

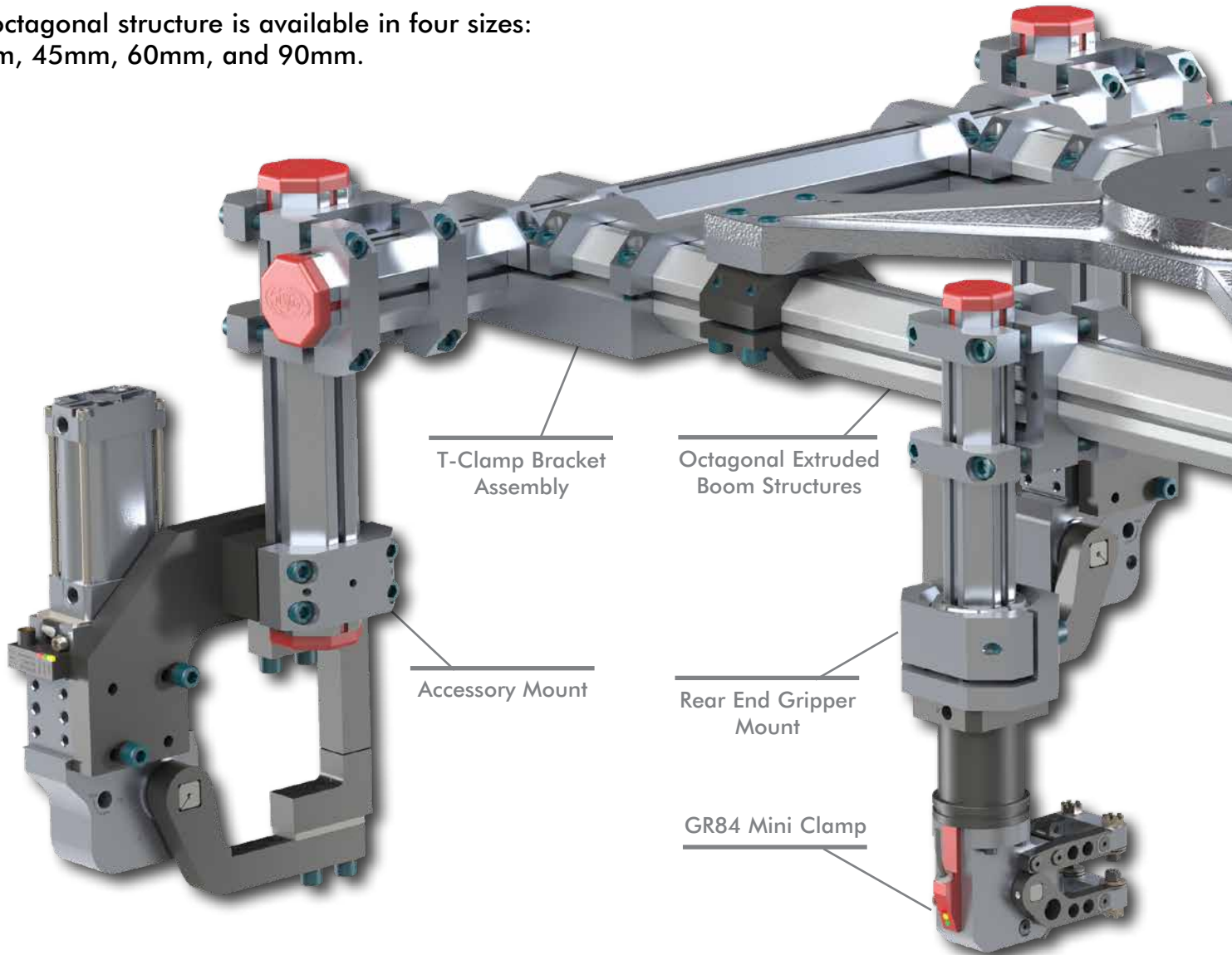
BODYBUILDER™ END EFFECTOR SYSTEM



Product Overview

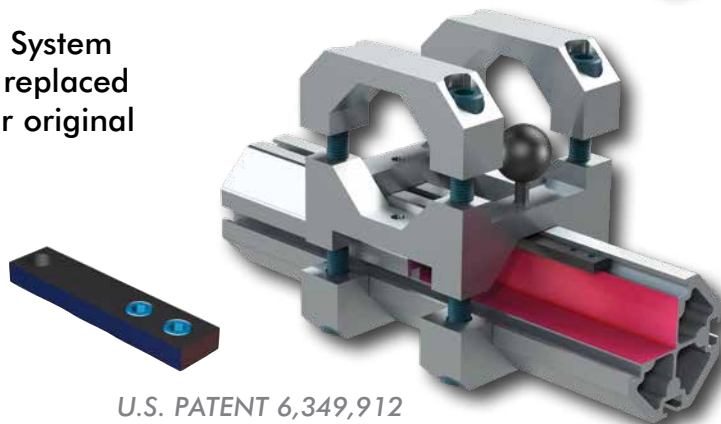
BodyBuilder™ is designed to maximize productivity, both before and after installation. The flexibility of the system allows modifications to the end effector in minutes, greatly reducing start up time to launch.

