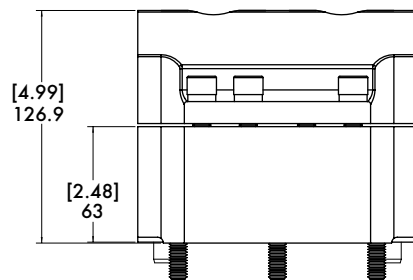
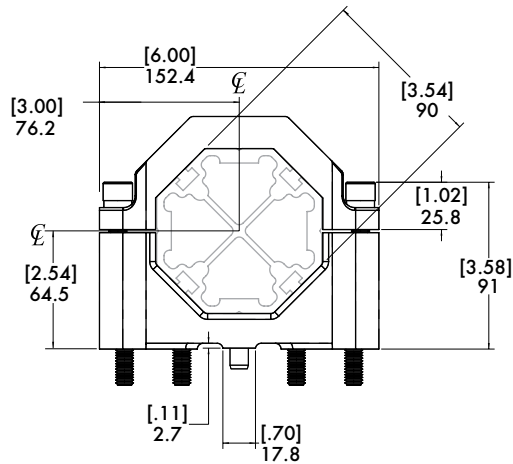
- Can be used as direct robot interface.

Specifications:

Max. Static Product Load:
1355 Nm [1000 ft-lb]
Material: Aluminum



Fasteners and Dowels Included



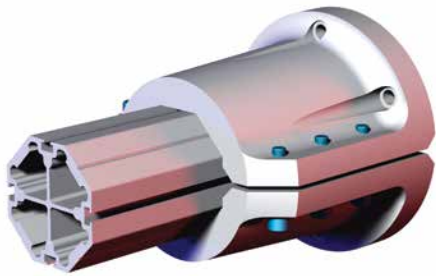
Model Number	Weight
CPI-ATI-151-90HD-90BB	2.89 kg [6.38 lb]



BODYBUILDER™ END MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

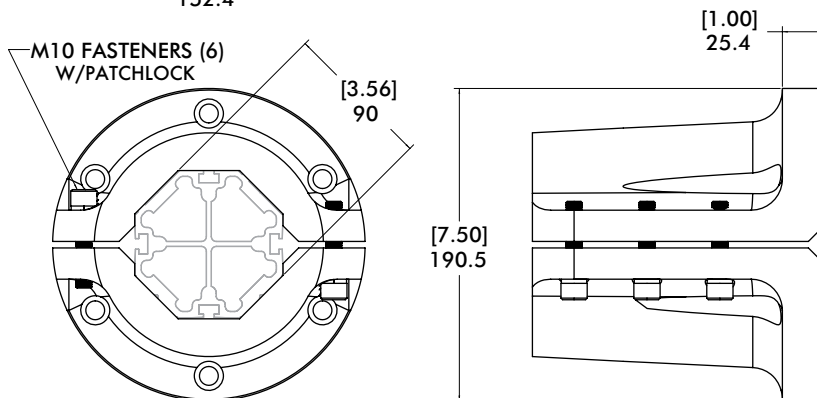
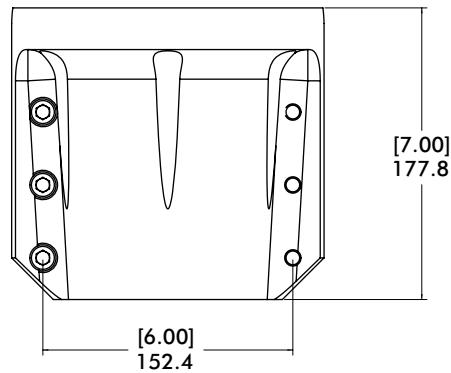
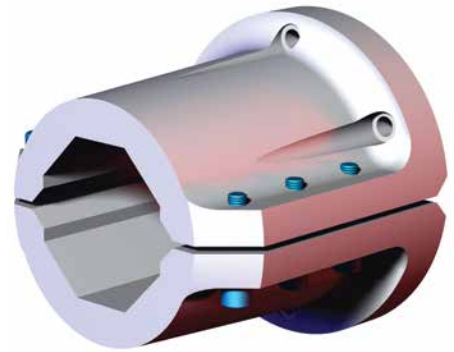
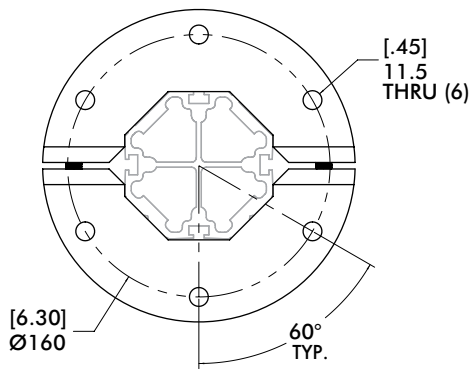
CL-90B-160F 90mm End Mount



Specifications:
Max. Static Clamp Load:
 746 Nm [550 ft-lb]
Material: Aluminum

Features:

- Can be used as direct robot interface.



Model Number	Weight
CPI-CL-90B-160F	5.91 kg [13.04 lb]

BODYBUILDER™ BAYONETS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



RDCF-60B 60mm BodyBuilder™ Bayonet

Features:

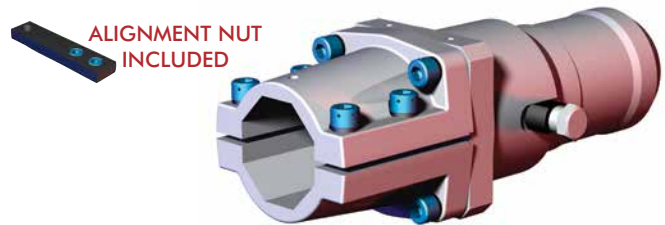
- Used in conjunction with Quick Disconnect Housing to provide an efficient method for changing tools manually.
- Two, hardened alignment pins allow quick and accurate installation into the housing.
- Optional 4-port air and electric available.

Specifications:

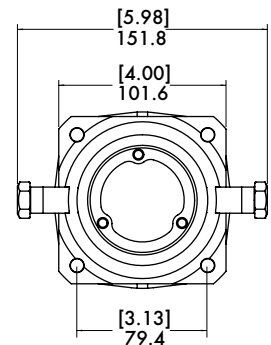
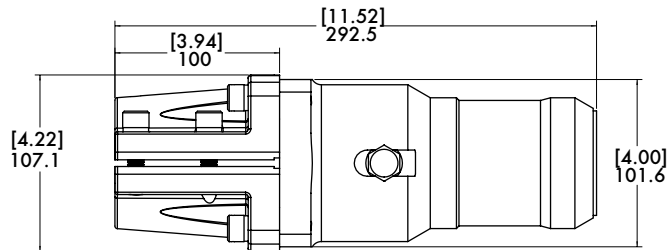
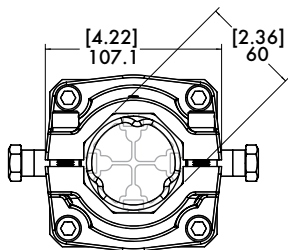
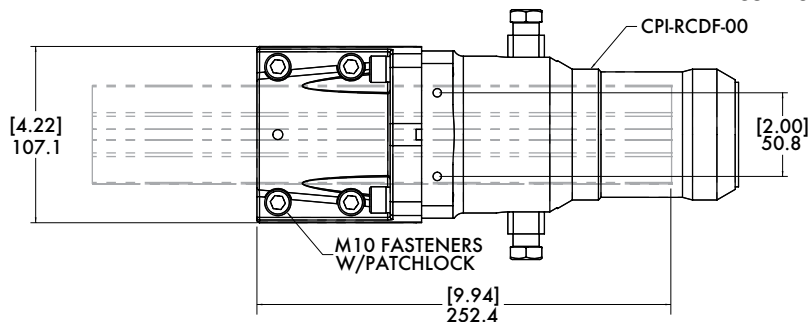
Max. Static Product Load:
746 Nm [550 ft-lb]
Material:
Body: Aluminum
Pins: Steel



Used in conjunction with Quick Disconnect Housing to provide an efficient method for changing tools manually.



Optional 4-port air and electric connections available.



Model Number	Weight
CPI-RDCF-60B-00-00-X	3.16 kg [6.96 lb]

BODYBUILDER™ STRUCTURE END MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



RDN-25-6 Manual Quick Disconnect Housing



Specifications:

Max. Static Product Load:
746 Nm [550 ft-lb]

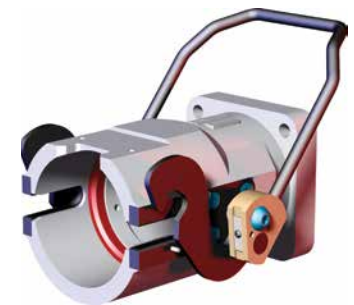
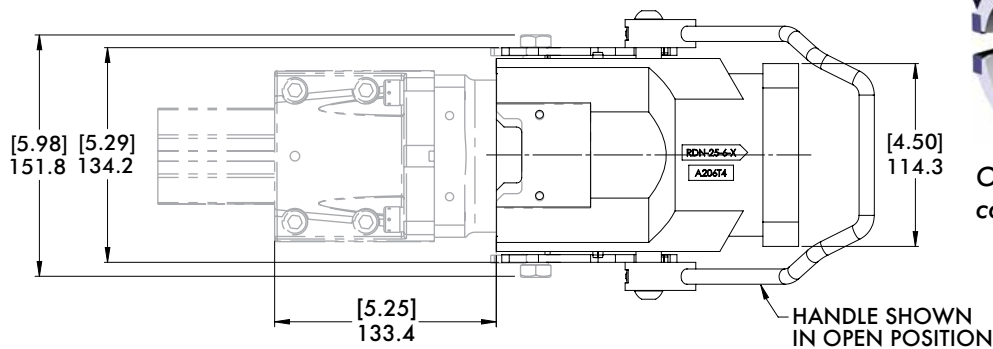
Material:

Body: Aluminum
Knuckles: Brass
Handle and Hooks: Steel
Inserts: Urethane

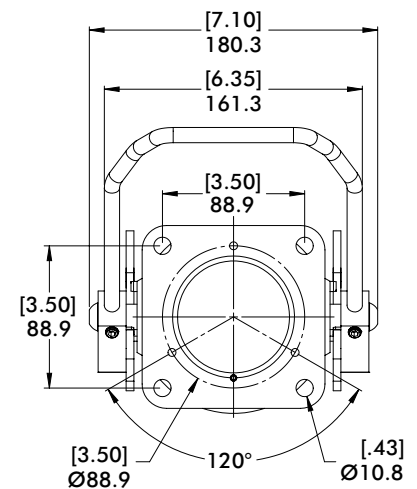
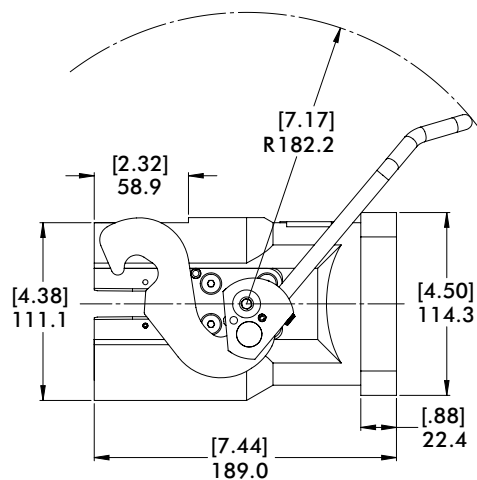
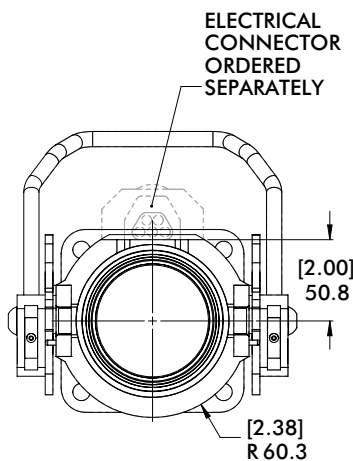
Features:

- Actuation of handle allows quick and accurate installation by pulling the bayonet into a fixed position within the housing.
- The internal rings eliminate vibration and seat the bayonet into a clamped position.
- Hardened steel retainer slots reduce wear and extend product life.

Used in conjunction with 60 mm BodyBuilder™ Bayonet to provide an efficient method for changing tools manually.



Optional 4-port air and electric connections available.



Model Number
CPI-RDN-25-6

Weight
4.00 kg [8.90 lb]

BODYBUILDER™ ALIGNMENT SYSTEM

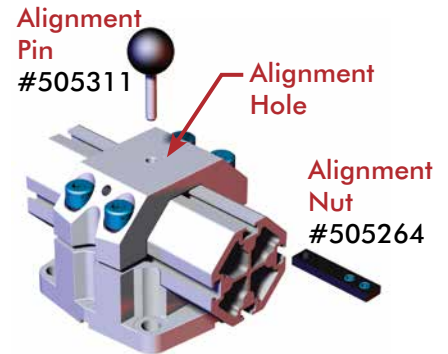


BodyBuilder™ Octagonal Tooling | Explaining the Patented Alignment System

BodyBuilder™ Robotic Tooling System offers a patented alignment system, ensuring that all BodyBuilder™ components can be adjusted to the original set-up position.

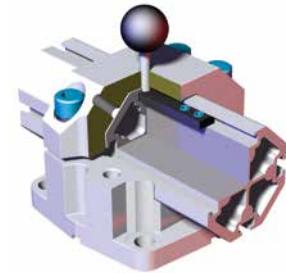
Once the BodyBuilder™ structure bracket mount is secured into place during set-up, insert the alignment nut into the octagonal boom channel groove.

Be sure the alignment nut is inserted so that when it is slid under the bracket mount, the set screws can still be accessed outside the bracket mount as shown.

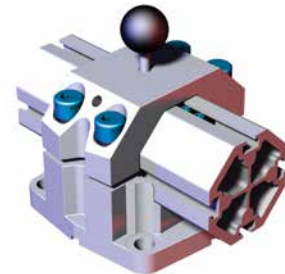


Slide the alignment nut along the boom groove and underneath the bracket mount until the hole in the block and the appropriate calibration hole in the bracket mount is aligned visual.

Insert the alignment pin into the alignment hole of the bracket mount, through the alignment nut until it stops in the groove of the boom channel.



With the alignment pin in place, the alignment nut should not move. Secure bracket mount in the channel groove by tightening the two set screws. Remove alignment pin as it is used as a probe for alignment purposes only.



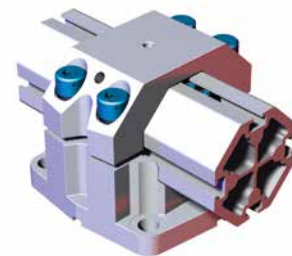
The alignment nut remains in place even when the bracket mount is removed.

To order replacement alignment pin or nut, please use the following order numbers:

Alignment Pin #505311, Alignment Nut #505264



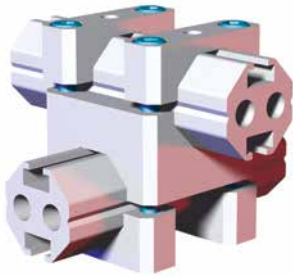
To Replace the Bracket mount, place the assembled bracket mount on the Bodybuilder™ boom until the alignment holes are visually aligned. Insert the alignment pin to secure bracket mount in place, and tighten the fasteners.



Remove the alignment pin and continue tightening the fasteners to specified torque values.

U.S. PATENT 6,349,912

CLM-30B-30B 30mm to 30mm (Micro) Transition Bracket Assembly



Specifications:

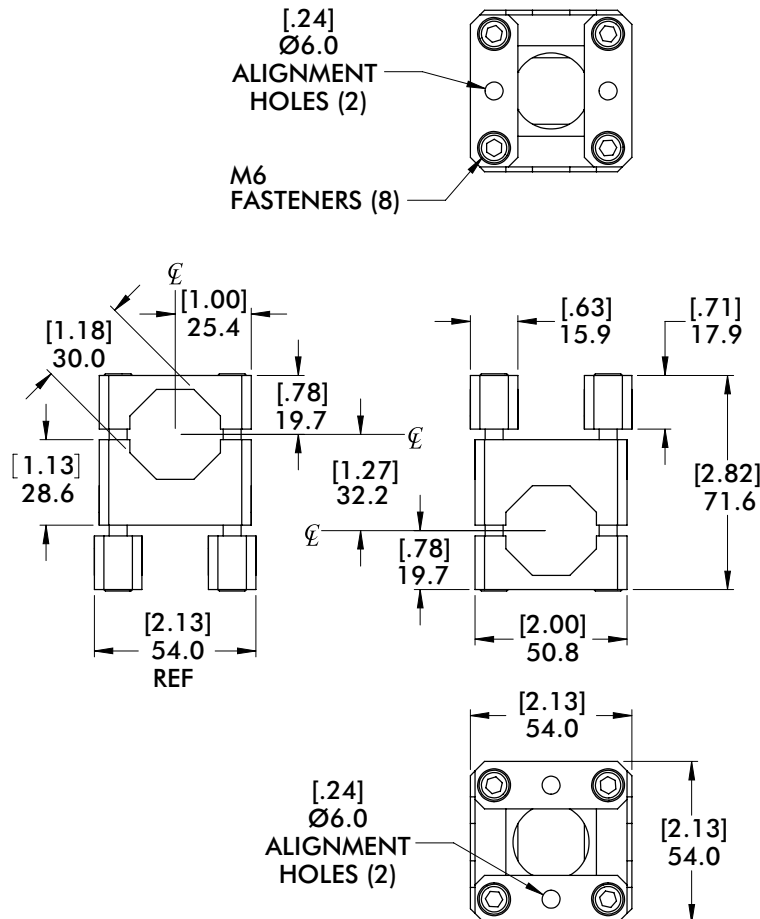
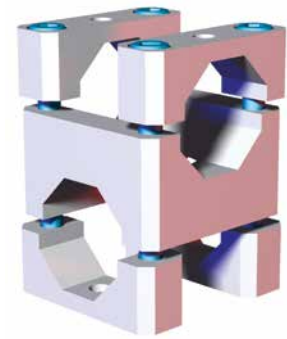
Max. Static Clamp Load:

102 Nm [75 ft-lb]

Material: Aluminum

Features:

- Connects (2) 30mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.



Model Number	Weight
CPI-CLM-30B-30B	.24 kg [.54 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



30B-30B 30mm to 30mm Transition Bracket Assembly

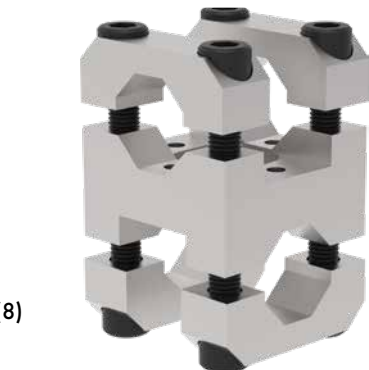
Features:

- Connects (2) 30mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

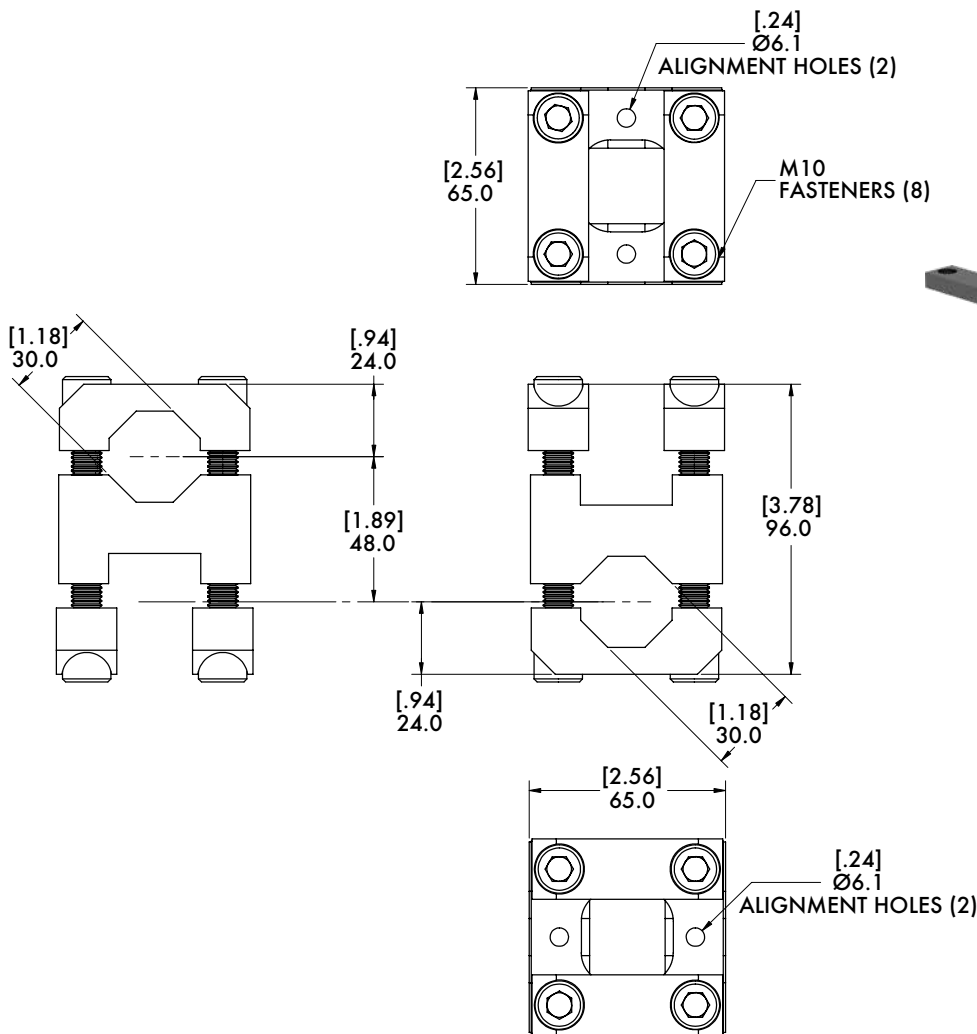
Specifications:

Max. Static Clamp Load:
30mm: 271 Nm [200 ft-lb]

Material: Aluminum



ALIGNMENT NUTS INCLUDED



Model Number	Weight
M-30B-30B-M	.82 kg [1.80 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



30B-45B 30mm to 45mm Transition Bracket Assembly

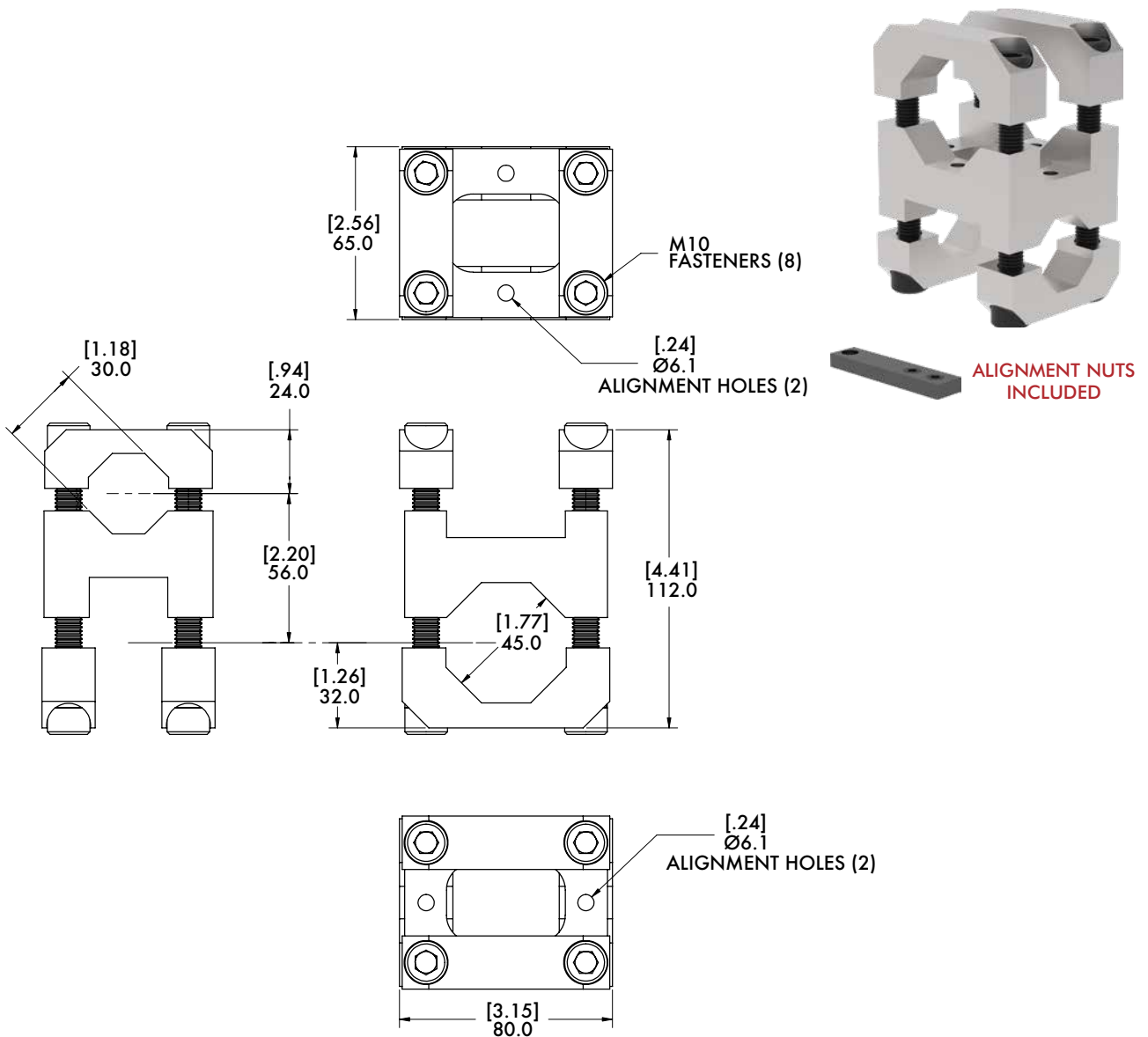


Specifications:

Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Connects 30mm and 45mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.



Model Number	Weight
M-30B-45B-M	1.00 kg [2.20 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



45B-45B 45mm to 45mm Transition Bracket Assembly

Features:

- Connects (2) 45mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design

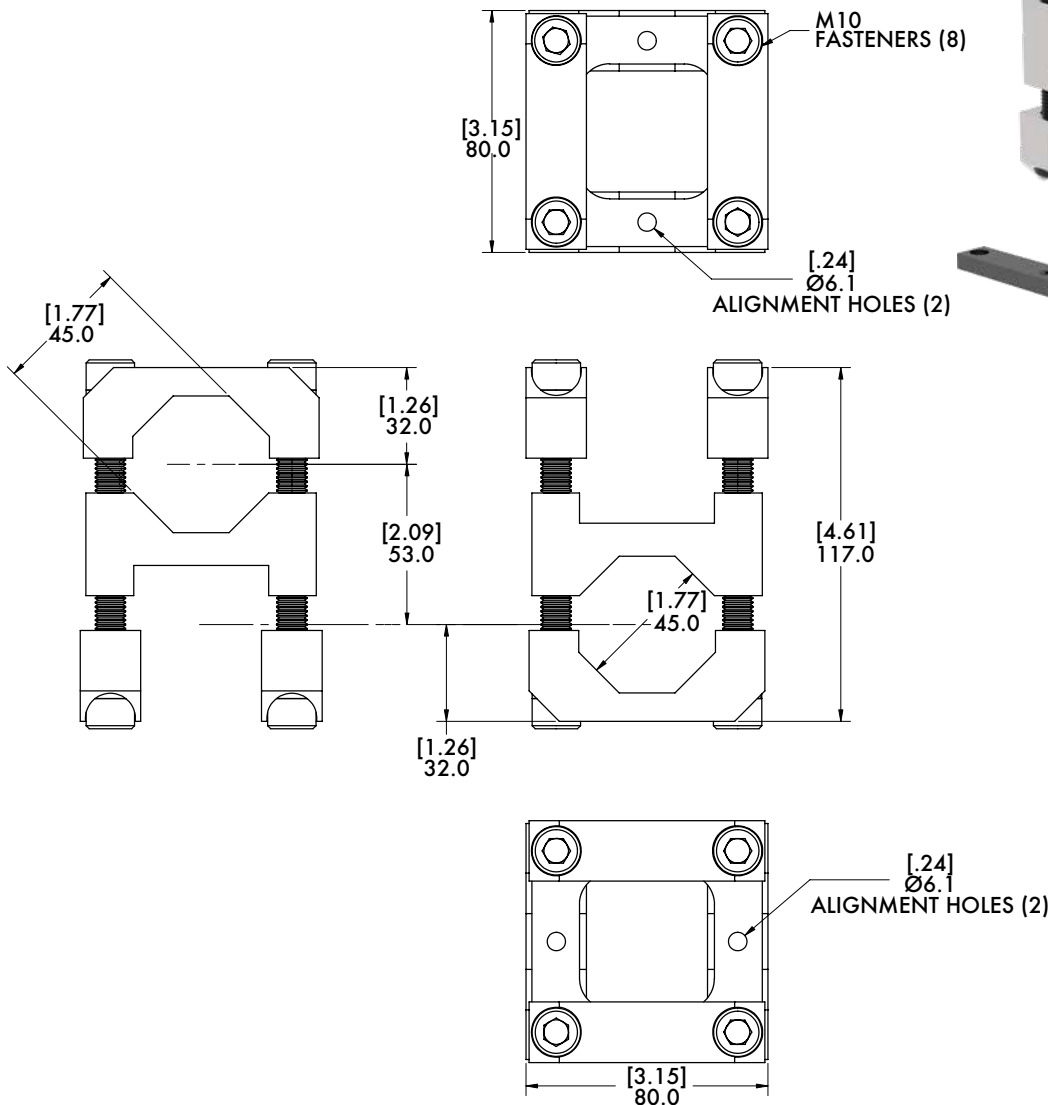
Specifications:

Max. Static Clamp Load:
45mm: 475 Nm [350 ft-lb]

Material: Aluminum



ALIGNMENT NUTS INCLUDED



Model Number	Weight
M-45B-45B-M	1.05 kg [2.31 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



30B-60B 30mm to 60mm Transition Bracket Assembly



Specifications:

Max. Static Clamp Load:

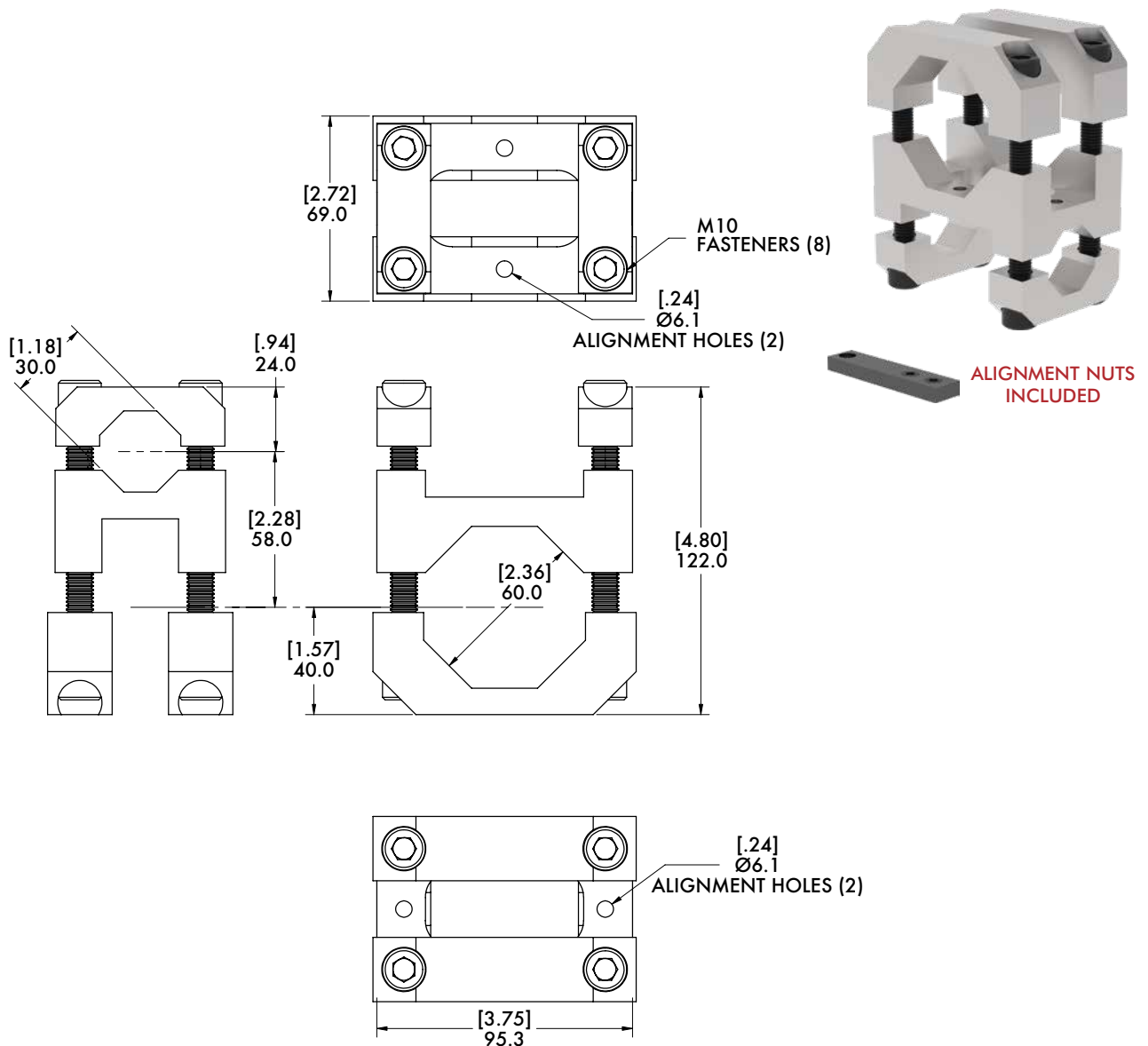
60mm: 746 Nm [550 ft-lb]

30mm: 271 Nm [200 ft-lb]

Material: Aluminum

Features:

- Connects 30mm and 60mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.



Model Number	Weight
M-30B-60B-M	1.13 kg [2.50 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



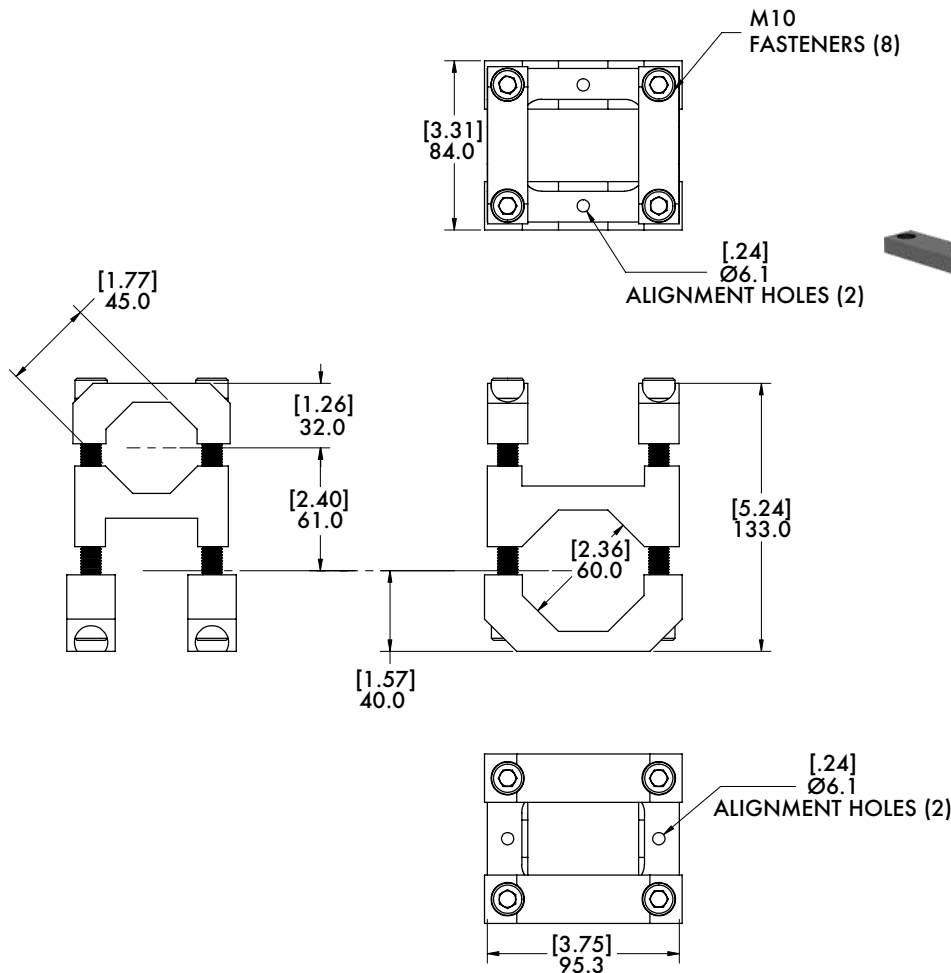
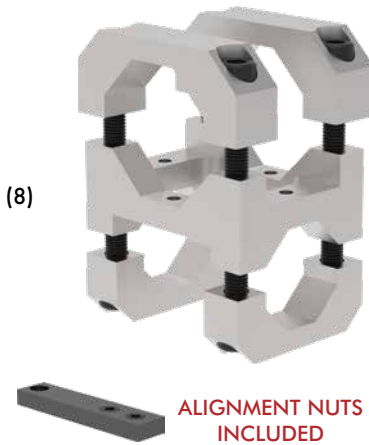
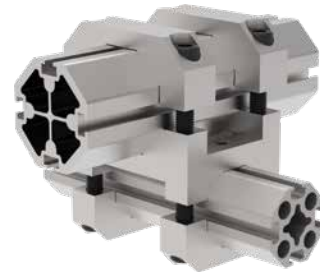
45B-60B 45mm to 60mm Transition Bracket Assembly

Features:

- Connects 45mm and 60mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 45mm: 475 Nm [350 ft-lb]
Material: Aluminum



Model Number	Weight
M-45B-60B-M	1.23 kg [2.70 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



60B-60B 60mm to 60mm Transition Bracket Assembly

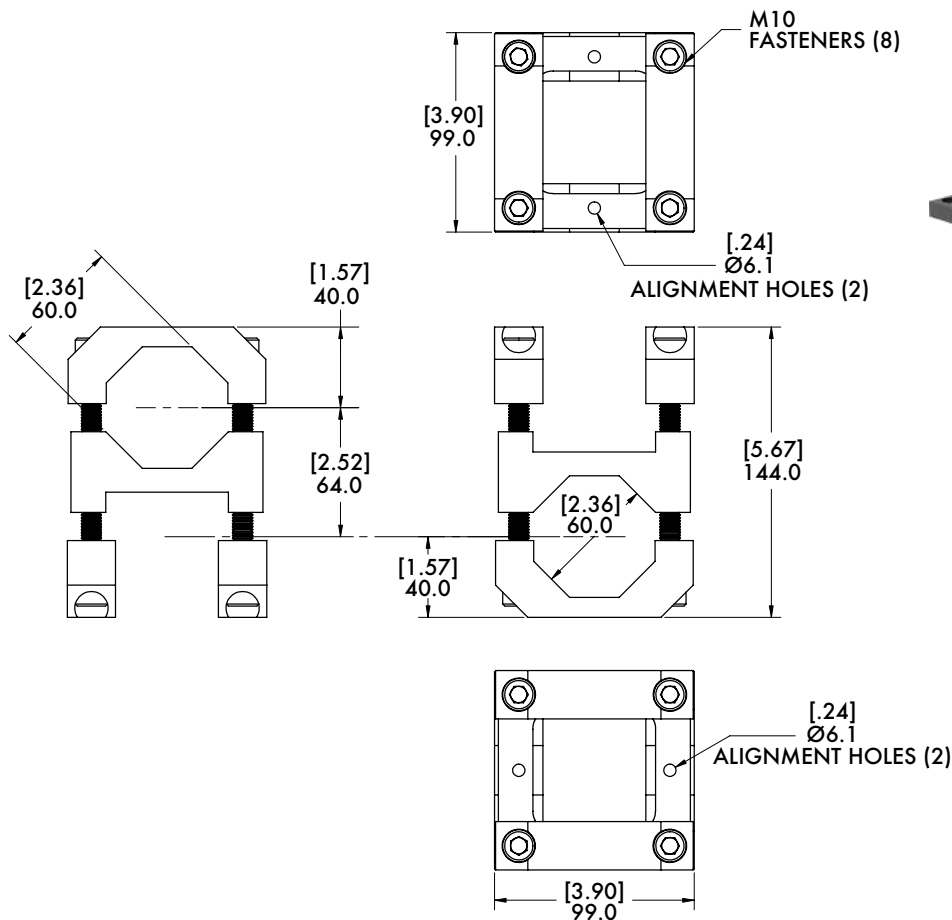
Specifications:

Max. Static Clamp Load:
60mm: 746 Nm [550 ft-lb]

Material: Aluminum

Features:

- Connects (2) 60mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design



Model Number	Weight
M-60B-60B-M	1.36 kg [3.00 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



30B-90B 30mm to 90mm Transition Bracket Assembly

Features:

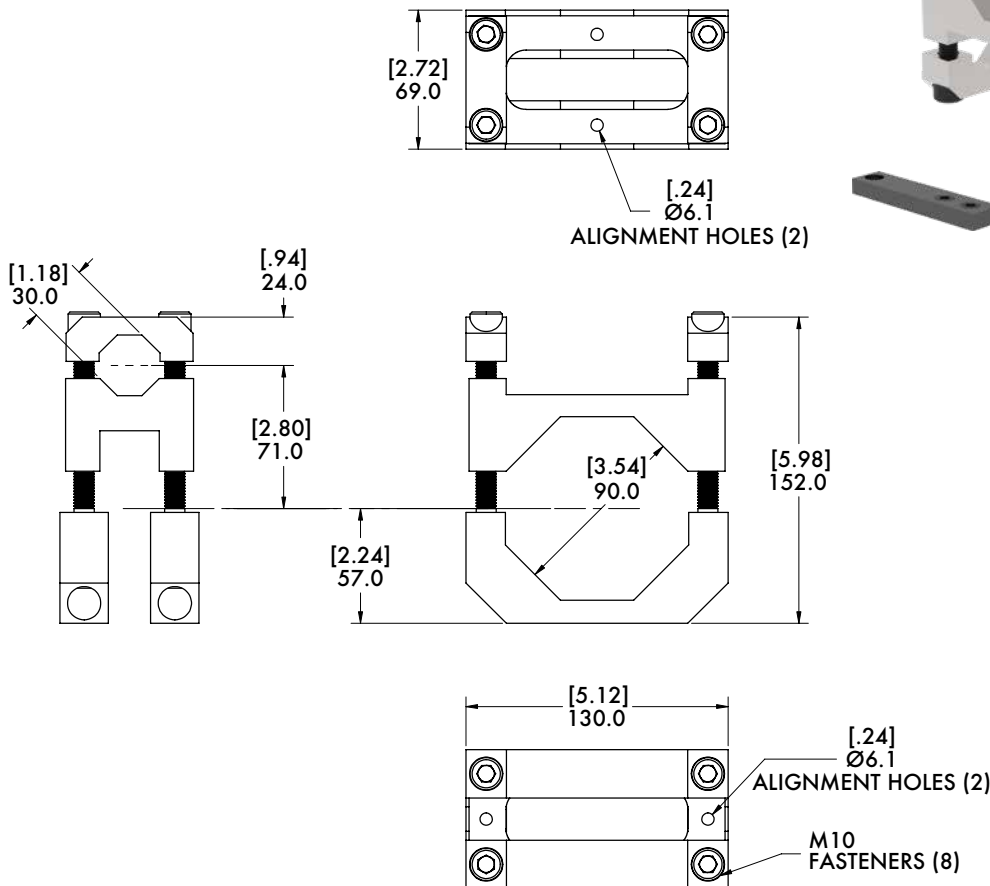
- Connects 30 and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:
 30mm: 271 Nm [200 ft-lb]
 90mm: 746 Nm [550 ft-lb]
Material: Aluminum



ALIGNMENT NUTS INCLUDED



Model Number	Weight
M-30B-90B-M	1.78 kg [3.93 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



45B-90B 45mm to 90mm Transition Bracket Assembly

Specifications:

Max. Static Clamp Load:

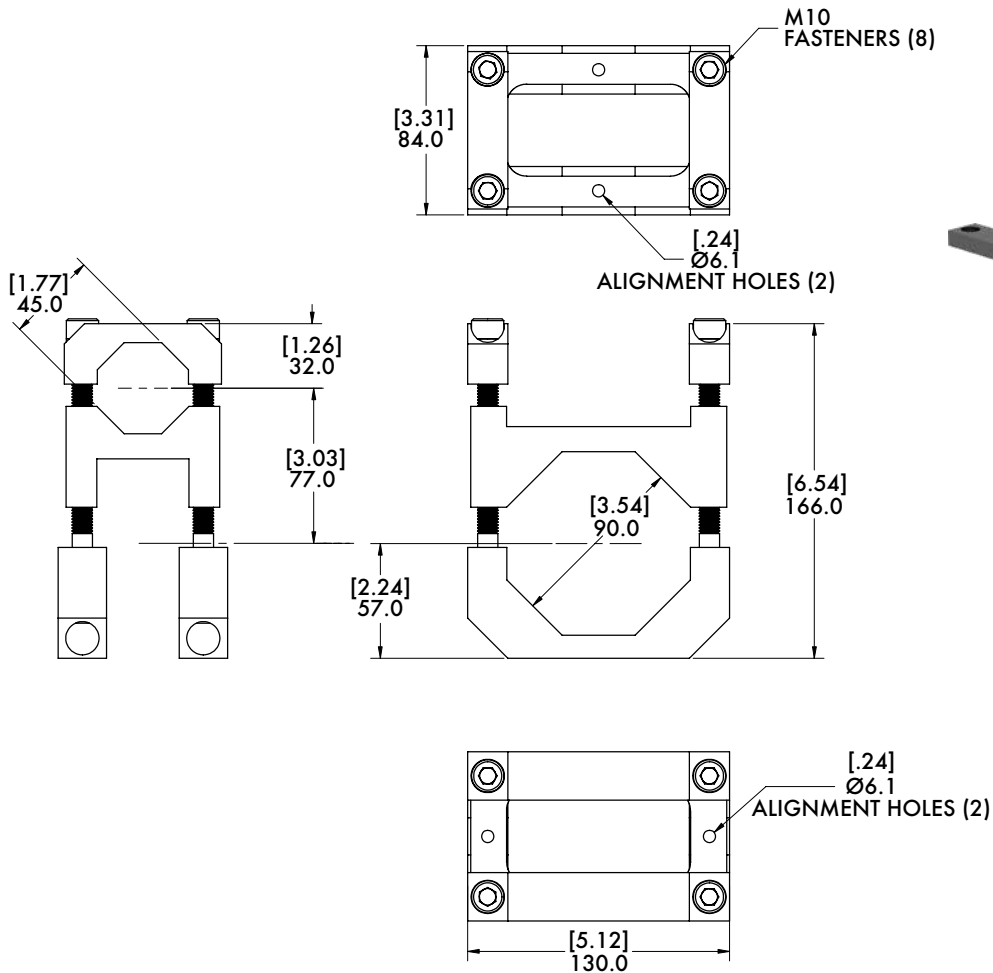
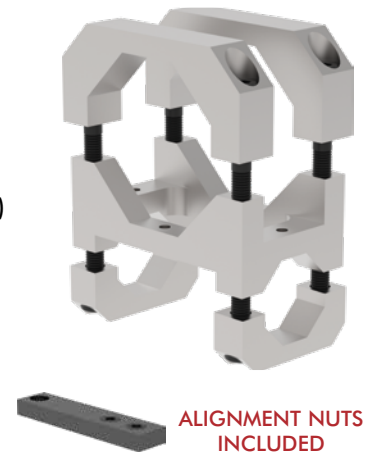
45mm: 475 Nm [350 ft-lb]

90mm: 746 Nm [550 ft-lb]

Material: Aluminum

Features:

- Connects 45 and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.