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.



U.S. PATENT 6,349,912

Most commonly used in:

Applications

Robot Welding
Pick and Place
Material Handling
Lower Nest

Markets

Industrial
Automotive
Transportation
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



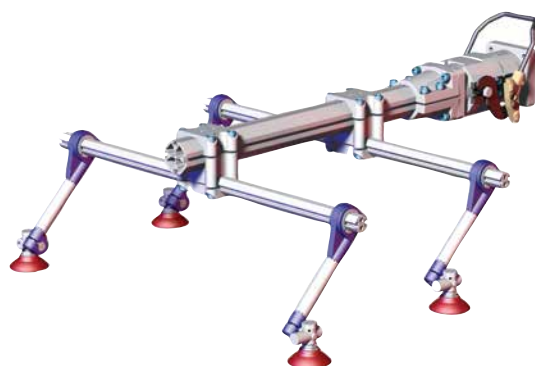
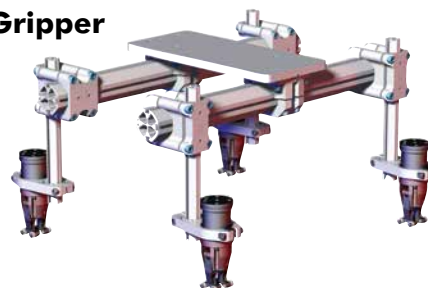
BODYBUILDER™ TOOLING EXAMPLES