Model Number	Weight
M-45B-90B-M	1.91 kg [4.21 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



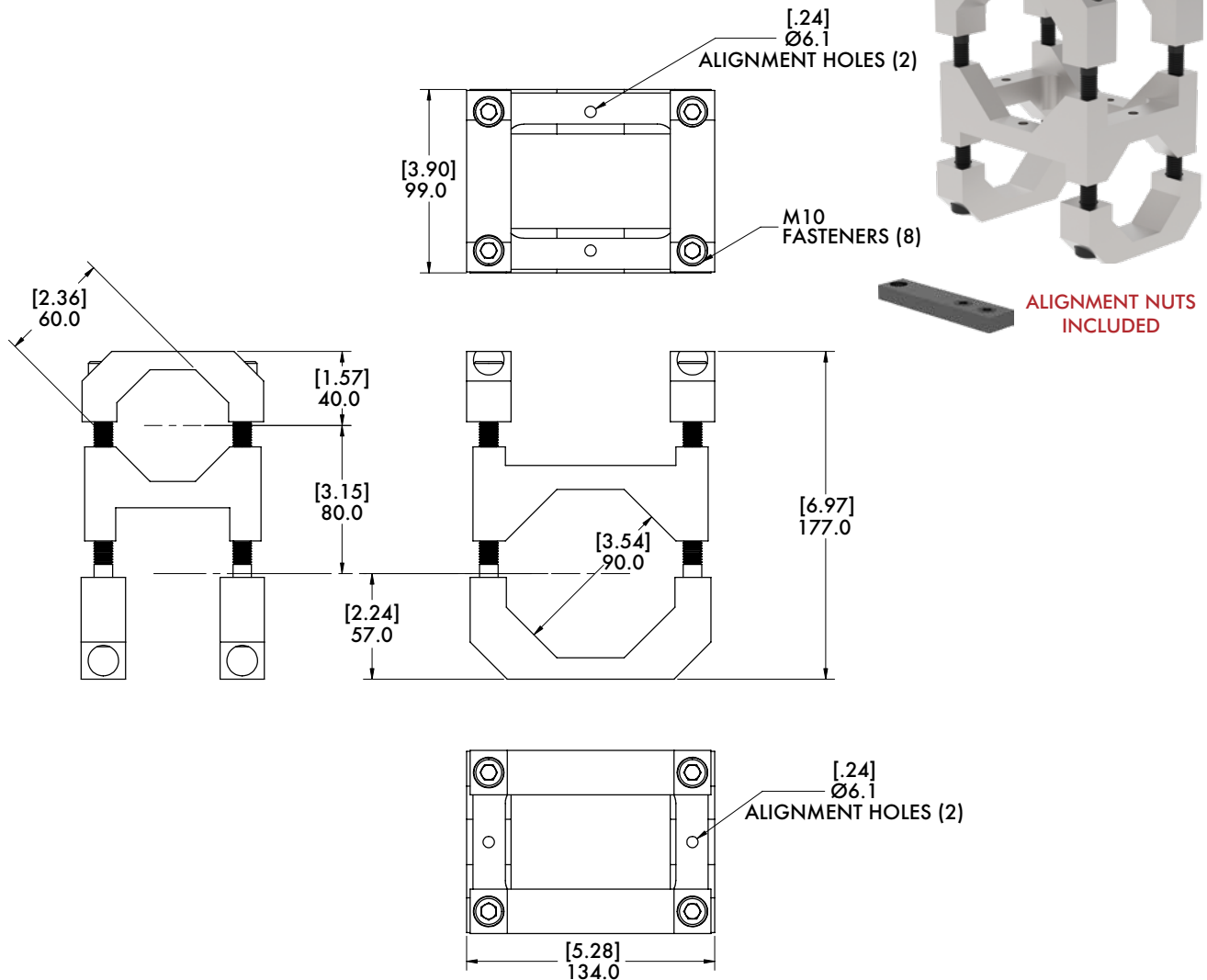
60B-90B 60mm to 90mm Transition Bracket Assembly

Features:

- Connects 60mm and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

Maximum Clamp Load:
60mm and 90mm:
746 Nm [550 ft-lb]
Material: Aluminum



Model Number	Weight
M-60B-90B-M	2.25 kg [4.97 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



90B-90B 90mm to 90mm Transition Bracket Assembly

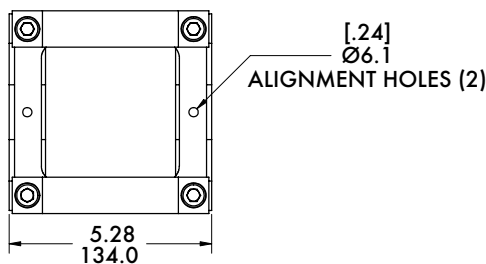
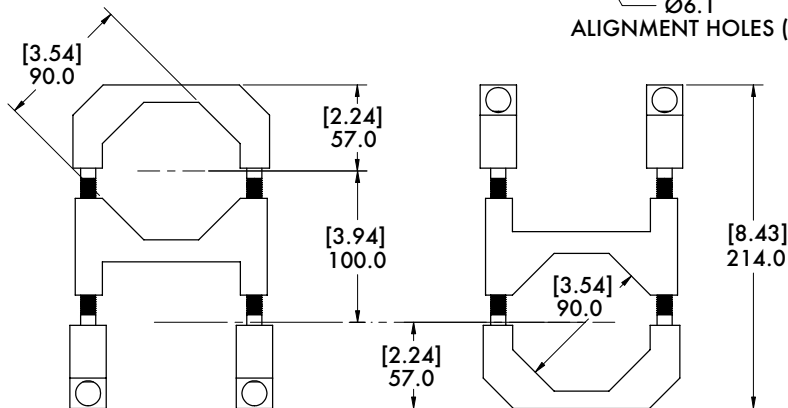
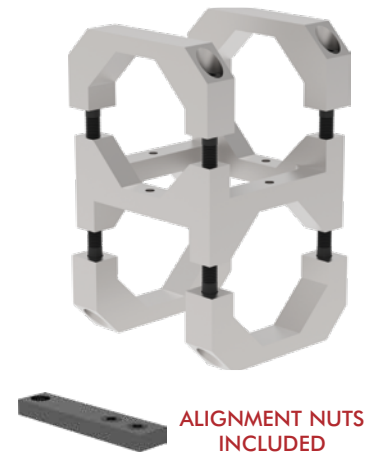
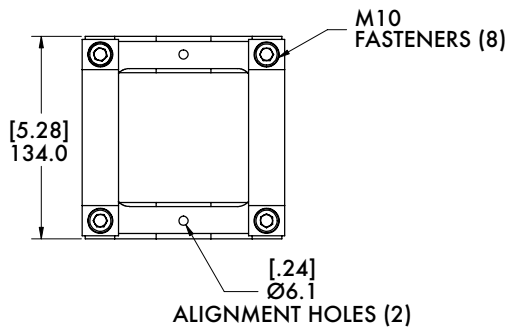
Specifications:

Max. Static Clamp Load:
746 Nm [550 ft-lb]

Material: Aluminum

Features:

- Connects (2) 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.



Model Number	Weight
M-90B-90B-M	3.33 kg [7.34 lb]

BODYBUILDER™ SQUARE CLAMPS

BodyBuilder™ Octagonal Tooling | Octagon to Round Transition Block Assembly



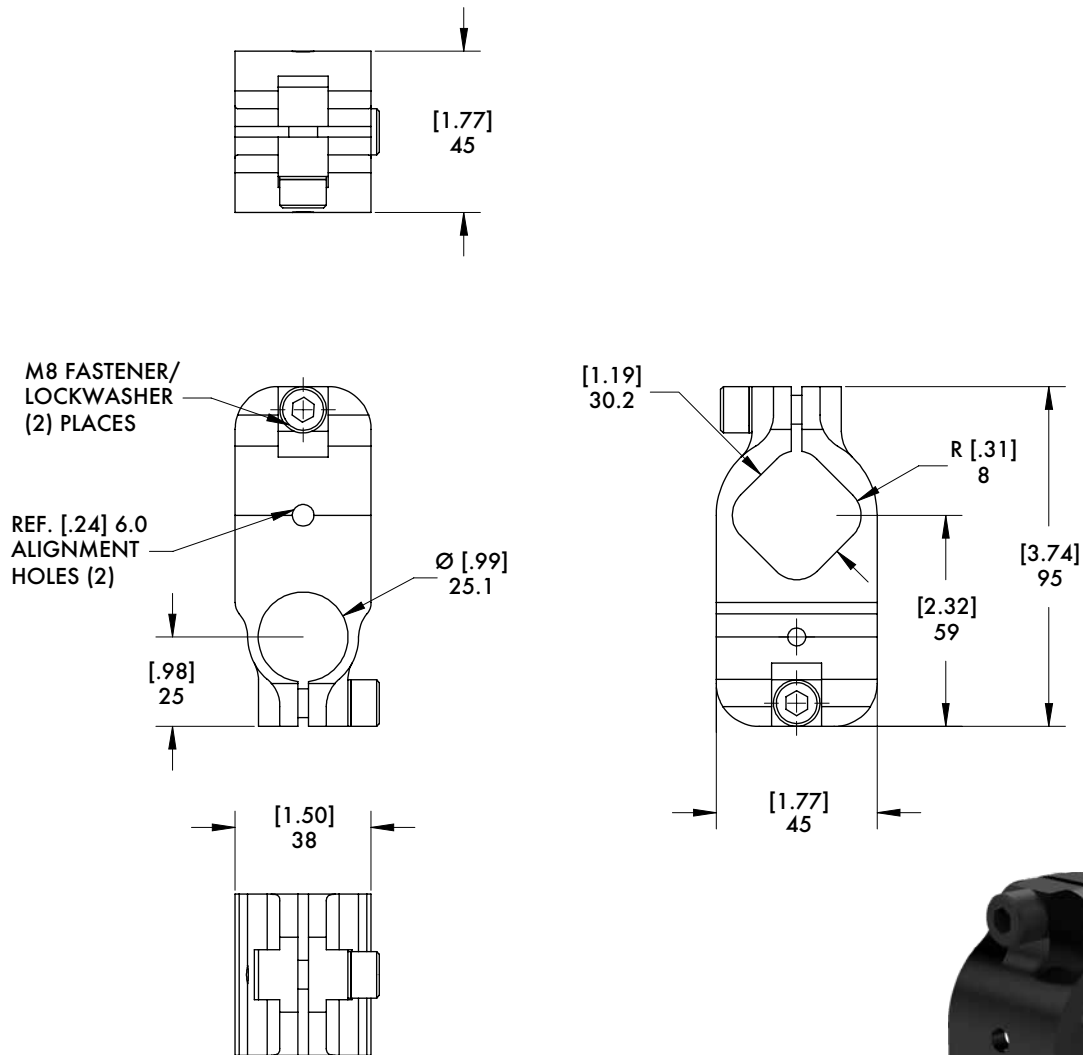
30B-25M 30mm Octagon to 25mm Round

Specifications:

Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



Model Number	Weight
M-30B-25M-M	203g [0.45lbs]

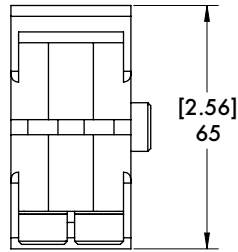
45B-25M (-10E) 45mm Octagon to 25mm or 1 in. Round

Specifications:

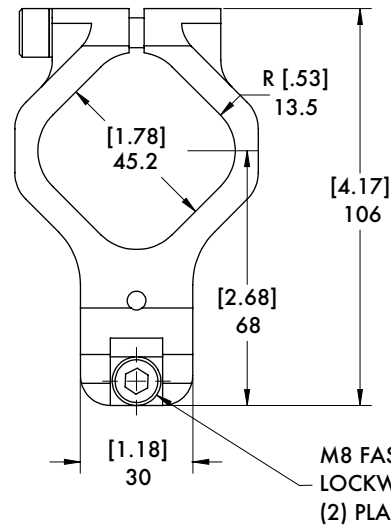
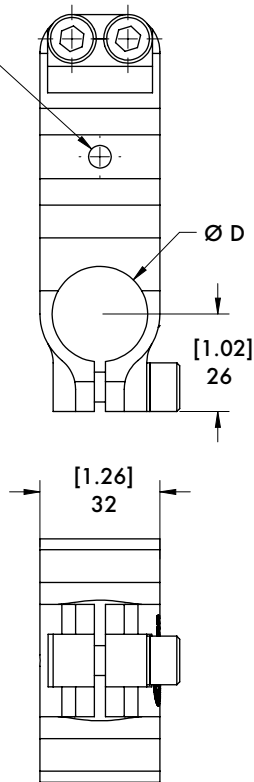
Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



REF. [.24] 6.0
ALIGNMENT
HOLES (2)



M8 FASTENERS/
LOCKWASHERS
(2) PLACES



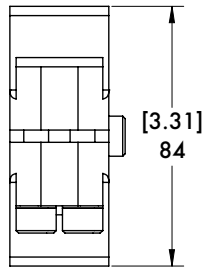
Model Number	Weight	ØD
M-45B-25M-M	239g [0.53lbs]	25mm
M-45B-10E-M	237g [0.52lbs]	1 in.

TRANSITION SQUARE CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

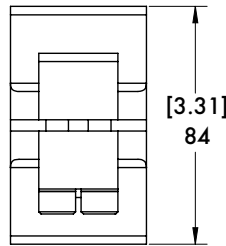


60B-25M 60mm Octagon to 25mm Round

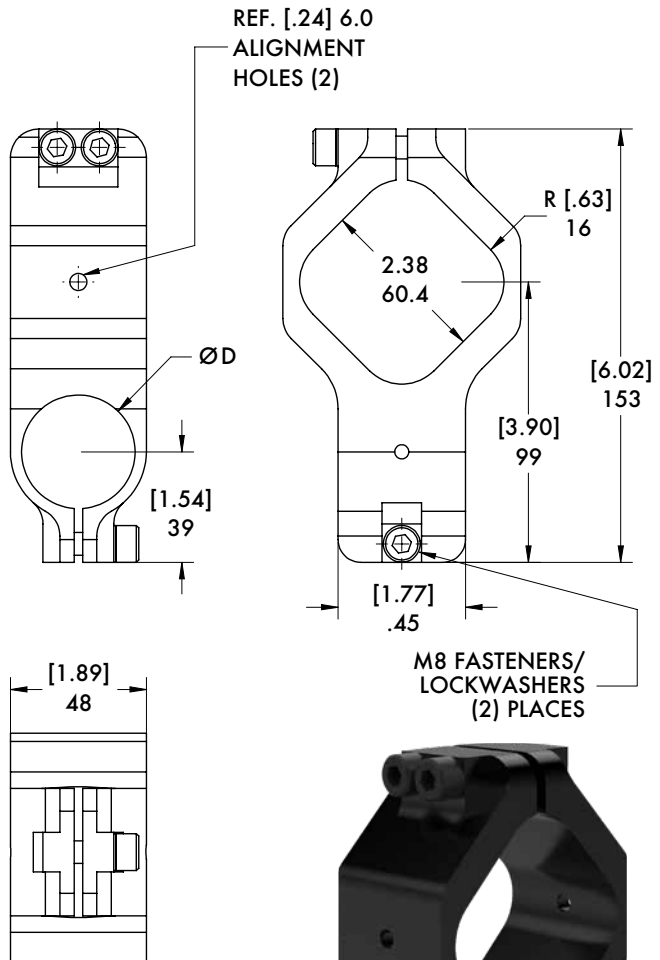
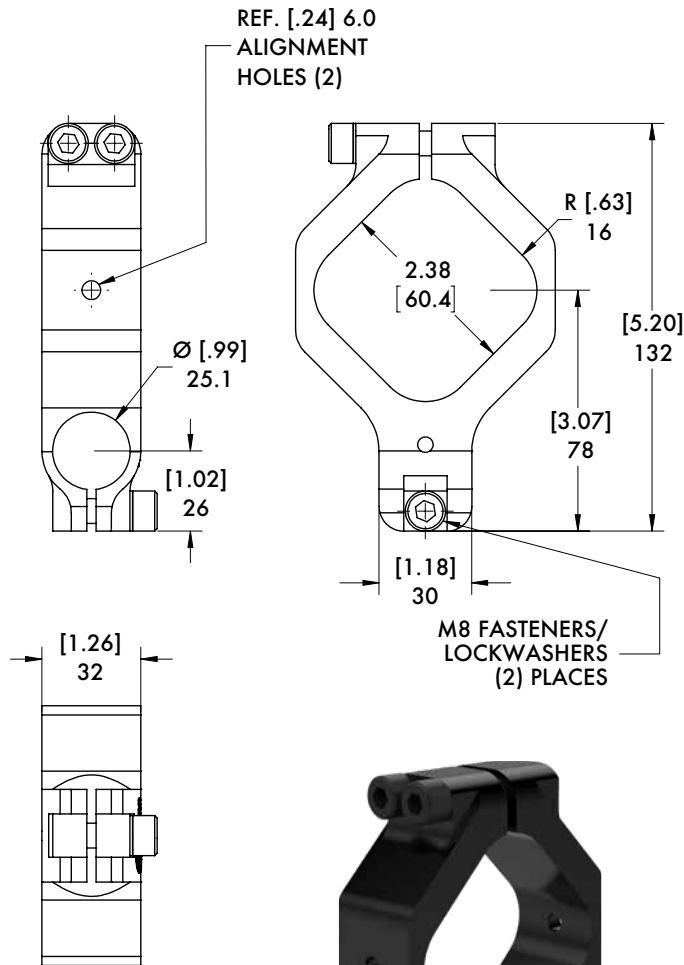


Specifications:
 Max. Static Clamp Load:
 407 Nm [300 ft-lb]
 Material: High Strength Aluminum

60B-40M (-15E) 60mm Octagon to 40mm or 1.5 in. Round



Specifications:
 Max. Static Clamp Load:
 813 Nm [600 ft-lb]
 Material: High Strength Aluminum



Model Number	Weight
M-60B-25M-M	356g [0.78lbs]

Model Number	Weight	ØD
M-60B-40M-M	520g [1.15lbs]	40mm
M-60B-15E-M	535g [1.18lbs]	1.5 in.

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



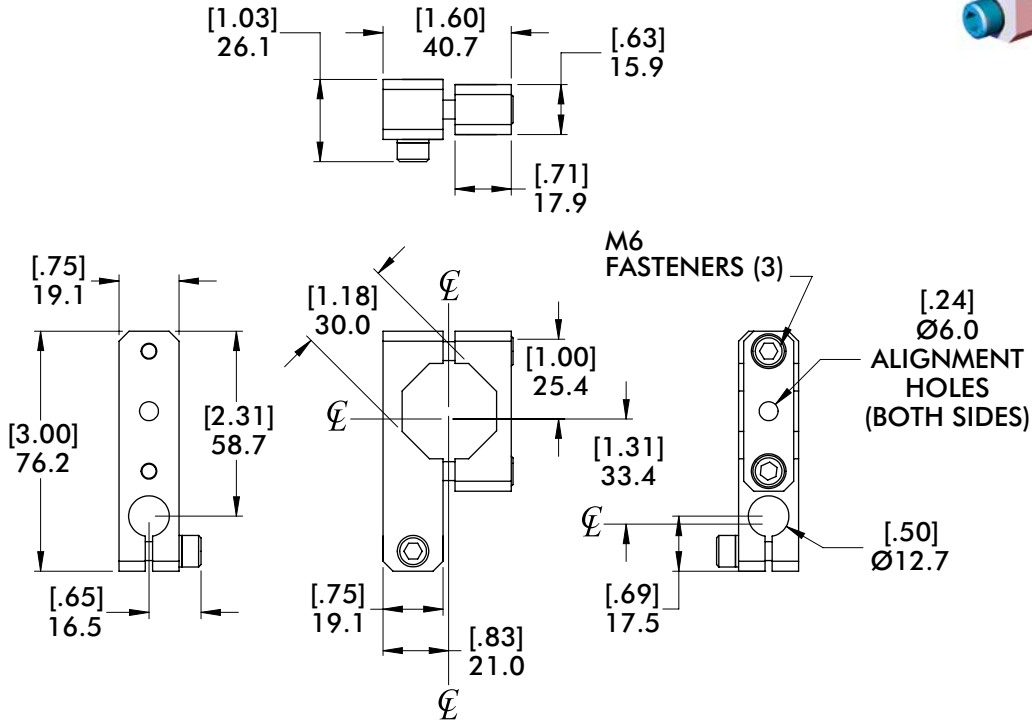
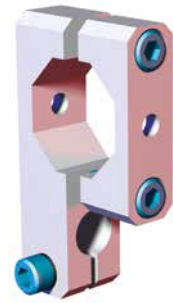
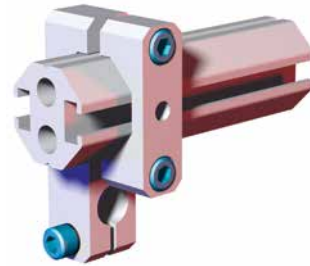
CLM-30B-50 30mm Octagon to Ø50"(in) Round Transition Bracket Assembly

Features:

- Connects BodyBuilder™ extrusion and round tubing perpendicular to each other.
- Lightweight, high-strength aluminum design.

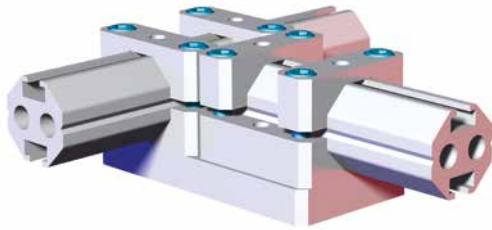
Specifications:

Max. Static Clamp Load:
102 Nm [75 ft-lb]
Material: Aluminum



Model Number	Weight
CPI-CLM-30B-50-TR	.092 kg [.20 lb]

TCAM-30B-30B 30mm to 30mm Octagon (Micro) T-Clamp Bracket Assembly

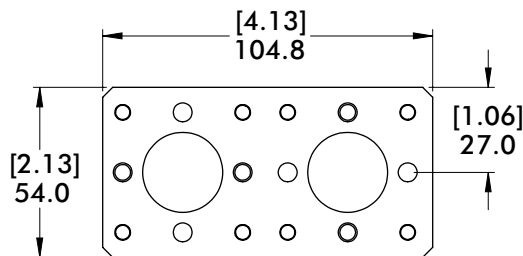
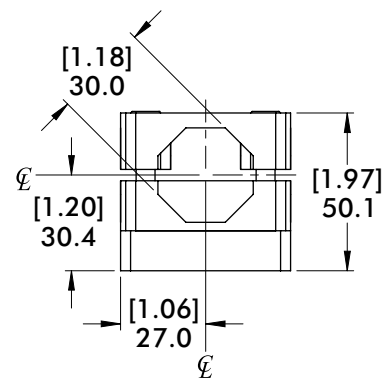
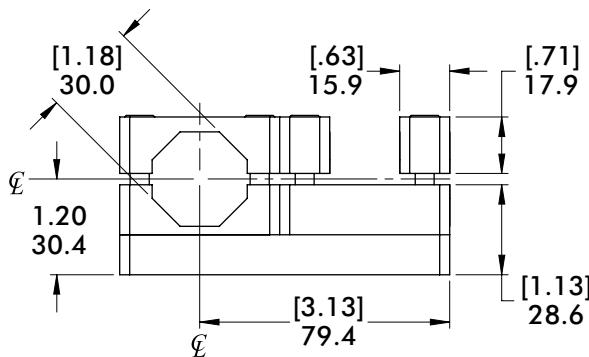
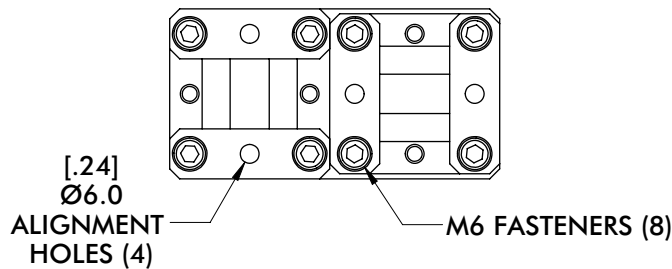
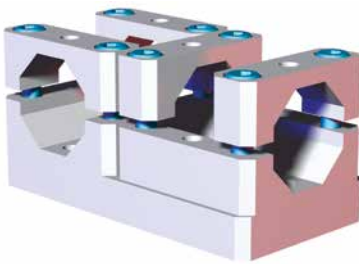


Specifications:

Max. Static Clamp Load:
102 Nm [75 ft-lb]
Material: Aluminum

Features:

- Connects (2) 30mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Model Number	Weight
CPI-TCAM-30B-30B-M	.45 kg [.99 lb]

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

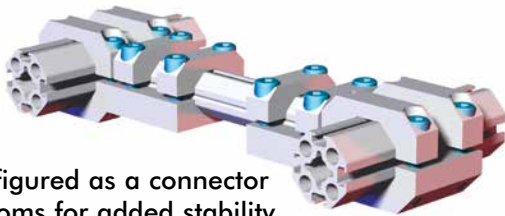
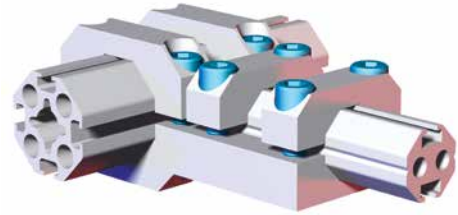
TCA-30B-45B 30mm to 45mm Octagon T-Clamp Bracket Assembly

Features:

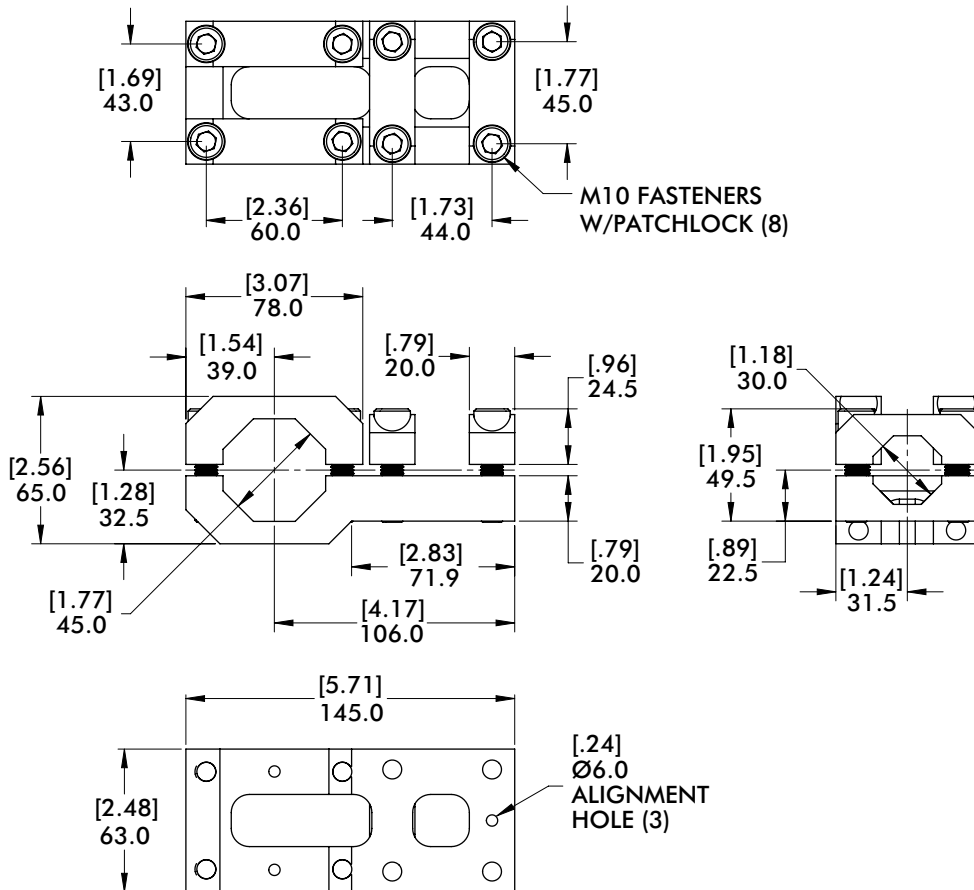
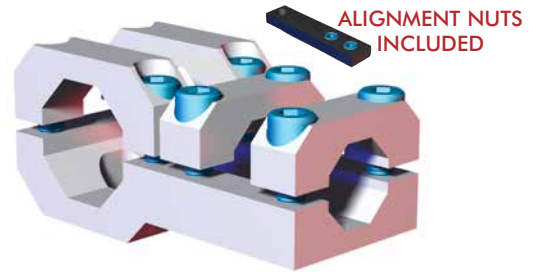
- Connects 30mm and 45mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum

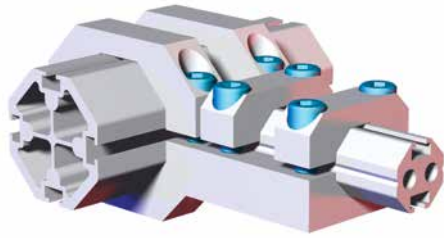


Can be configured as a connector between booms for added stability



Model Number	Weight
CPI-TCA-30B-45B	.80 kg [1.76 lb]

TCA-30B-60B 30mm to 60mm Octagon T-Clamp Bracket Assembly

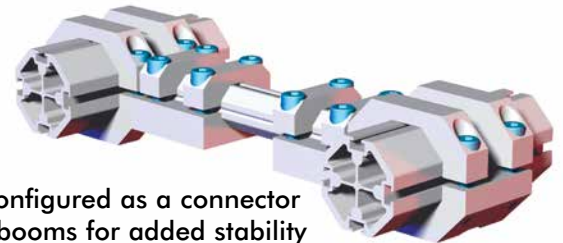
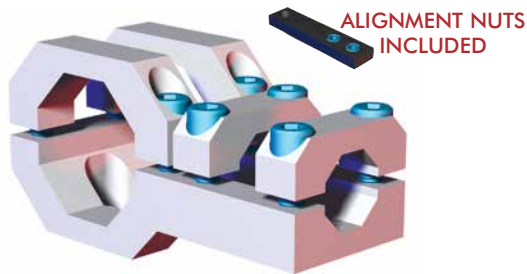


Specifications:

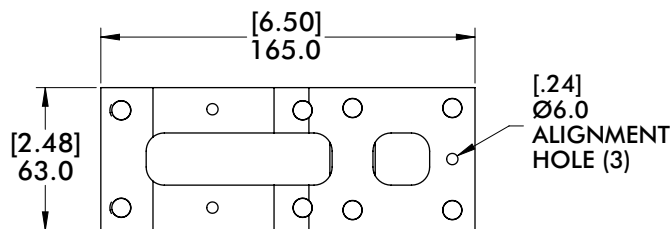
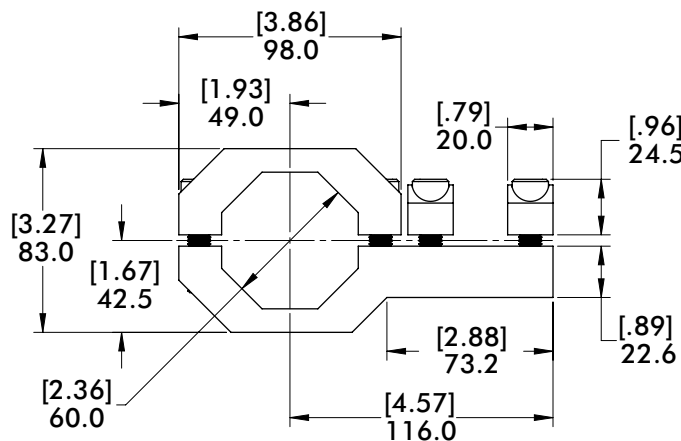
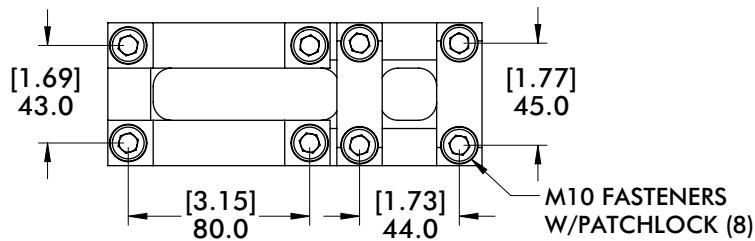
Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Connects 30mm and 60mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Can be configured as a connector between booms for added stability



Model Number	Weight
CPI-TCA-30B-60B	1.23 kg [2.71 lb]

BODYBUILDER™ T-CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



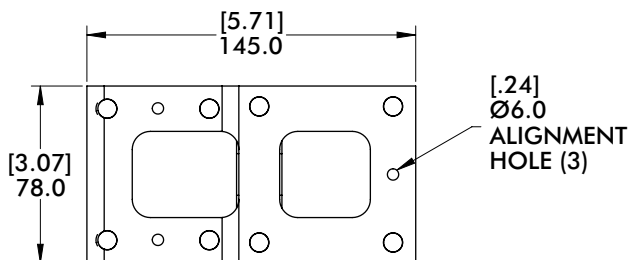
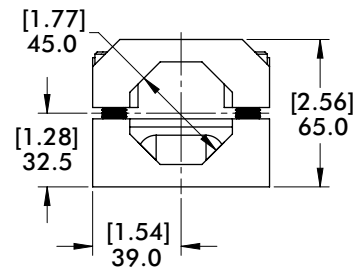
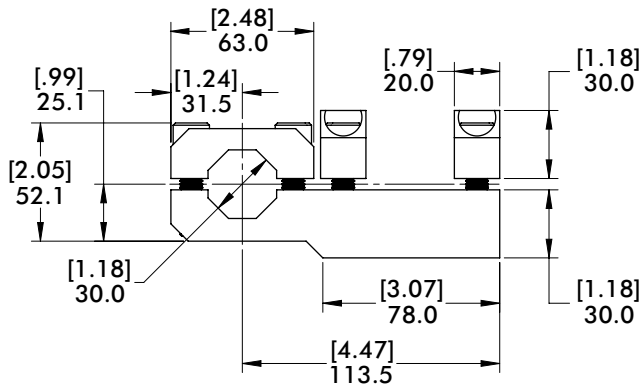
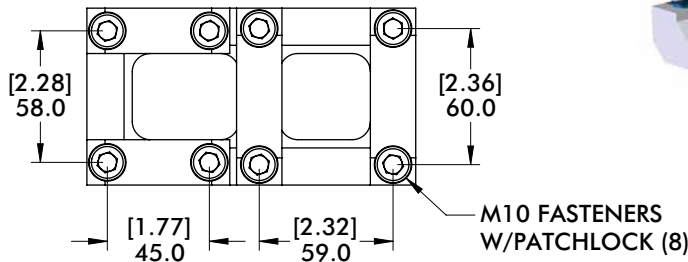
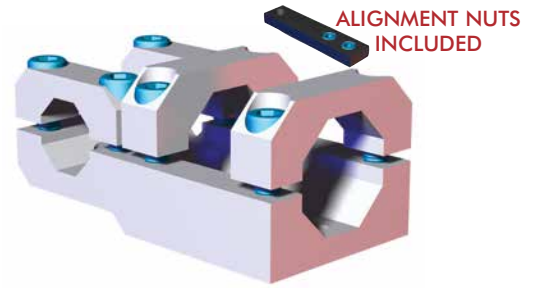
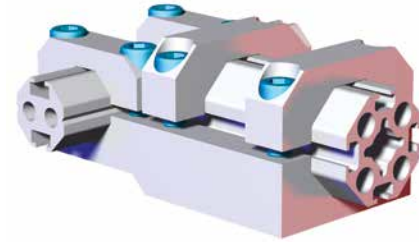
TCA-45B-30B 45mm to 30mm Octagon T-Clamp Bracket Assembly

Features:

- Connects 45mm and 30mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

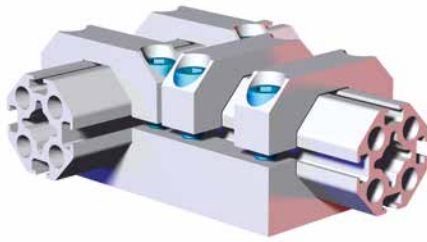
Specifications:

Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum



Model Number	Weight
CPI-TCA-45B-30B	.91 kg [2.02 lb]

TCA-45B-45B 45mm to 45mm Octagon T-Clamp Bracket Assembly



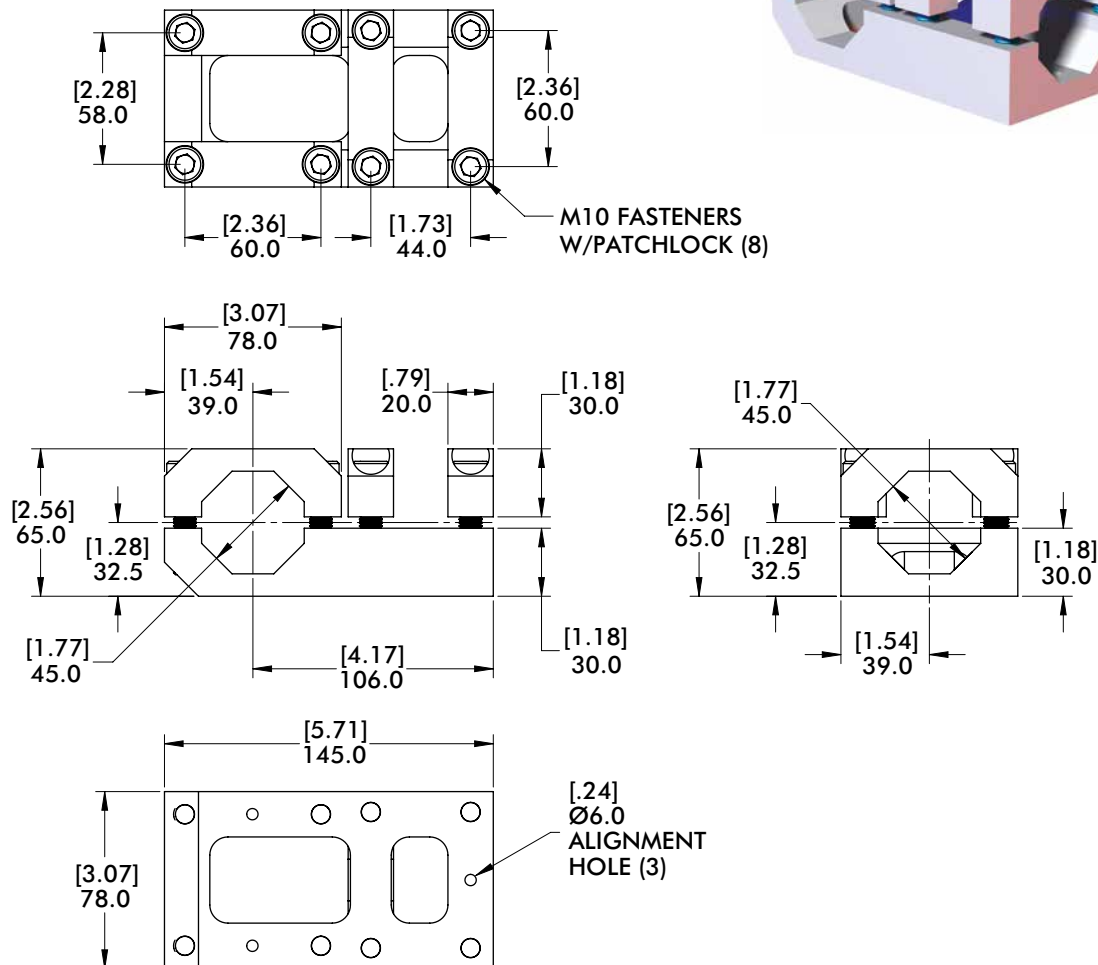
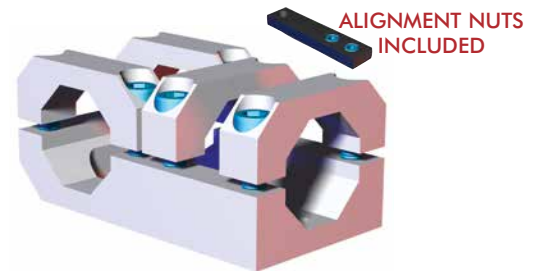
Specifications:

Max. Static Clamp Load:
45mm: 475 Nm [350 ft-lb]

Material: Aluminum

Features:

- Connects (2) 45mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Model Number	Weight
CPI-TCA-45B-45B	.95 kg [2.09 lb]

BODYBUILDER™ T-CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



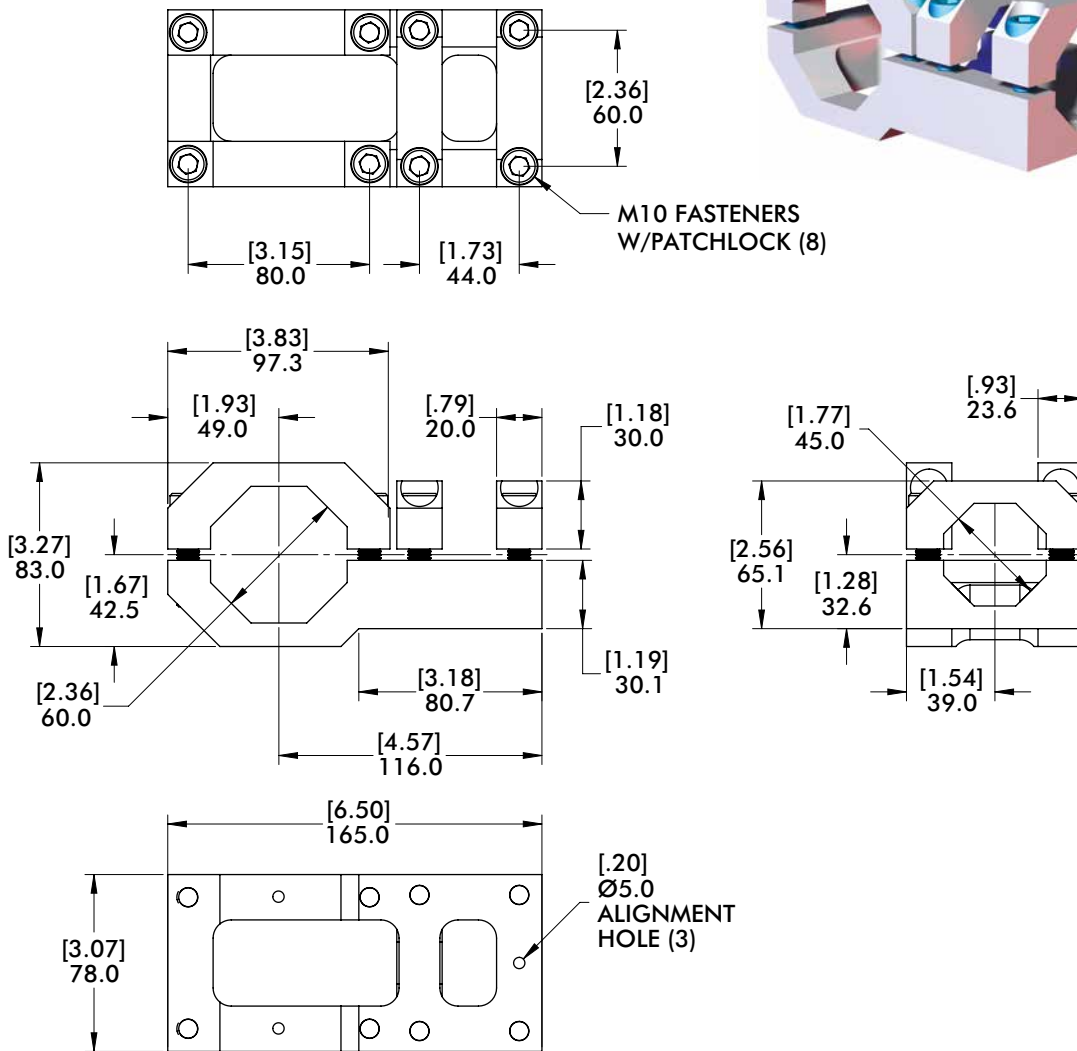
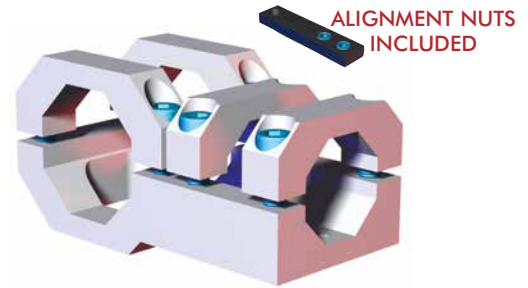
TCA-45B-60B 45mm to 60mm Octagon T-Clamp Bracket Assembly

Features:

- Connects 45mm and 60mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

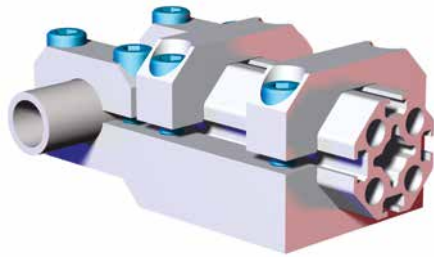
Specifications:

Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 45mm: 475 Nm [350 ft-lb]
Material: Aluminum



Model Number	Weight
CPI-TCA-45B-60B	1.21 kg [2.67lb]

TCA-45B-25M 45mm Octagon to 25mm Round T-Clamp Bracket Assembly

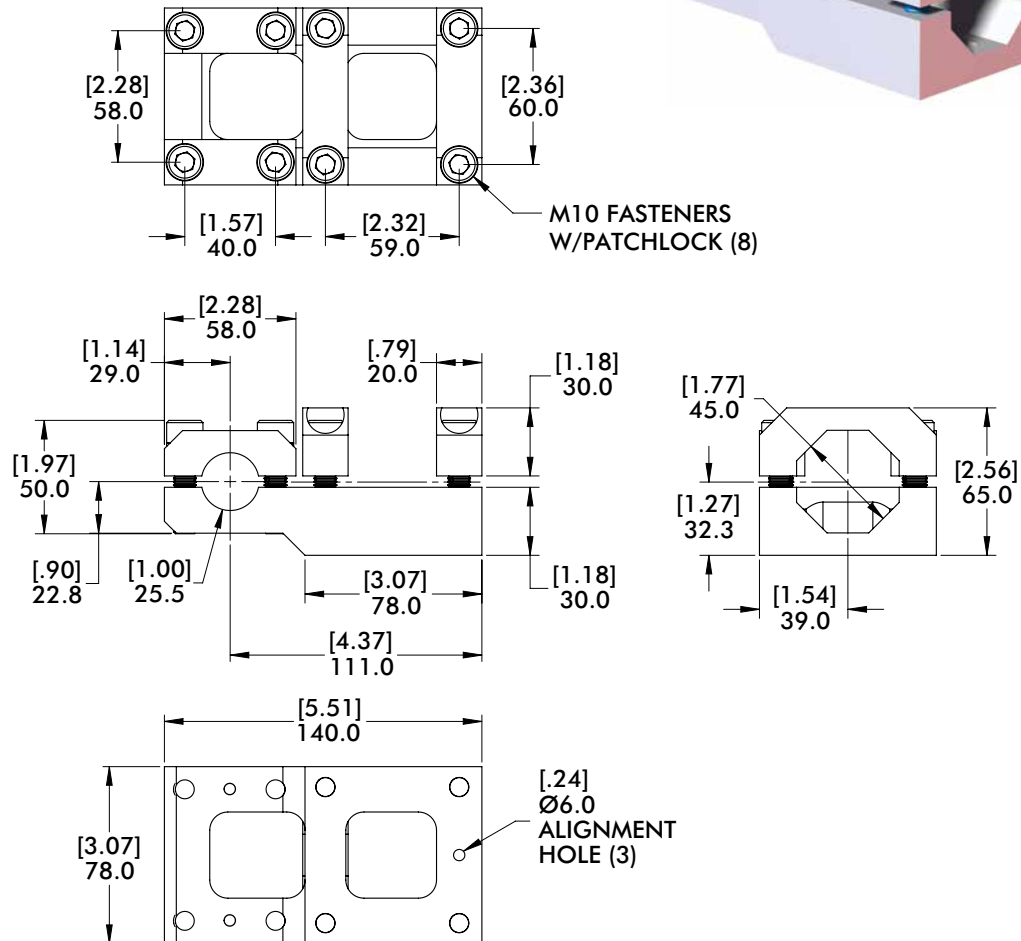
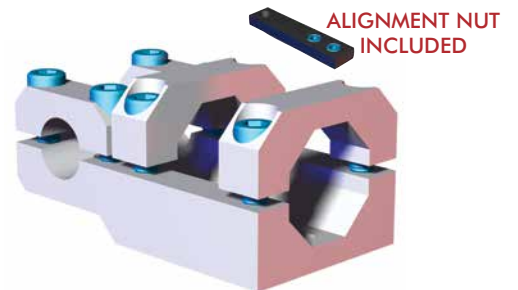


Specifications:

Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 25mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Connects 45mm octagon and 25mm round perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Model Number	Weight
CPI-TCA-45B-25M	.89 kg [1.97lb]

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

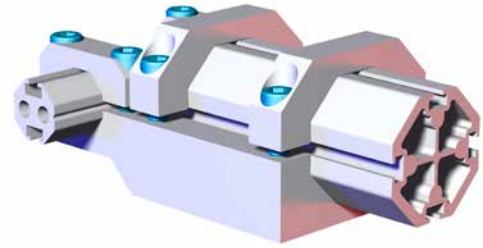
TCA-60B-30B 60mm to 30mm octagon T-Clamp Bracket Assembly

Features:

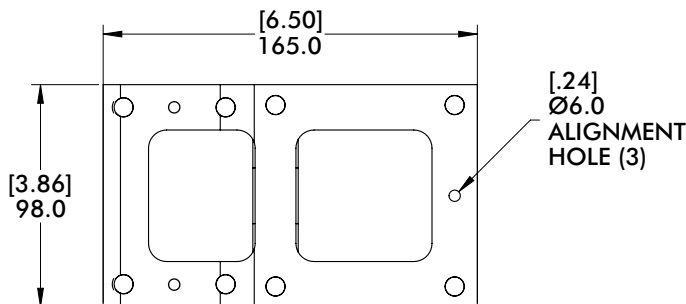
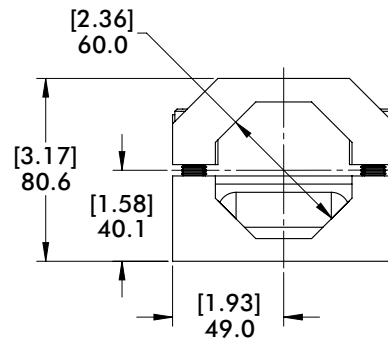
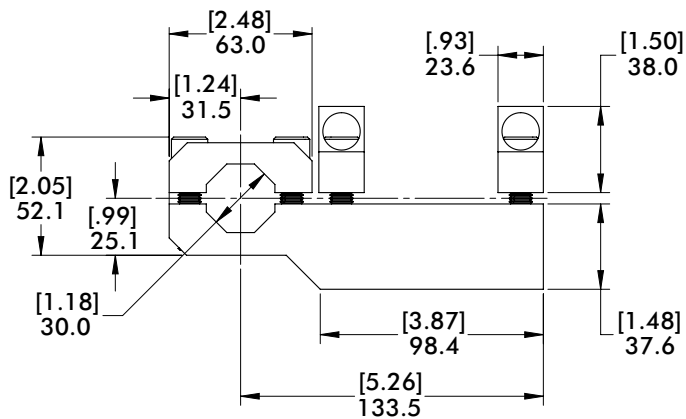
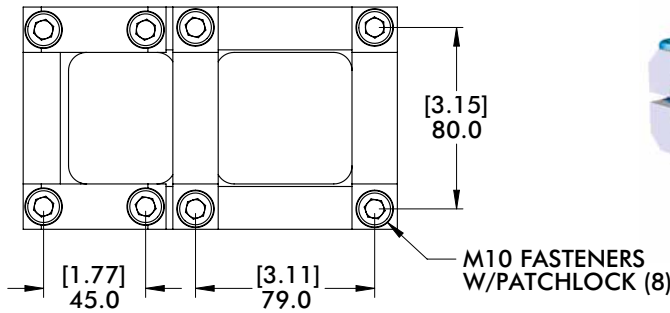
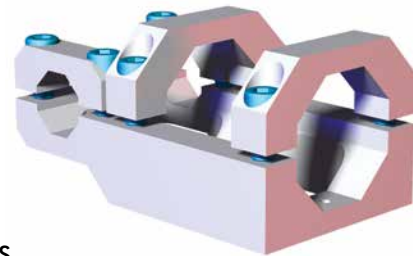
- Connects 60mm and 30mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum



ALIGNMENT NUTS INCLUDED



Model Number	Weight
CPI-TCA-60B-30B	1.32 kg [2.91 lb]

TCA-60B-45B 60mm to 45mm octagon T-Clamp Bracket Assembly



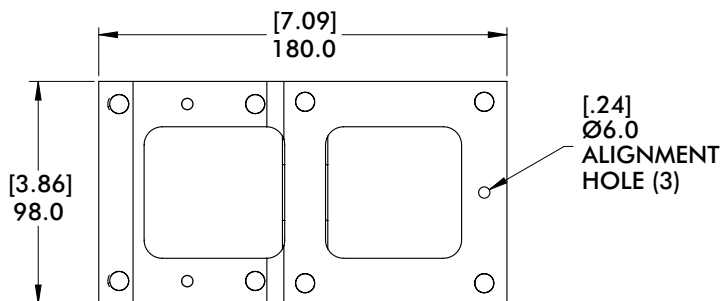
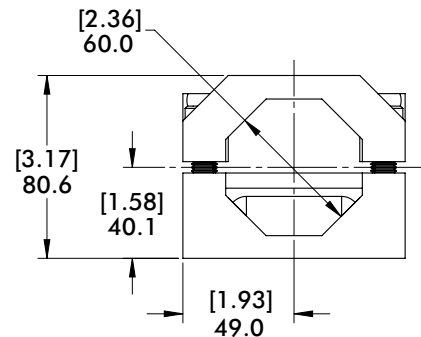
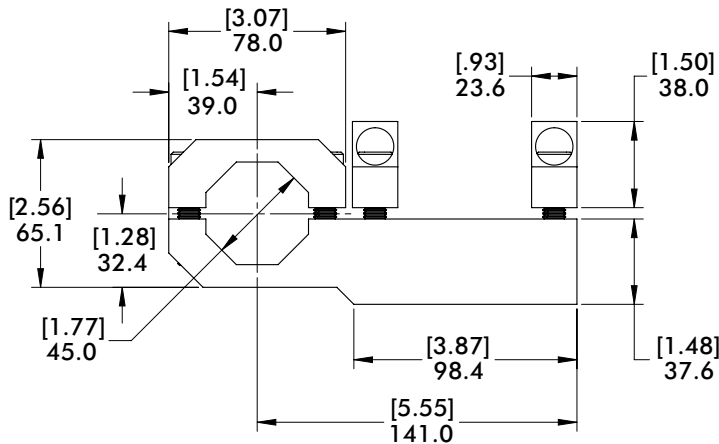
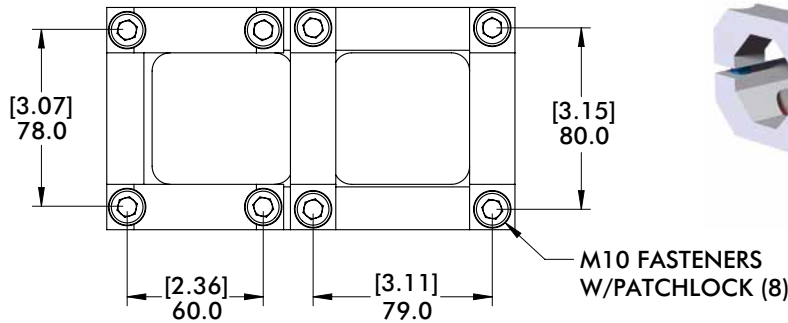
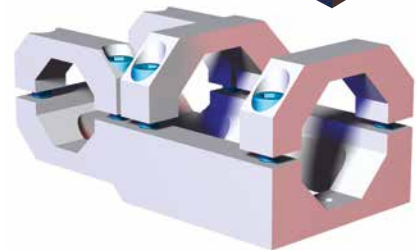
Specifications:

Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 45mm: 475 Nm [350 ft-lb]
Material: Aluminum

Features:

- Connects 60mm and 45mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

ALIGNMENT NUTS INCLUDED



Model Number	Weight
CPI-TCA-60B-45B	1.45 kg [3.20 lb]

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

TCA-60B-60B 60mm to 60mm octagon T-Clamp Bracket Assembly

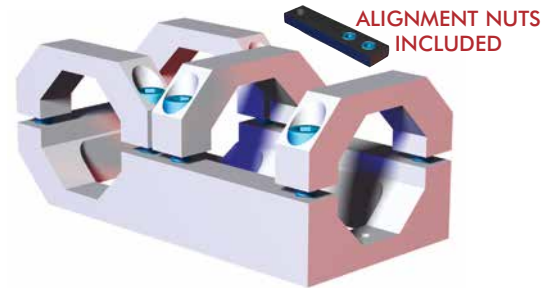
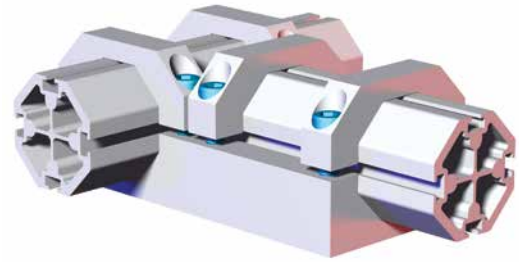
Features:

- Connects (2) 60mm octagon extrusions perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

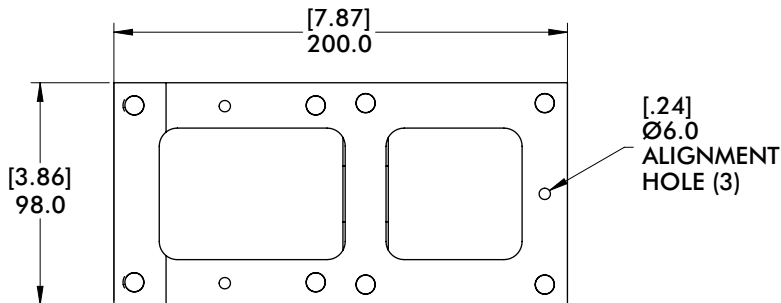
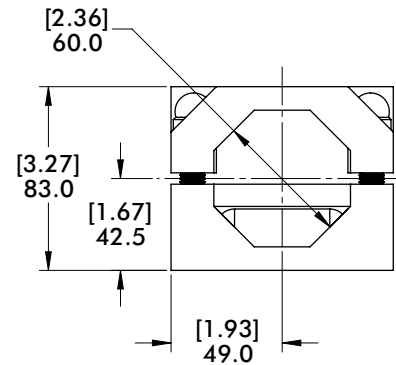
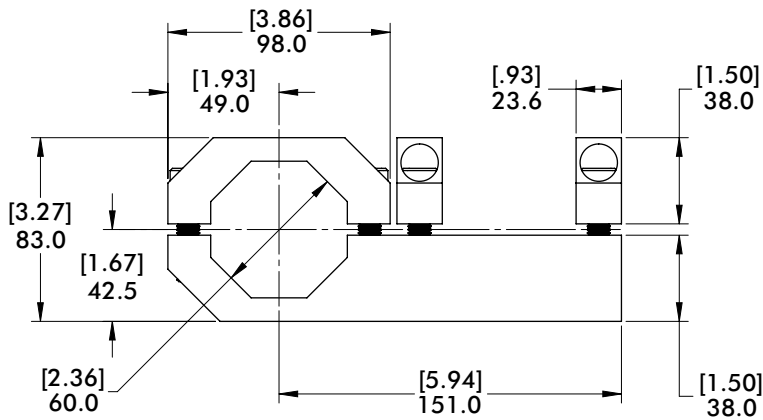
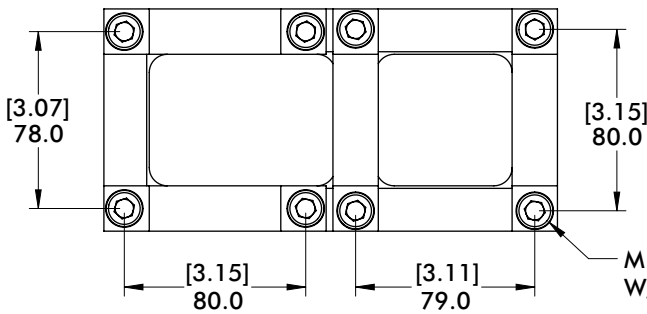
Specifications:

Max. Static Clamp Load:
60mm: 746 Nm [550 ft-lb]

Material: Aluminum

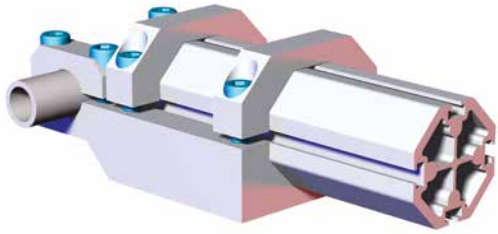


ALIGNMENT NUTS INCLUDED



Model Number	Weight
CPI-TCA-60B-60B	1.77 kg [3.90 lb]

TCA-60B-25M 60mm Octagon to 25mm Round T-Clamp Bracket Assembly

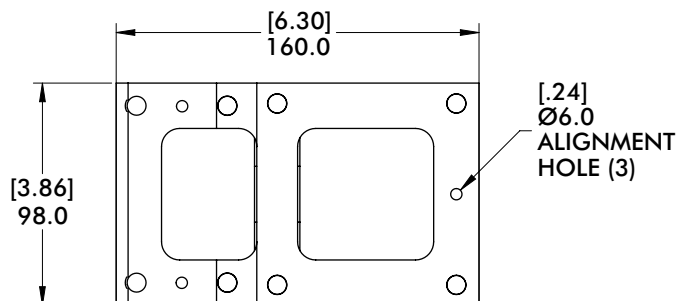
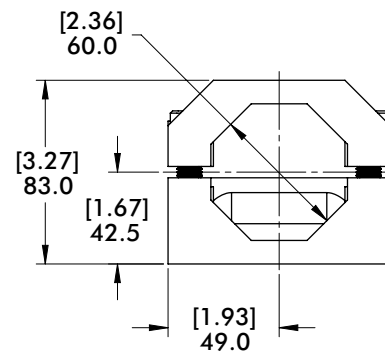
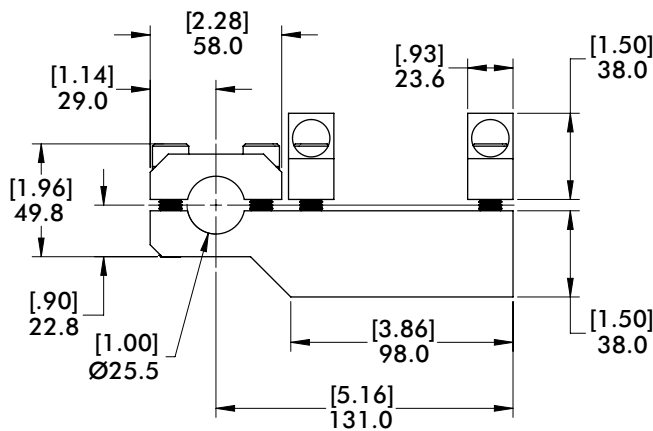
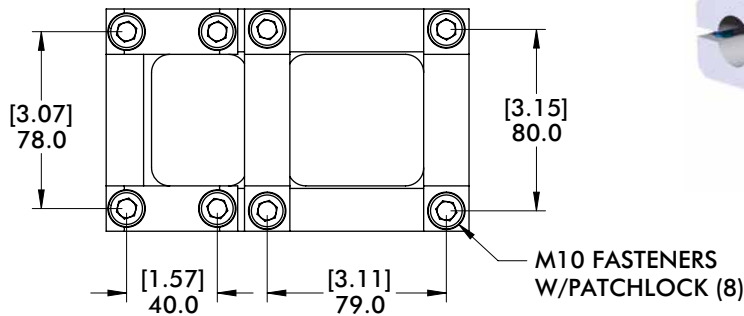
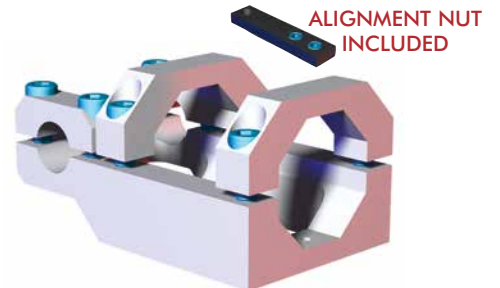


Specifications:

Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 30mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Connects 60mm octagon and 25mm round perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Model Number	Weight
CPI-TCA-60B-25M	1.25 kg [2.76 lb]

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

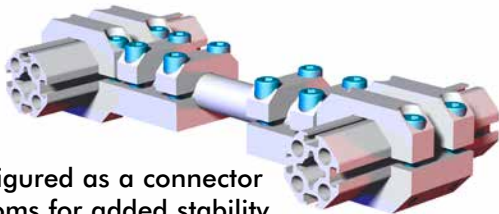
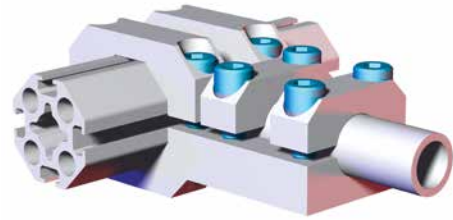
TCA-25M-45B 25mm Round to 45mm Octagon T-Clamp Brackets Assembly

Features:

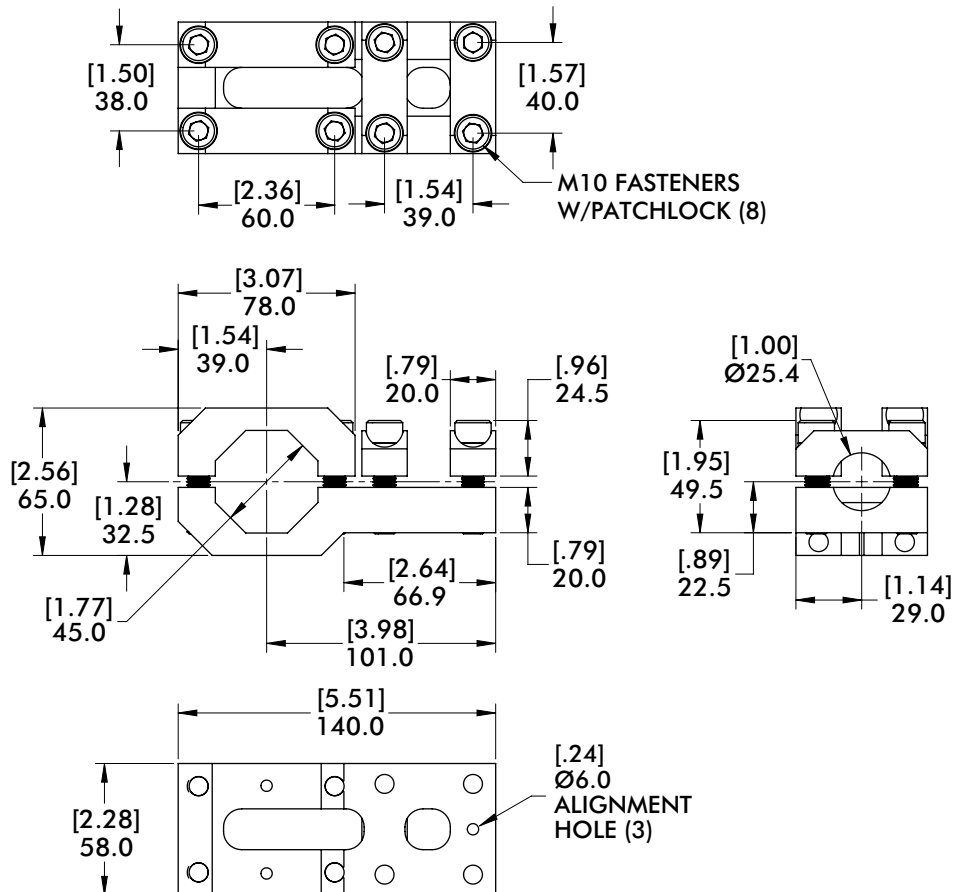
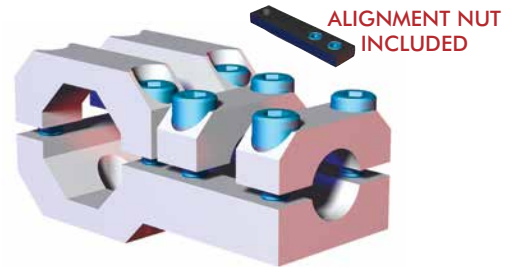
- Connects 25mm round and 45mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 25mm: 271 Nm [200 ft-lb]
Material: Aluminum

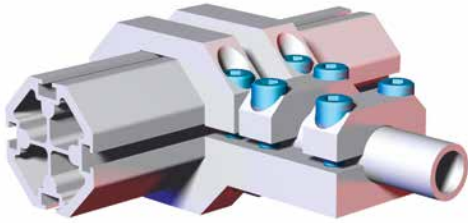


Can be configured as a connector between booms for added stability



Model Number	Weight
CPI-TCA-25M-45B	.57 kg [1.26 lb]

TCA-25M-60B 25mm Round to 60mm Octagon T-Clamp Bracket Assembly

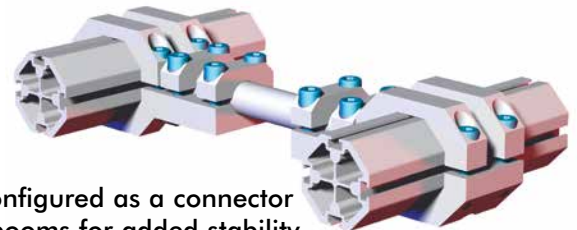
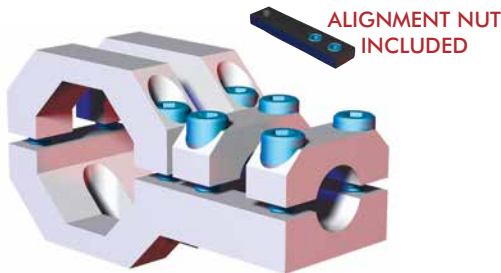


Specifications:

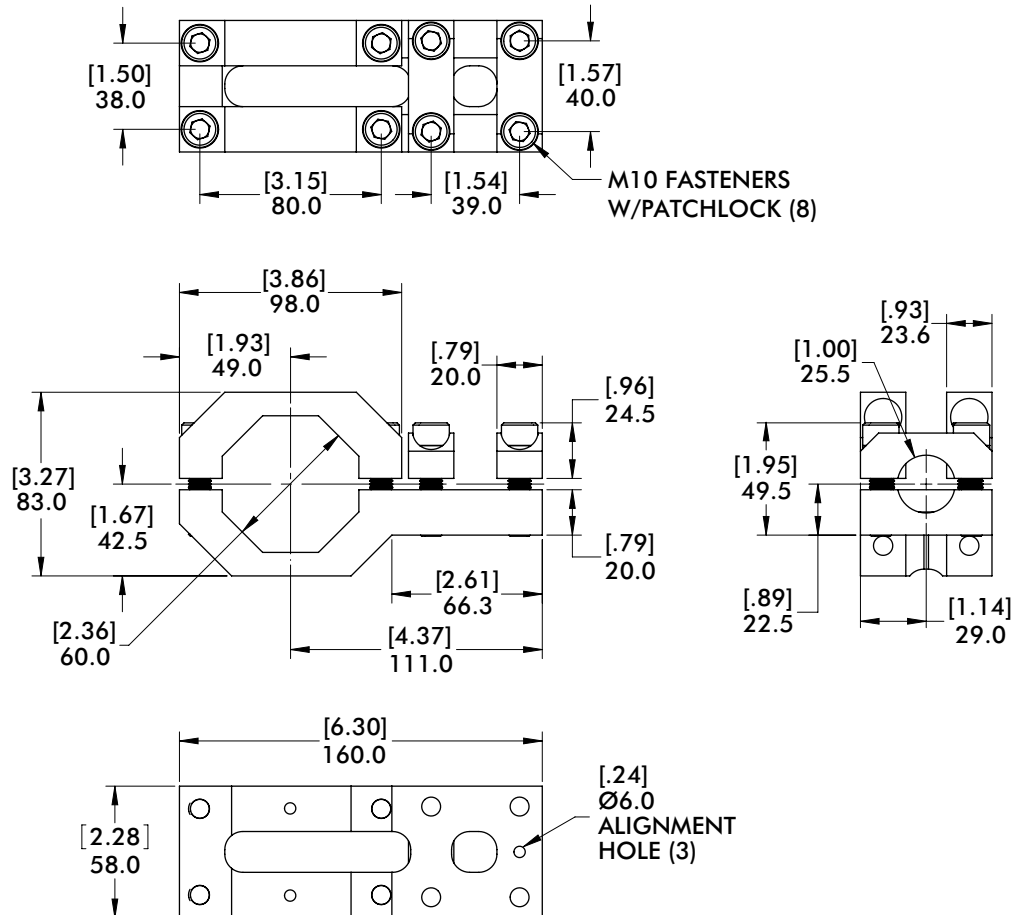
Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 25mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Connects 25mm round and 60mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.



Can be configured as a connector between booms for added stability



Model Number	Weight
CPI-TCA-25M-60B	.85 kg [1.87 lb]

BODYBUILDER™ ELBOWS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



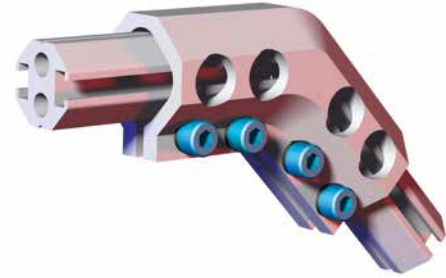
45° Angular Boom Clamp Brackets

Features:

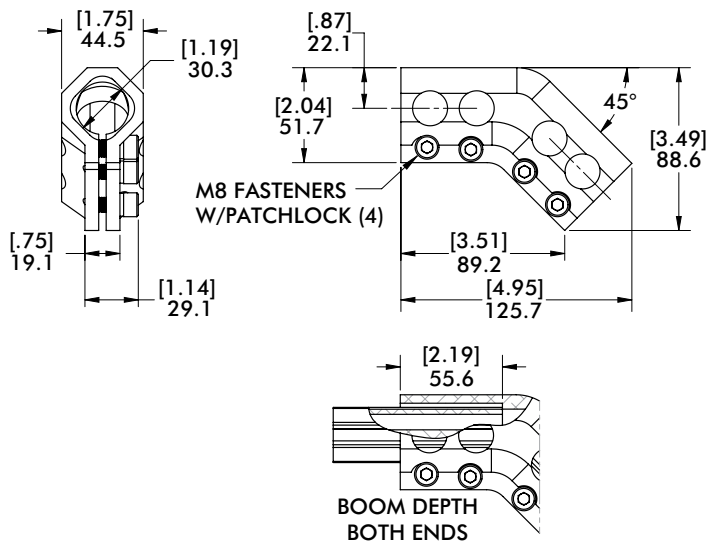
- Mounts (2) Bodybuilder extrusion booms inline at a 45° angle.