BodyBuilder™ Octagonal Tooling | Typical Application Build Examples

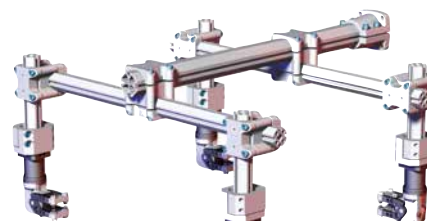


**Mid Mount with GR84
Series Mini-Clamps**

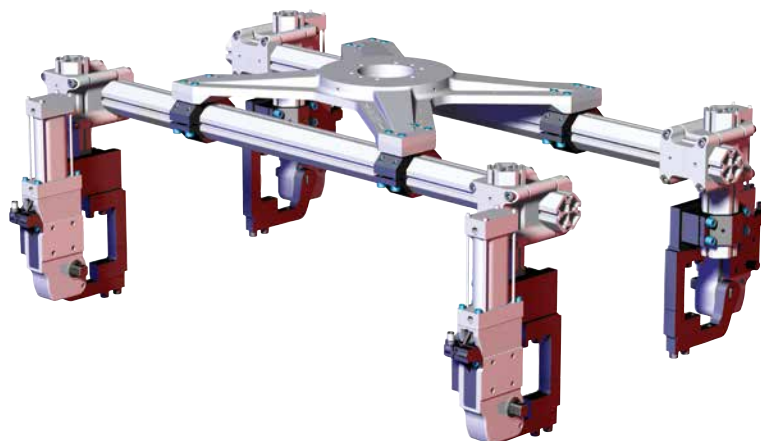
**Mid Mount with GR1
Series Gripper**



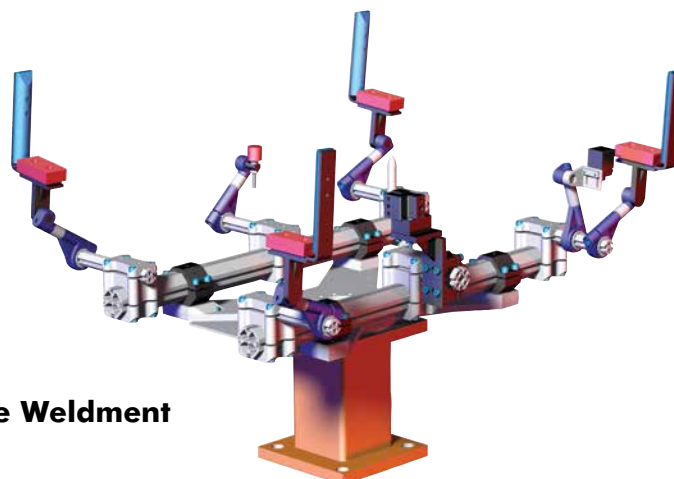
**End Mount with Venturi Cup
Mounts and Vacuum Cups**



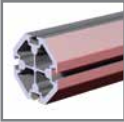





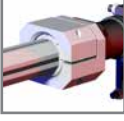
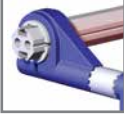

**End Mount with GR84
Series Mini Clamp**



**Mid Mount with 82M50
Enclosed Power Clamps**



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

	BodyBuilder™ Extruded Aluminum Octagonal Booms	5
	BodyBuilder™ Structure Mid Mount Assemblies.....	11
	BodyBuilder™ Structure End Mount Assemblies	28
	BodyBuilder™ Transition Brackets and Blocks	32
	BodyBuilder™ Low-Profile Transition Brackets	48
	BodyBuilder™ Accessory Brackets and Mounts	68
	BodyBuilder™ Gripper Mounts.....	72
	BodyBuilder™ Swivel Arm Mounts.....	75
	BodyBuilder™ Swivel Arm Accessories.....	79

BODYBUILDER™ BOOM STRUCTURE

BodyBuilder™ Octagonal Tooling | Dimensions

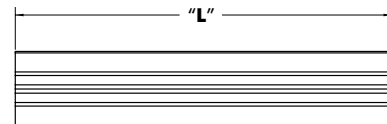
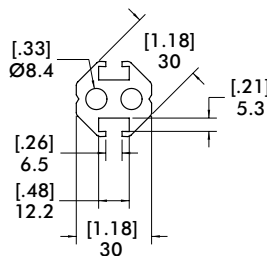
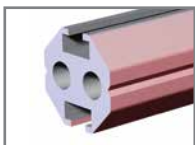


30, 45, 60, and 90mm Boom Lengths and Ordering Numbers

<div> BODYBUILDER™ OCTAGONAL ALUMINUM BOOM LENGTHS & ORDER NUMBERS </div>				
(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

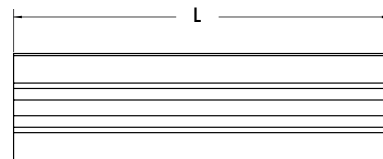
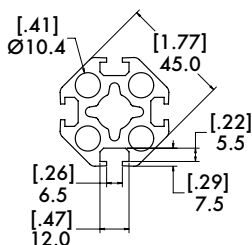
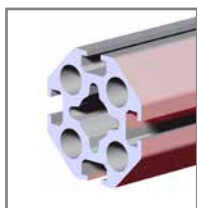
Weight

B - 30 - (L) - 0

1.4 kg/m [0.9 lb/ft]

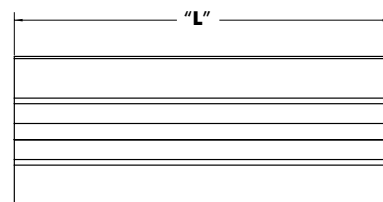
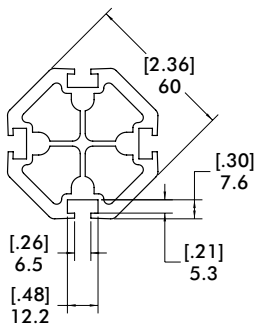
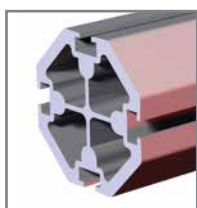
45, 60, and 90mm Boom Profile Dimensions and Specifications