Specifications:

Material: Aluminum

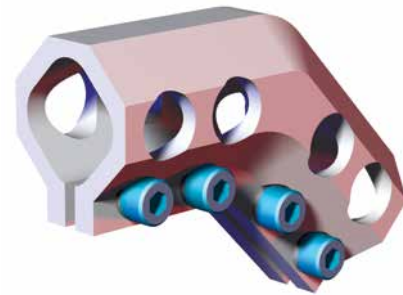


DC-3030B-45 30mm to 30mm 45° External Boom Clamp Brackets



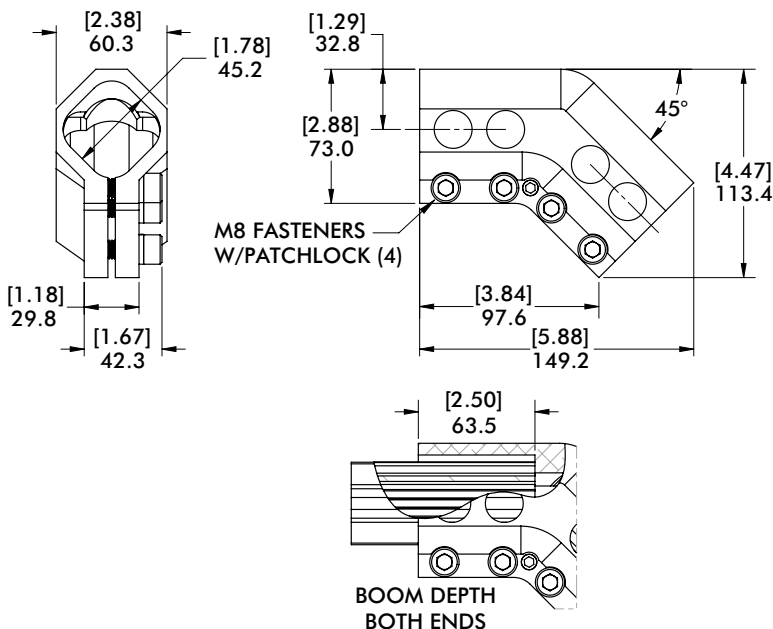
Specifications:

Max. Static Clamp Load:
271Nm [200 ft-lb]



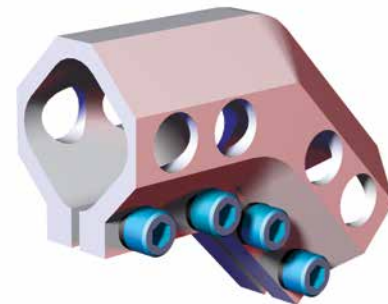
Model Number	Weight
CPI-DC-3030B-45	.30 kg [.66 lb]

DC-4545B-45 45mm to 45mm 45° Angular Boom Clamp Brackets



Specifications:

Max. Static Clamp Load:
475 Nm [350 ft-lb]



Model Number	Weight
CPI-DC-4545B-45	.64 kg [1.4 lb]

DC-6060B-45 60mm to 60mm 45° Angular Boom Clamp Brackets



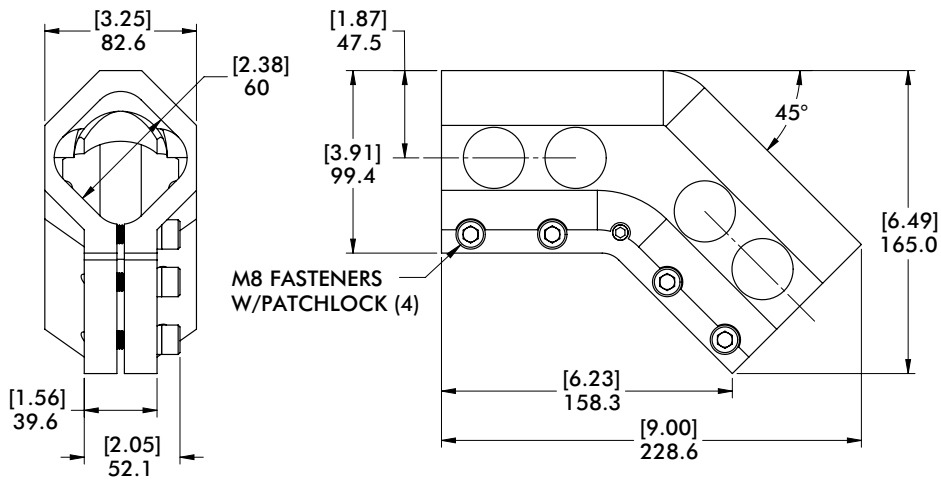
Specifications:

Max. Static Clamp Load:
746 Nm [550 ft-lb]

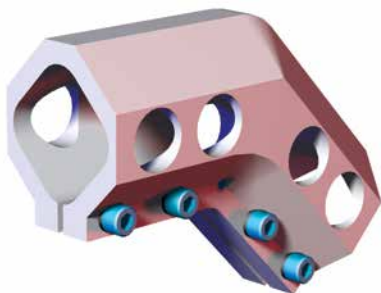
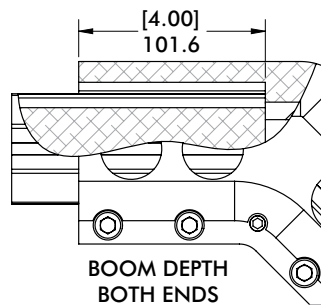
Material: Aluminum

Features:

- Mounts (2) Bodybuilder extrusion booms inline at a 45° angle.



M8 FASTENERS
W/PATCHLOCK (4)



Model Number	Weight
CPI-DC-6060B-45	1.74 kg [3.8 lb]

BODYBUILDER™ MID FLANGE CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

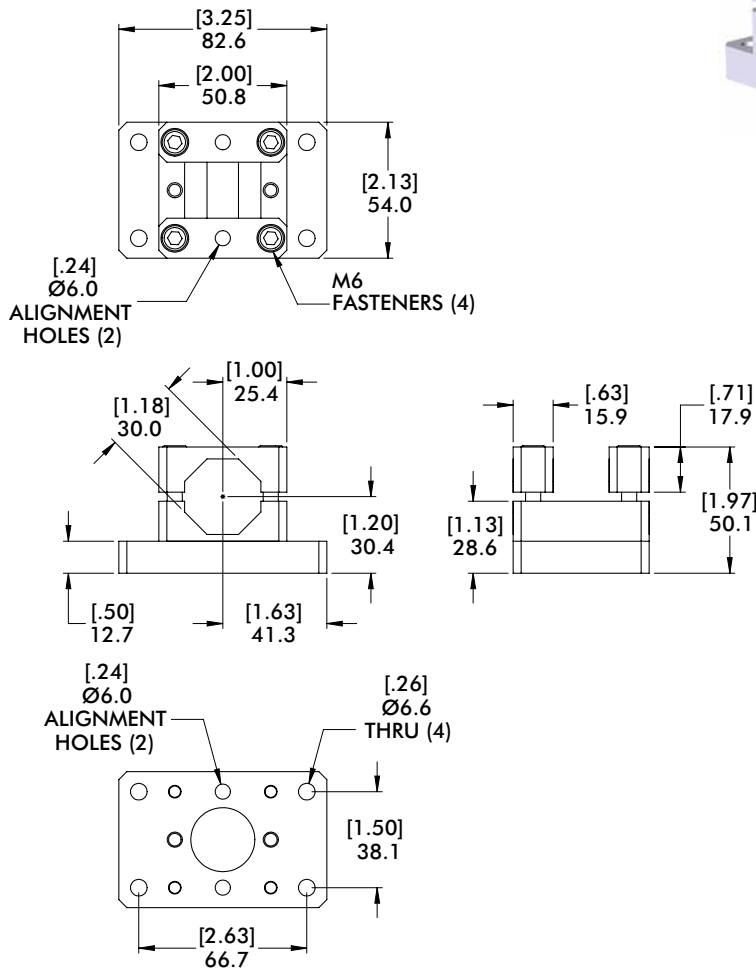
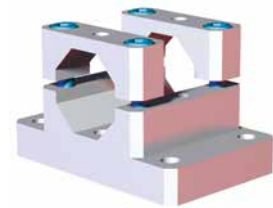
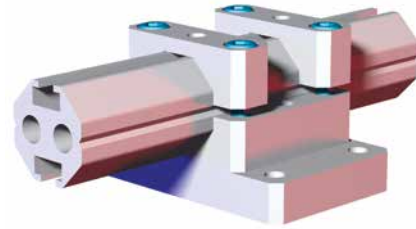
CLM-30B-152F-90 30mm Mid Flange Clamp Mount

Features:

- Mounts 30mm extrusion parallel to the mounting surface.
- Can be used as robot interface when quick-change connector is not required.

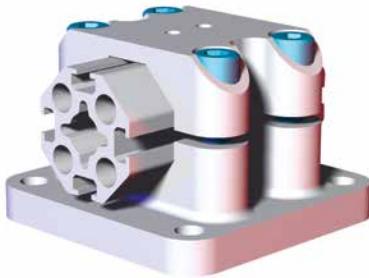
Specifications:

Max. Static Clamp Load:
102 Nm [75 ft-lb]
Material: Cast Aluminum



Model Number	Weight
CPI-CLM-30B-152F-90	0.28 kg [.61 lb]

TBC-45 45mm Mid Flange Clamp Mount



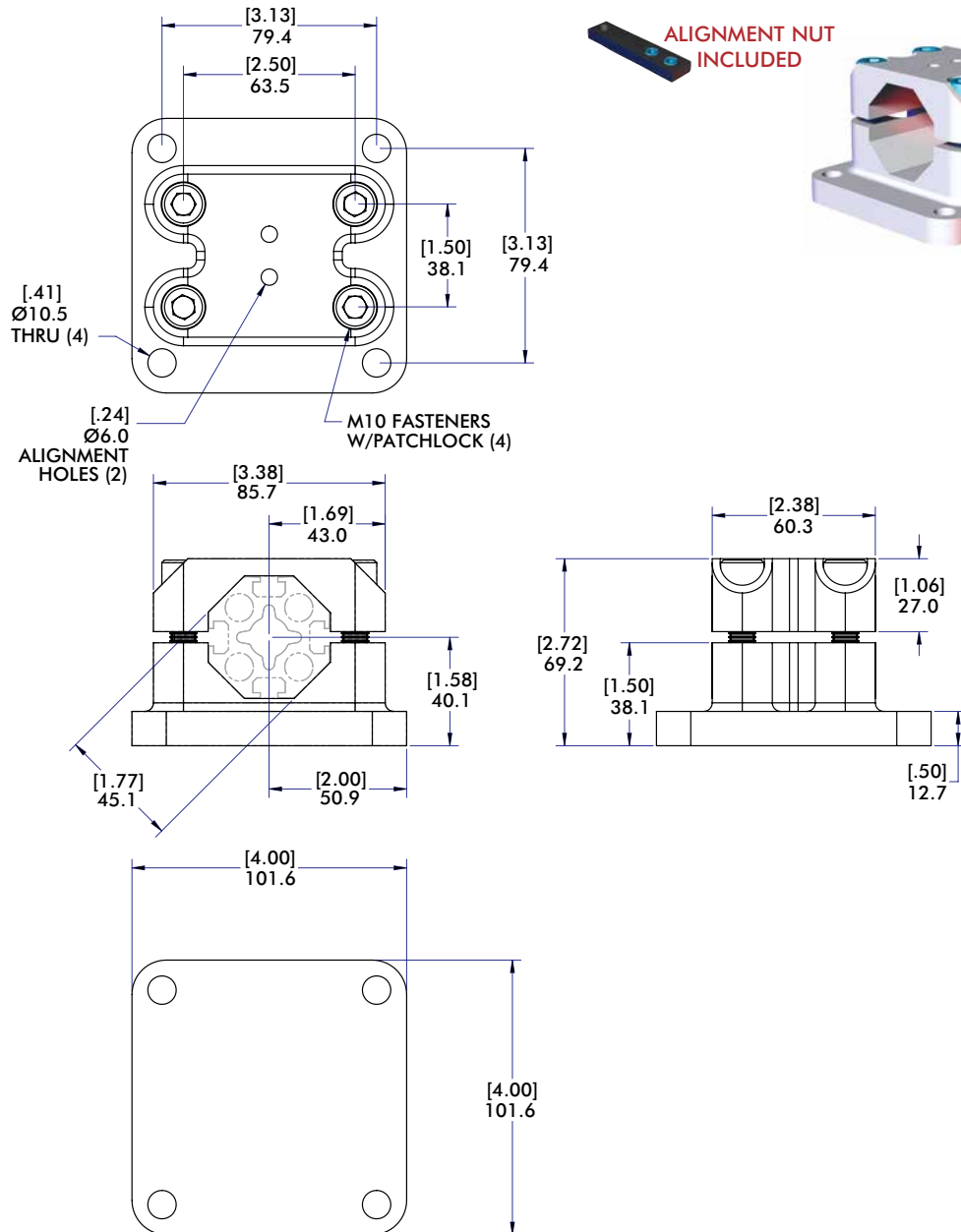
Specifications:

Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material: Aluminum

Features:

- Mounts 45mm extrusion parallel to the mounting surface.
- Can be used as robot interface when quick-change connector is not required.



Model Number	Weight
TBC-45-00	0.79 kg [1.74 lb]

BODYBUILDER™ MID FLANGE CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

TBC-60 60mm Mid Flange Clamp Mount

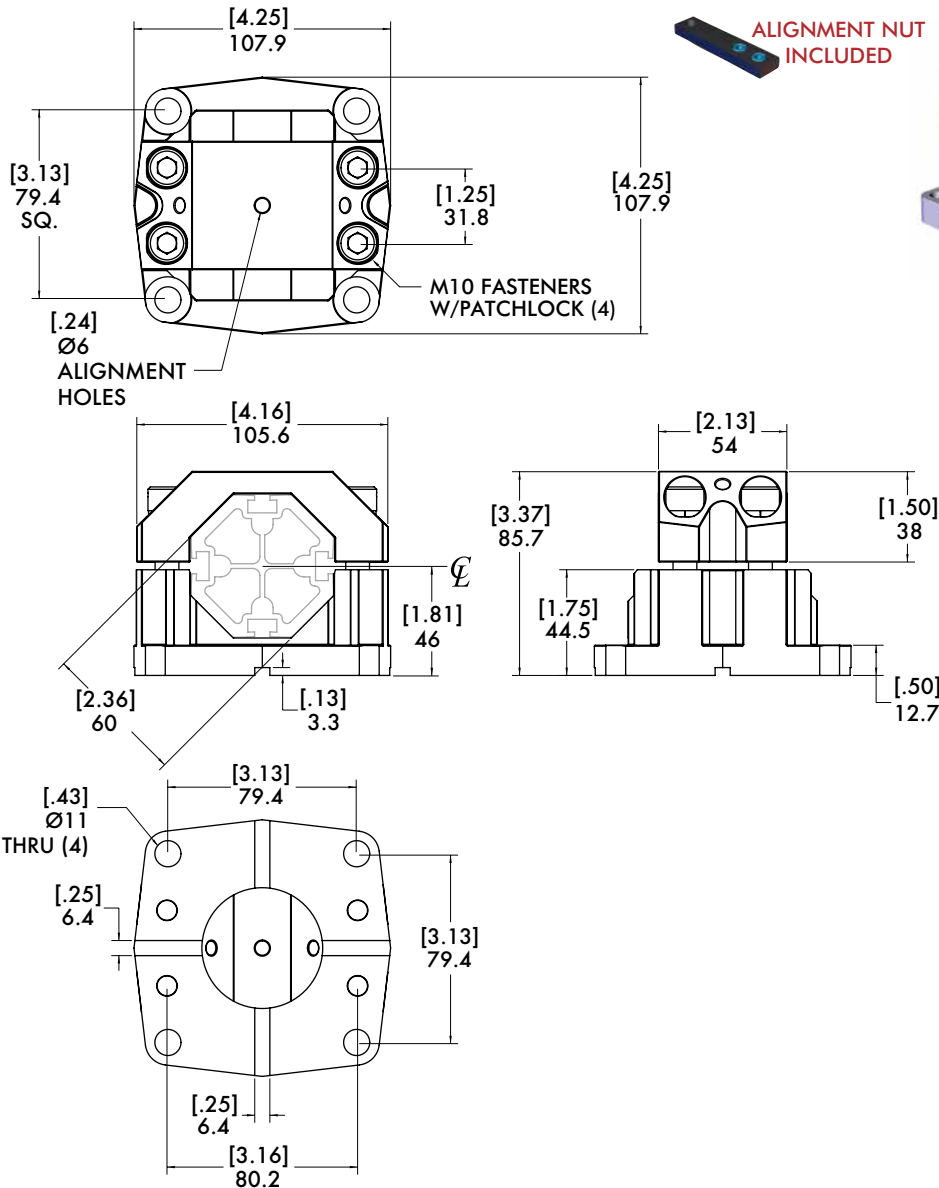
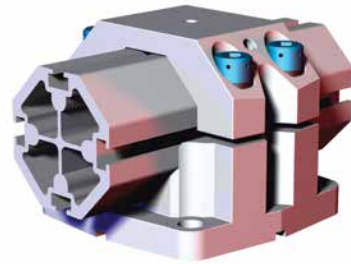
Features:

- Mounts 60mm extrusion parallel to the mounting surface.
- Can be used to mount to robot with an interface plate.
- Cross-key design provides added strength for high-torque applications when used in conjunction with a slot and key mechanism.

Specifications:

Max. Static Clamp Load:
746 Nm [550 ft-lb]

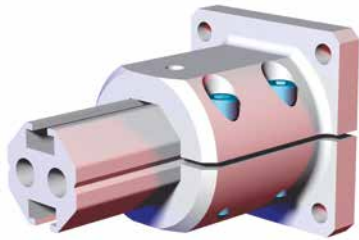
Material: Cast Aluminum



Cross Key sold separately: (2) x 540-25388

Model Number	Weight
TBC-60-00	0.92 kg [2.02 lb]

CLM-30B-20F 30mm End Flange Clamp Mount

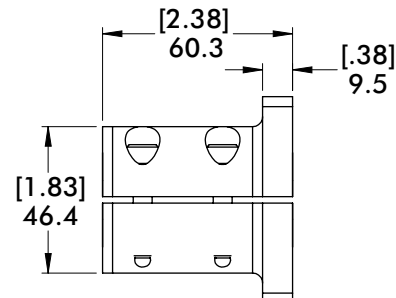
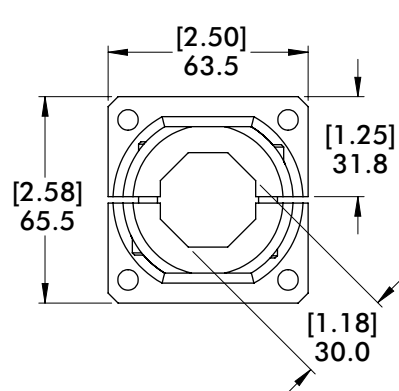
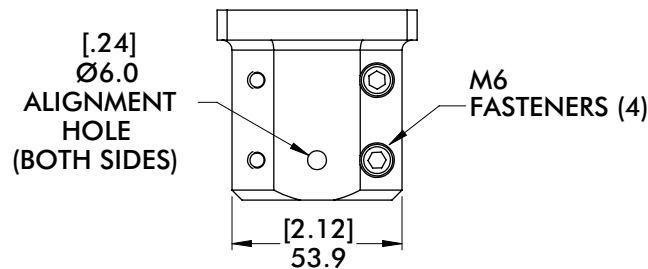
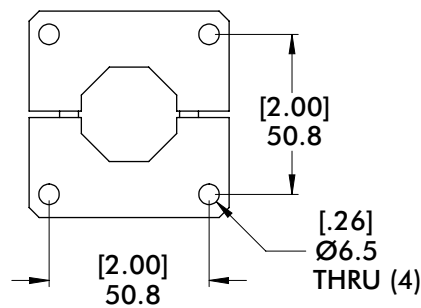
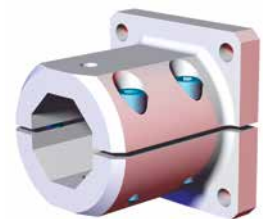


Specifications:

Max. Static Clamp Load:
102 Nm [75 ft-lb]
Material: Aluminum

Features:

- Mounts 30mm extrusion 90° to the mounting surface.
- Can be used as robot interface when quick-change connector is not required.



Model Number	Weight
CPI-CLM-30B-20F	.29 kg [.64 lb]

BODYBUILDER™ END FLANGE CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



BECC-60 60mm End Flange Clamp Mount

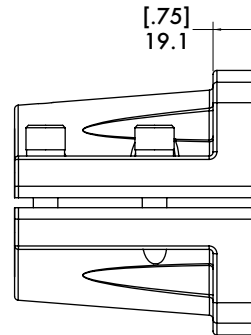
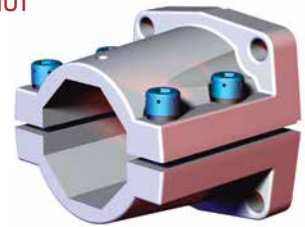
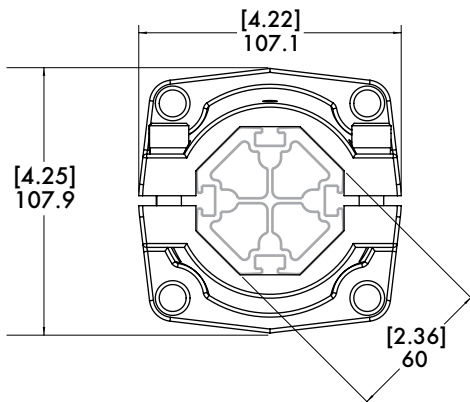
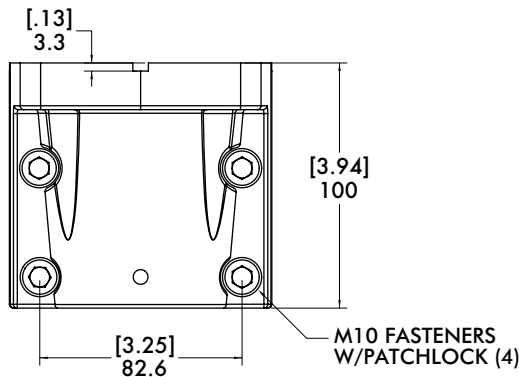
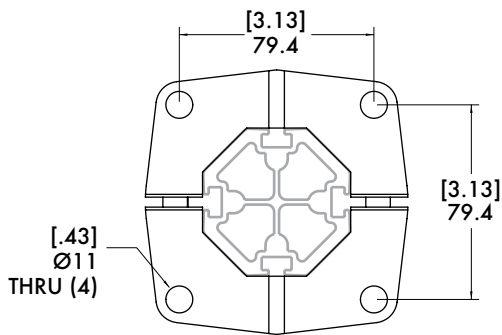
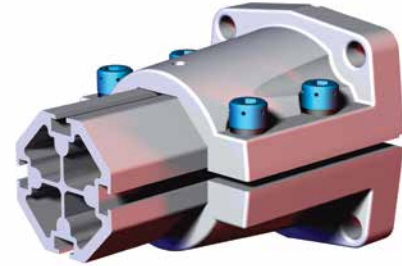
Features:

- Mounts 60mm extrusion 90° to the mounting surface.
- Can be used as robot interface when quick-change connector is not required.
- Cross-key design provides added strength for high-torque applications when used in conjunction with a slot and key mechanism.

Specifications:

Max. Static Clamp Load:
746 Nm [550 ft-lb]

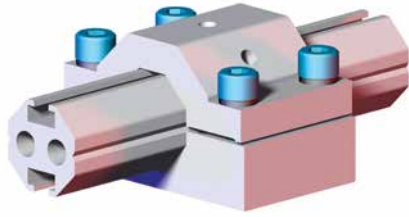
Material: Cast Aluminum



Cross Key sold separately: (2) x 540-25388

Model Number	Weight
BECC-60-00	1.21 kg [2.67 lb]

TPM-30 30mm Accessory Mounting Bracket

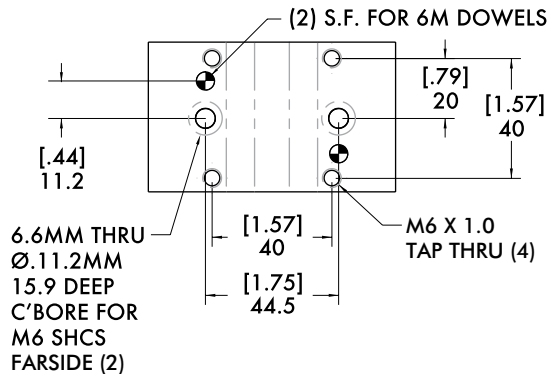
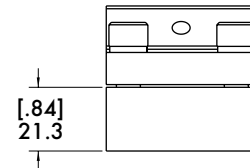
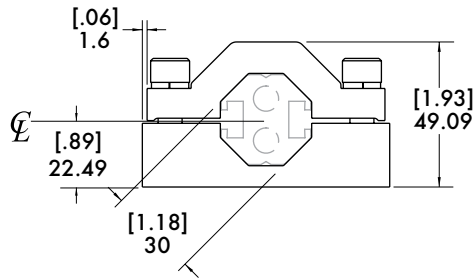
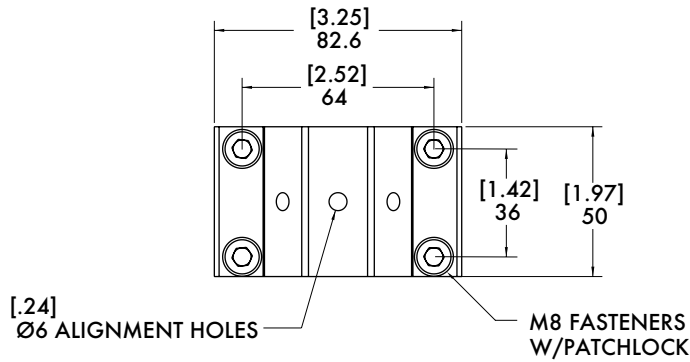
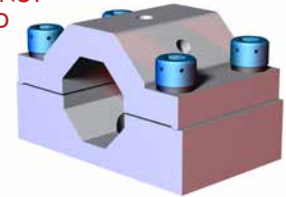


Specifications:

Max. Static Clamp Load:
271 Nm [200 ft-lb]
Material: Aluminum

Features:

- Provides a secure attachment point for clamps and pin locators.



Model Number	Weight
TPM-30	.36 kg [.80 lb]

BODYBUILDER™ ACCESSORY MOUNTS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



TPM(S)-45 45mm Accessory Mounting Bracket

Features:

- Provides a secure attachment point for clamps and pin locators.
- Standard NAAMS mounting patterns.

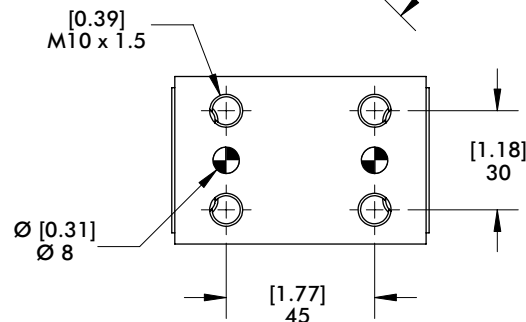
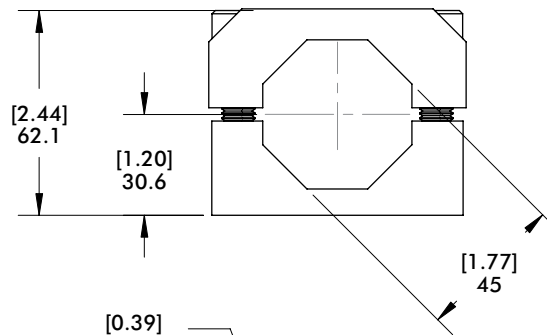
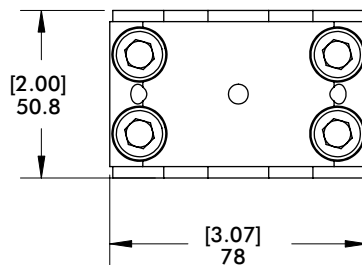
Specifications:

Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material:

TPMS-45: Steel

TPM-45: Aluminum



Model Number	Weight
TPM-45 (Aluminum)	.48 kg [1.28 lb]
TPMS-45 (Steel)	1.10 kg [2.90 lb]

TPMS-60 60mm Accessory Mounting Bracket.



Specifications:

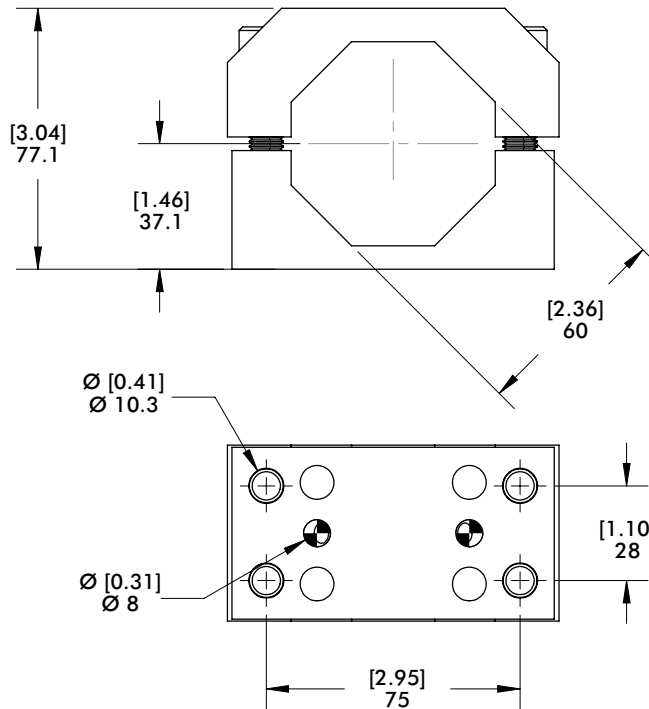
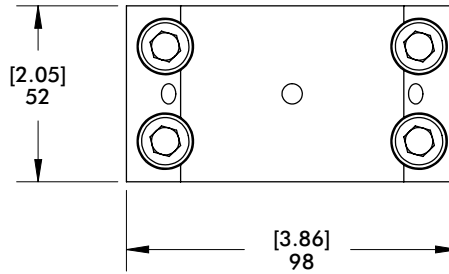
Max. Static Clamp Load:
746 Nm [550 ft-lb]

Material: Steel

Features:

- Provides a secure attachment point for clamps and pin locators.
- Standard NAAMS mounting patterns.

ALIGNMENT NUT INCLUDED



Model Number	Weight
TPMS-60	1.3 kg [2.90 lb]

BODYBUILDER™ ACCESSORY MOUNTS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

TPMS-90 90mm Accessory Mounting Bracket

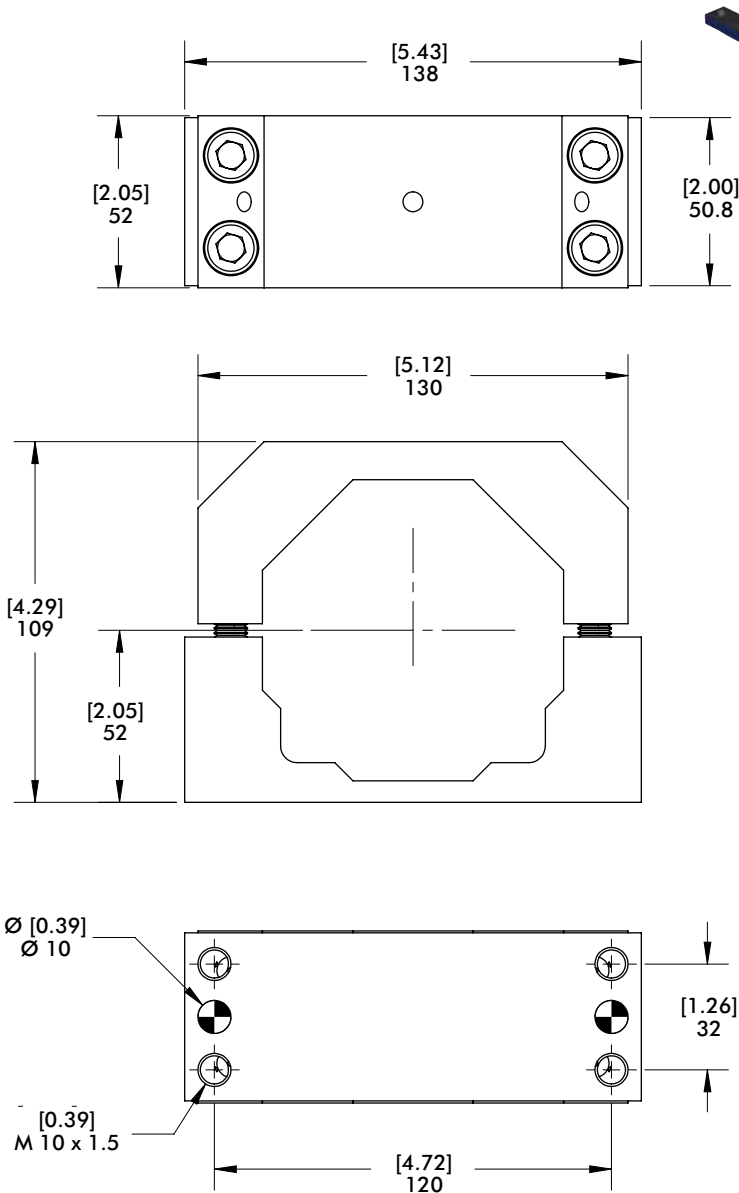
Features:

- Provides a secure attachment point for clamps and pin locators.

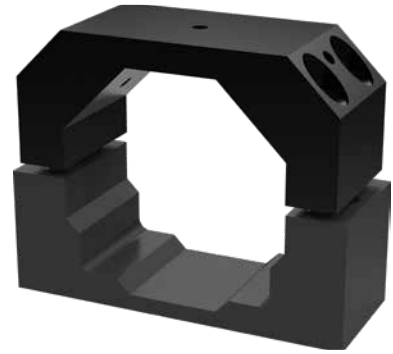
Specifications:

Max. Static Clamp Load:
746 Nm [550 ft-lb]

Material: Steel

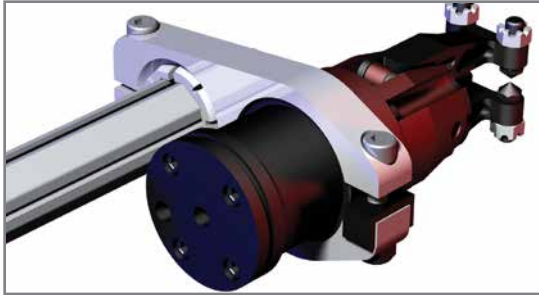


ALIGNMENT NUT
INCLUDED



Model Number	Weight
TPMS-90	1.93kg [4.25lb]

GPC-150-30BBS 30mm Swivel 150 Series Parallel Gripper Mount



Specifications:

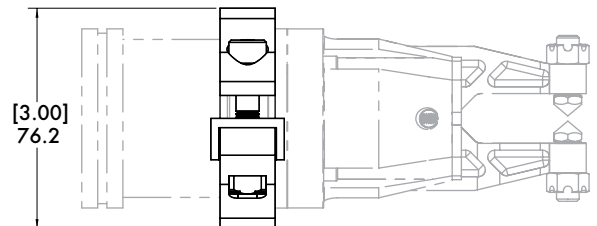
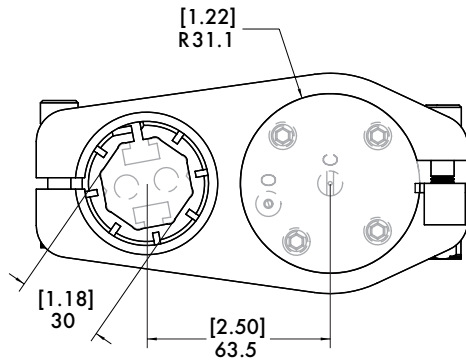
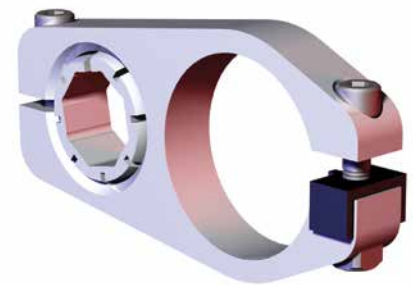
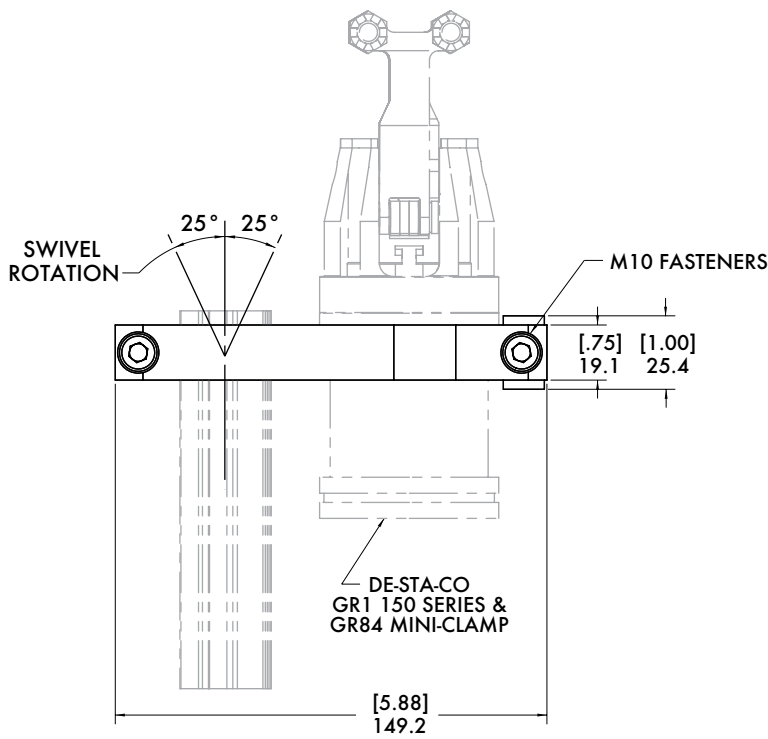
Max. Static Clamp Load:
271 Nm [200 ft-lb]

Material:

Body: Aluminum
Swivel Ball: Steel

Features:

- Removable grip mount lock allows gripper to be adjusted while continuing to holding it in place.
- Swivel ball allows for $\pm 25^\circ$ adjustment of swivel rotation.



Model Number	Weight
CPI-GPC-150-30BBS-DC	.33 kg [.73 lb]

BODYBUILDER™ GRIPPER MOUNTS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

RJM-150-30BBS 30mm End Gripper Mount for 150 Series Gripper

Features:

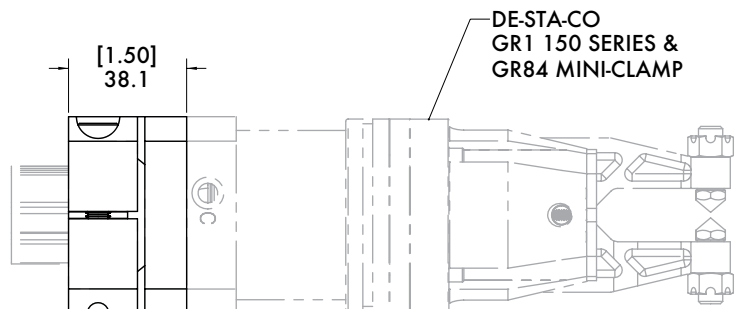
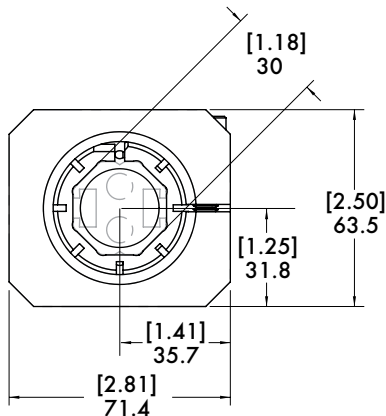
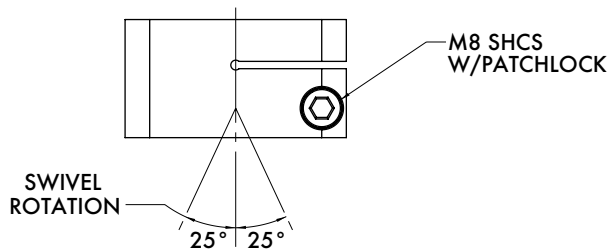
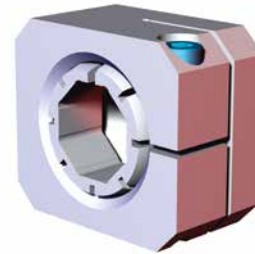
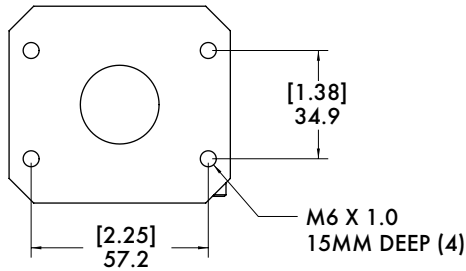
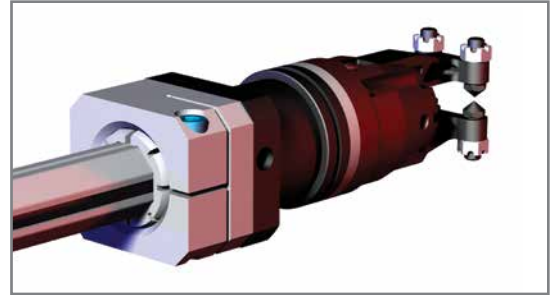
- Swivel ball allows for $\pm 25^\circ$ adjustment of swivel rotation.

Specifications:

Max. Static Clamp Load:
271 Nm [200 ft-lb]

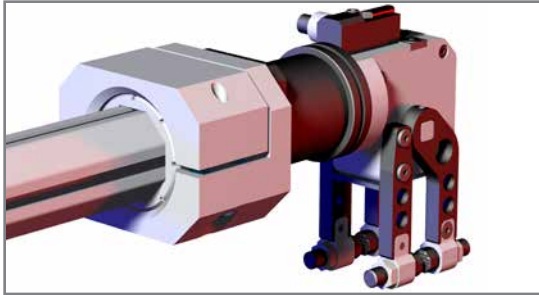
Material:

Housing:
Machined Aluminum
Swivel: Steel



Model Number	Weight
CPI-RJM-150-30BBS	.33 kg [.74 lb]

RJM-150-45BBS 45mm End Gripper Mount for 150 Series Gripper



Specifications:

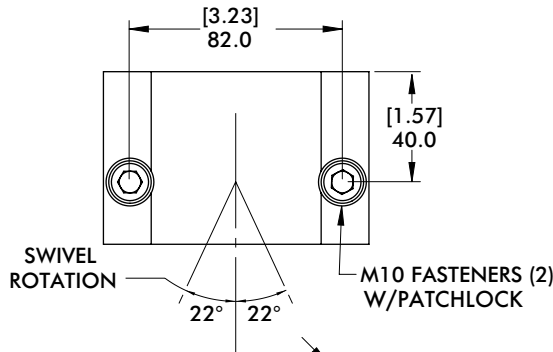
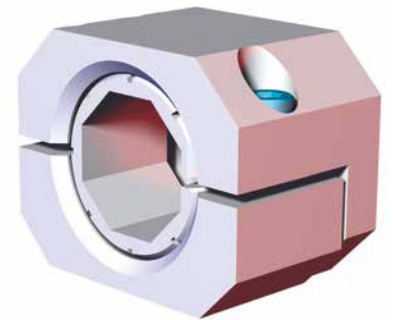
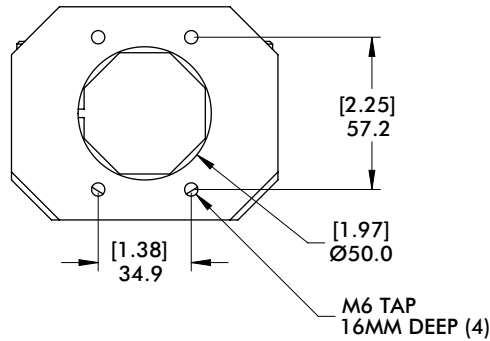
Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material:

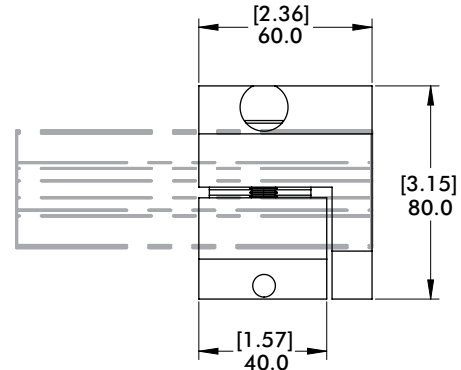
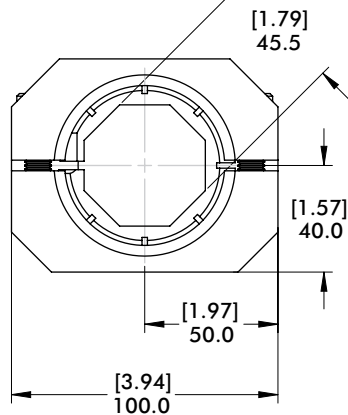
Housing:
Machined Aluminum
Swivel: Steel

Features:

- Swivel ball allows for $\pm 22^\circ$ adjustment of swivel rotation.



TO USE AS A FIXED MOUNT
INSERT BOOM COMPLETELY
UNTIL IT COMES INTO
CONTACT WITH GRIPPER
FOR SWIVEL OPTION INSERT
BOOM 40 MM [1.57 IN] OR
UNTIL BOOM IS INSERTED
ENOUGH TO ALLOW
ROTATION WITHOUT
OBSTRUCTION



Model Number	Weight
CPI-RJM-150-45BBS	1.23 kg [2.71 lb]

BODYBUILDER™ SWIVEL ARMS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

30B50-MSA 30mm Swivel Arms for .50"(in) Apple Core Accessories

Features:

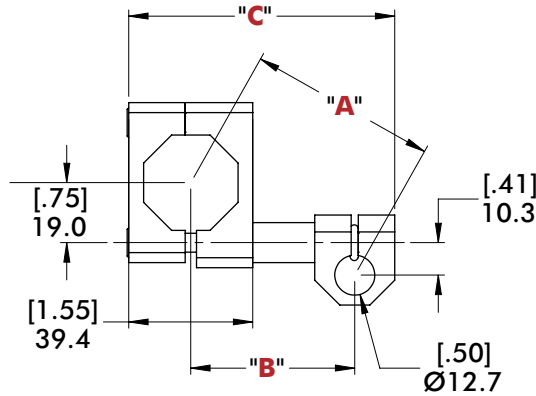
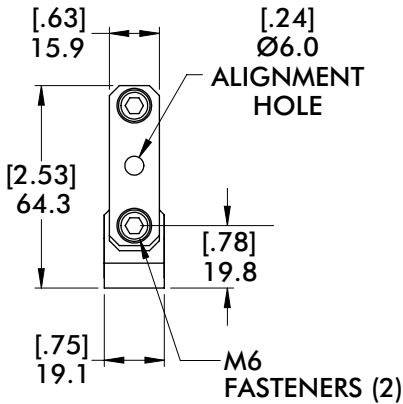
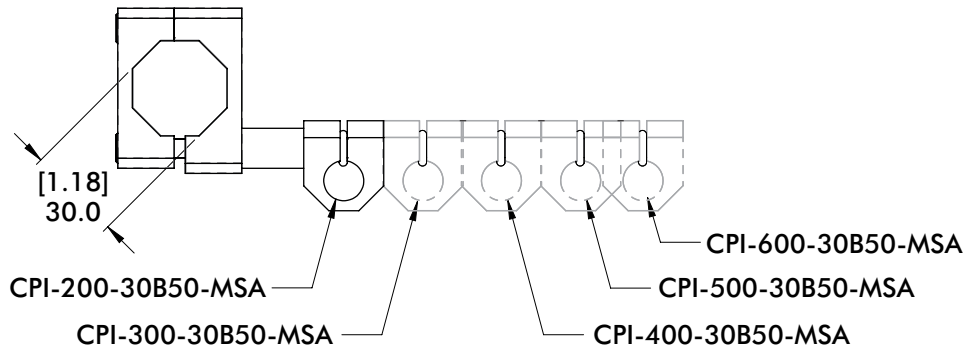
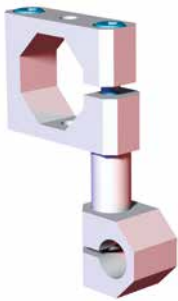
- Mounts to BodyBuilder™ 30mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustments in (3) axes.
- Used to mount venturi, bumpers, round locators, and proximity switches.

Specifications:

Max. Static Clamp Load:
102 Nm [75 ft-lb]

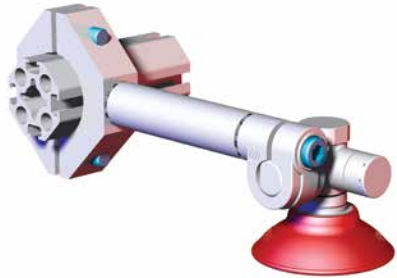
Material:

Body:
Cast Aluminum
Insert:
Machined Aluminum



CPI- <u>L</u> -30B50-MSA SWIVEL ARM				
"L"	"A"	"B"	"C"	Weight
200	59.8 [2.35]	52.1 [2.05]	84.5 [3.33]	.10 kg [.22 lb]
300	82.6 [3.25]	77.2 [3.04]	109.6 [4.32]	.11 kg [.24 lb]
400	106.2 [4.18]	102.1 [4.02]	134.5 [5.30]	.12 kg [.26 lb]
500	130.6 [5.14]	127.3 [5.01]	159.7 [6.29]	.13 kg [.29 lb]
600	150.0 [5.90]	147.1 [5.79]	179.5 [7.07]	.14 kg [.31 lb]

45B-CSA 45mm Swivel Arms for Ø19mm [.75 in] Apple Core Accessories



Specifications:

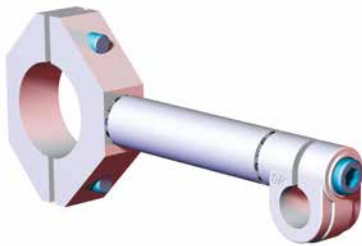
Max. Static Clamp Load:
271 Nm [200 ft-lb]

Material:

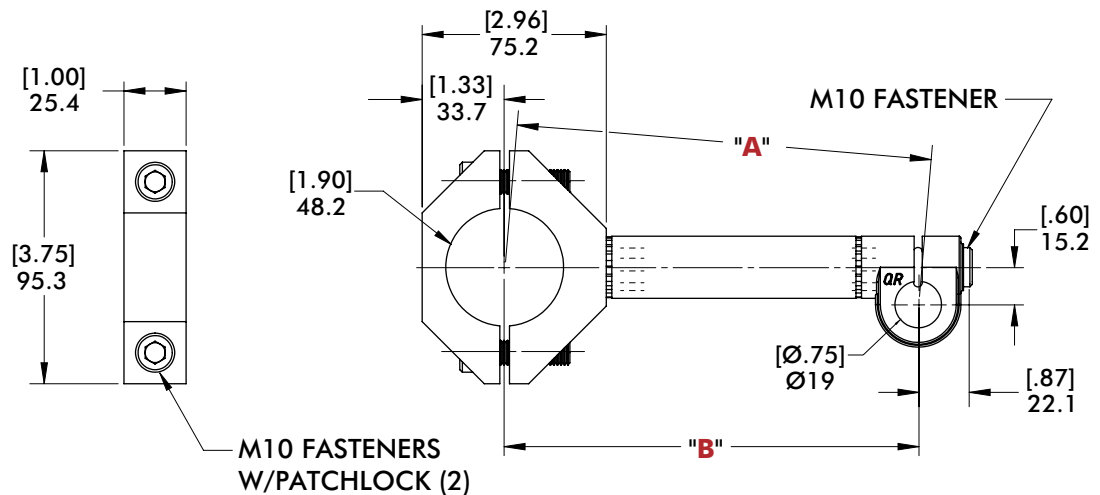
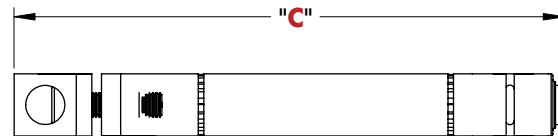
Body:
Cast Aluminum
Insert:
Machined Aluminum

Features:

- Mounts to BodyBuilder™ 45mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustments in (3) axes.
- Used to mount venturi, bumpers, round locators, and proximity switches.



CPI-180-45B-CSA SHOWN



CPI- " L " -45B-CSA SWIVEL ARM				
" L "	"A"	"B"	"C"	Weight
130	119.8 [4.72]	118.8 [4.68]	140.9 [5.56]	.48 kg [1.06 lb]
180	169.8 [6.68]	169.1 [66.6]	224.9 [8.89]	.54 kg [1.20 lb]
230	219.7 [8.65]	219.1 [8.63]	275.0 [10.83]	.61 kg [1.34 lb]
280	269.6 [10.61]	269.2 [10.60]	325.0 [12.80]	.67 kg [1.47 lb]

BODYBUILDER™ SWIVEL ARMS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

SA-30 30mm Swivel Arms for Ø19mm [.75 in] Apple Core Accessories

Features:

- Mounts to BodyBuilder™ 30mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustments in (3) axes.
- Used to mount venturi, bumpers, round locators, and proximity switches.

Specifications:

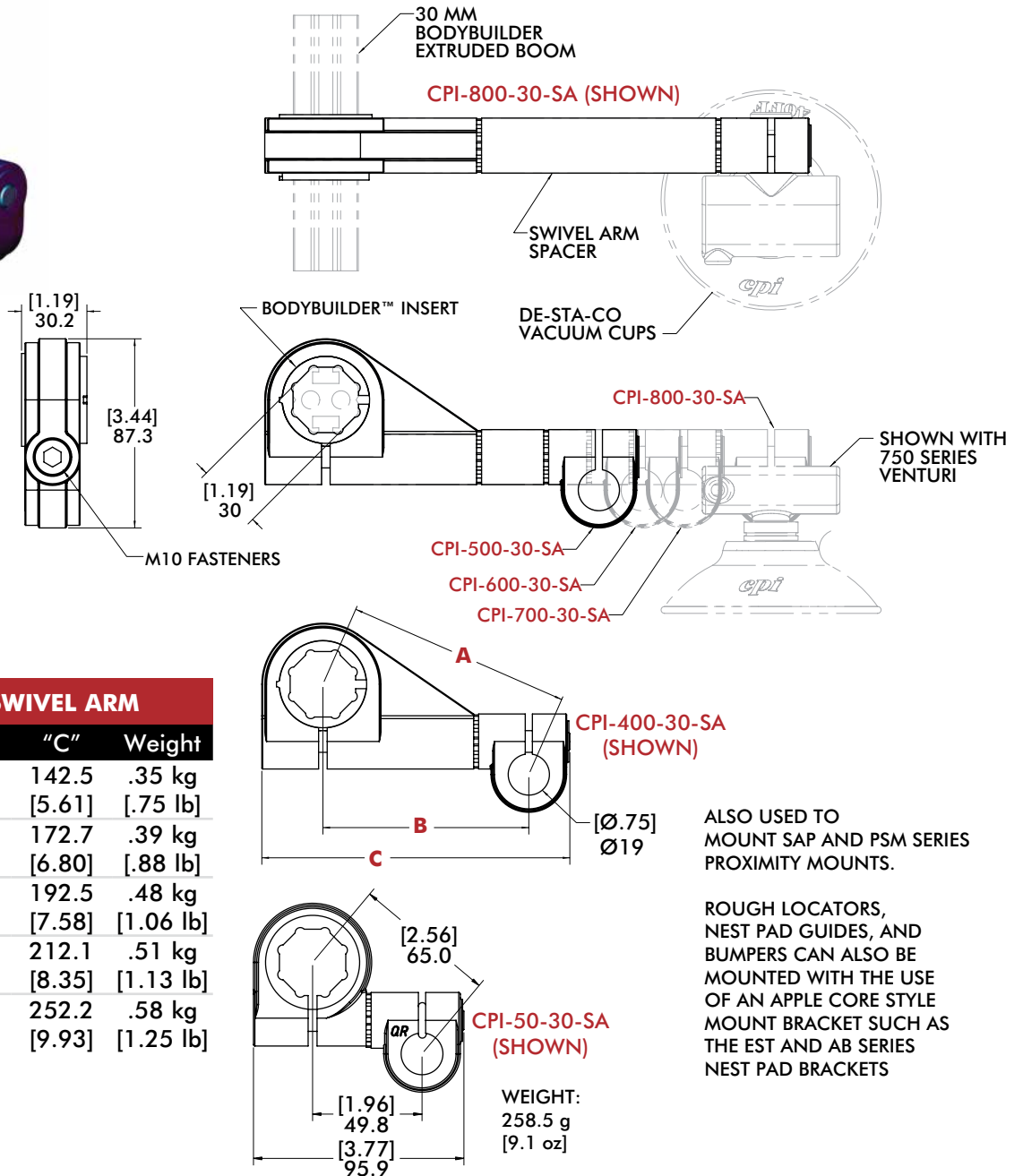
Max. Static Clamp Load:
271 Nm [200 ft-lb]

Material:

Body:
Cast Aluminum
Insert:
Machined Aluminum



CPI-400-30-SA SHOWN



CPI- " L "-30-SA SWIVEL ARM				
" L "	" A "	" B "	" C "	Weight
400	103.8 [4.09]	95.1 [3.74]	142.5 [5.61]	.35 kg [.75 lb]
500	132.8 [5.26]	126.0 [4.96]	172.7 [6.80]	.39 kg [.88 lb]
600	151.7 [5.97]	146.0 [5.75]	192.5 [7.58]	.48 kg [1.06 lb]
700	170.6 [6.72]	165.4 [6.51]	212.1 [8.35]	.51 kg [1.13 lb]
800	209.7 [8.26]	205.5 [8.09]	252.2 [9.93]	.58 kg [1.25 lb]

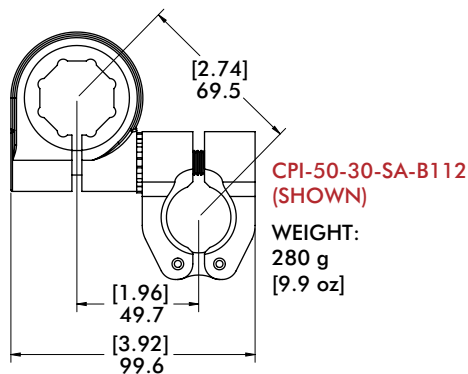
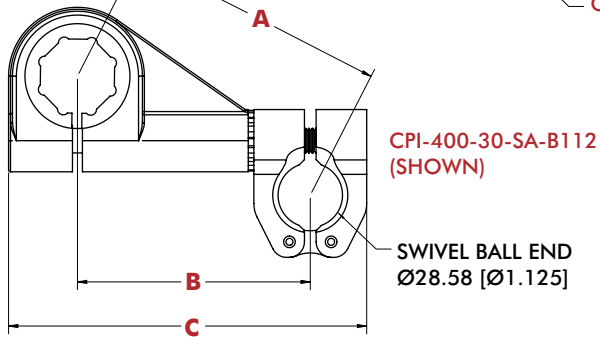
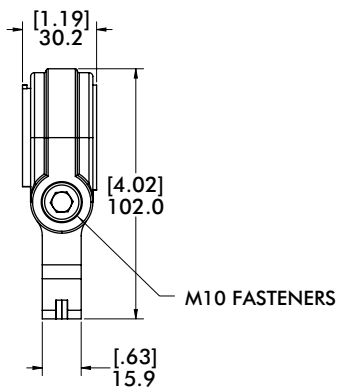
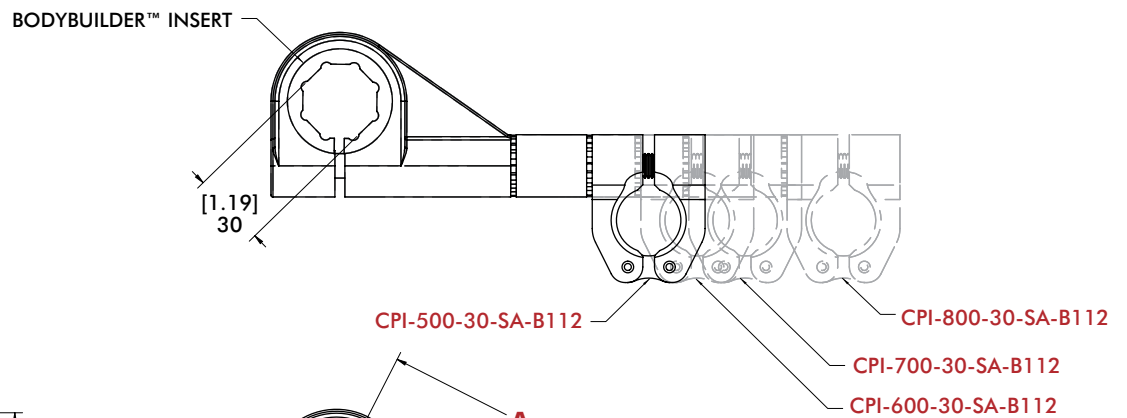
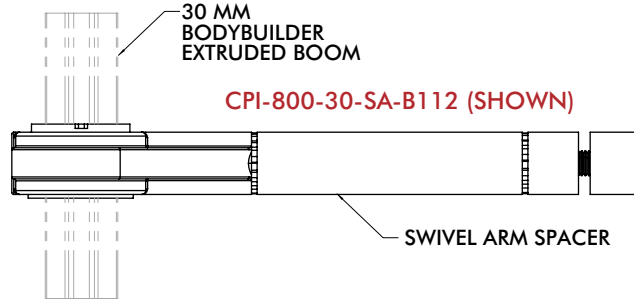
ALSO USED TO MOUNT SAP AND PSM SERIES PROXIMITY MOUNTS.

ROUGH LOCATORS, NEST PAD GUIDES, AND BUMPERS CAN ALSO BE MOUNTED WITH THE USE OF AN APPLE CORE STYLE MOUNT BRACKET SUCH AS THE EST AND AB SERIES NEST PAD BRACKETS

30-SA-B112 30mm Swivel Arms for Swivel Ball Mount Accessories



CPI-500-30-SA-B112 (SHOWN)



CPI- " L " -30-SA-B112 SWIVEL ARM				
" L "	" A "	" B "	" C "	Weight
400	106.7 [4.20]	95.0 [3.74]	146.1 [5.75]	.40 kg [.88 lb]
500	135.0 [5.32]	126.0 [4.96]	177.1 [6.97]	.46 kg [1.00 lb]
600	153.7 [6.05]	145.8 [5.74]	196.9 [7.75]	.49 kg [1.06 lb]
700	172.3 [6.78]	165.4 [6.51]	216.5 [8.52]	.53 kg [1.19 lb]
800	211.1 [8.31]	205.5 [8.09]	256.6 [10.10]	.60 kg [1.31 lb]

BODYBUILDER™ SWIVEL ARM ACCESSORIES



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

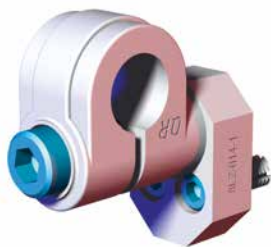
BC19 30mm Bodybuilder to Ø19mm [.75 in] Apple Core Swivel End Mount

Features:

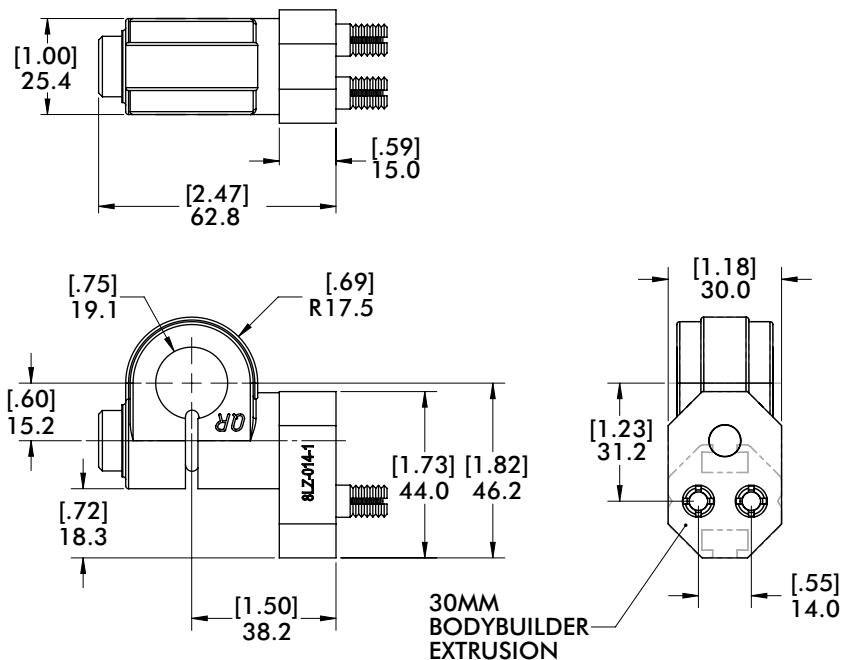
- Mounts to BodyBuilder™ 30mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustment along (2) axis.

Specifications:

Material:
Aluminum

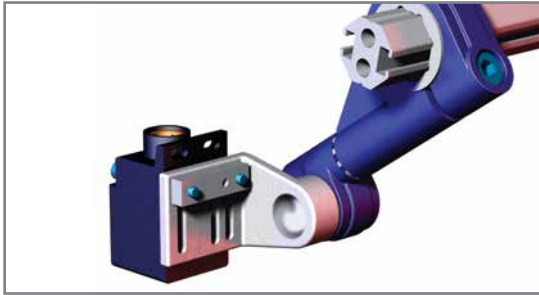


INCLUDES (2) INSERTS TO BE PRESS-FITTED INTO THE END OF 30MM BODYBUILDER™ OCTAGONAL BOOM



Model Number	Weight
CPI-BC-19	.13 kg [.28 lb]

AB-750-SL Part Present Proximity Switch Mount



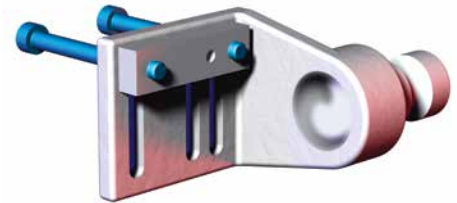
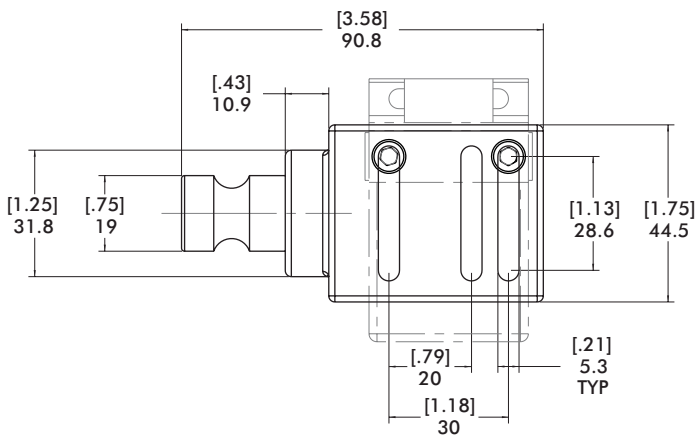
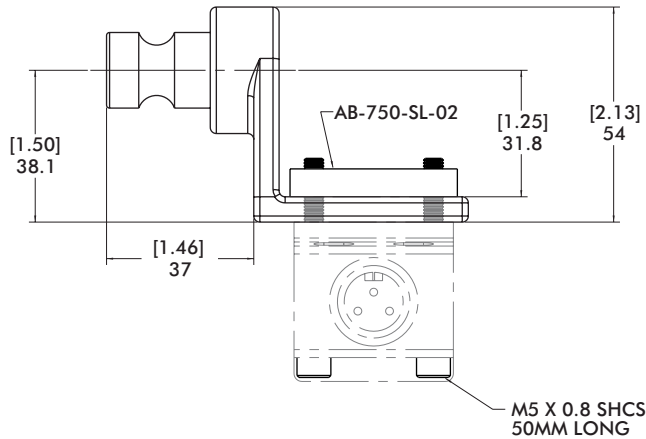
Specifications:

Max. Static Clamp Load:
271 Nm [200 ft-lb]

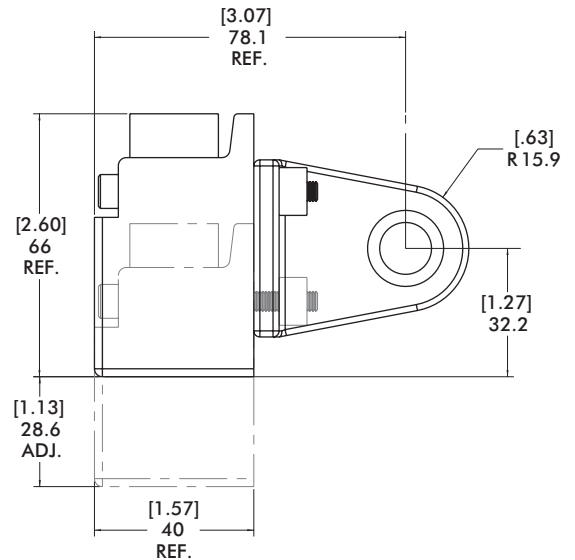
Material:
Aluminum

Features:

- Mounts a 40mm square proximity sensor to the BodyBuilder™ 30mm Swivel Arm (CPI-"L"-30-SA).
- Mount allows for 360 degrees of radial adjustment along one axis.
- Slots allows 28.6mm [1.13 in] of linear adjustment for fine tuning during final setup.



FASTENERS AND NUT INCLUDED



Model Number	Weight
CPI-AB-750-SL	.10 KG [.22 lb]

BODYBUILDER™ SWIVEL ARM ACCESSORIES



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

NPG-15RL-400 Rough Locator

Features:

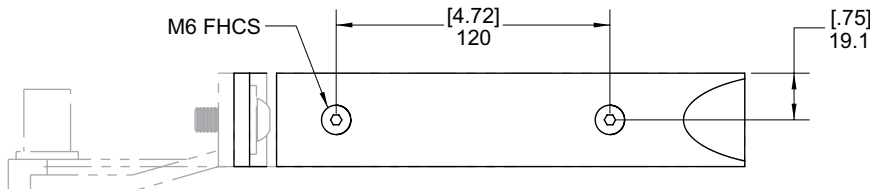
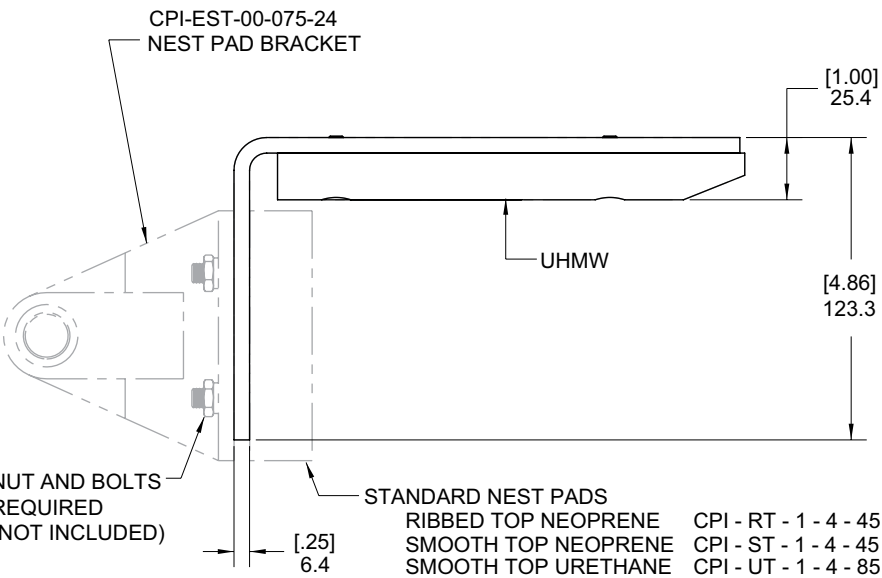
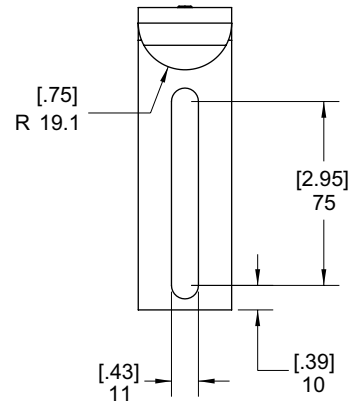
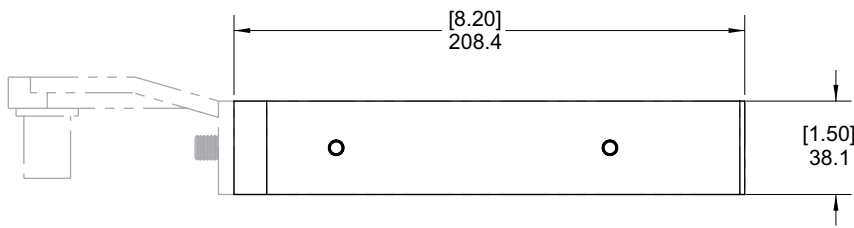
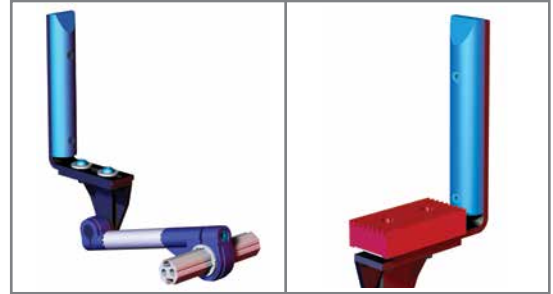
- Mounts to Nest Pad Brackets and indirectly to BodyBuilder™ 30mm Swivel Arm Mount.

Specifications:

Max. Static Clamp Load:
271 Nm [200 ft-lb]

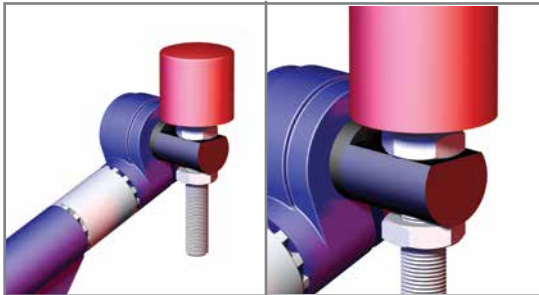
Material:

Bracket: Steel
Wear Surface: UHMW

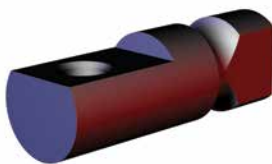


Model Number	Weight
CPI-NPG-15RL-400	0.86 kg [1.90 lb]

SAP-BM10 Ø19mm [.75 in] Apple Core Nest Bumper Mount



Specifications:
 Max. Static Clamp Load:
 271 Nm [200 ft-lb]
 Material:
 Steel



Model Number	Weight
CPI-SAP-BM10	.10 kg [.21 lb]