BodyBuilder™ 45mm Boom



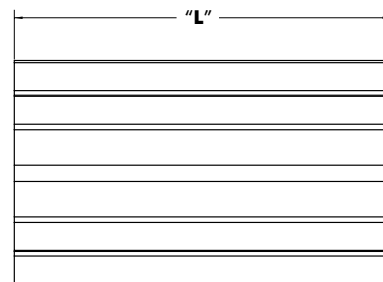
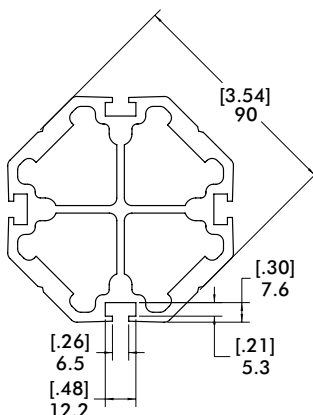
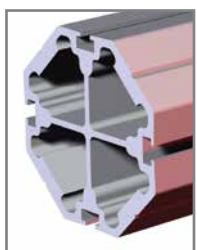
Model Number	Weight
B - 45 - (L) - 0	2.0 kg/m [1.4 lb/ft]

BodyBuilder™ 60mm Boom



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

BodyBuilder™ 90mm Boom



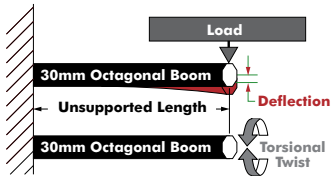
Model Number	Weight
B - 90 - (L) - 0	6.5 kg/m [4.4 lb/ft]

BODYBUILDER™ BOOM STRUCTURE

BodyBuilder™ Octagonal Tooling | Technical Specifications

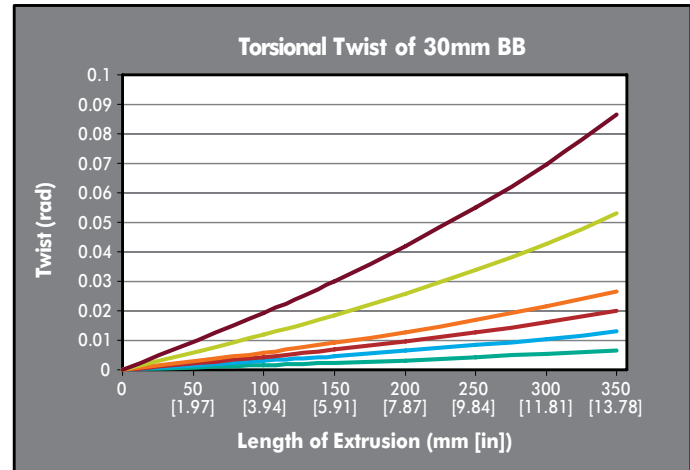
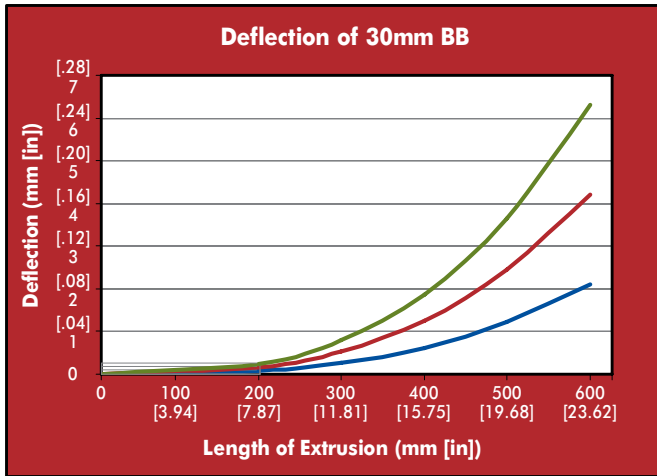
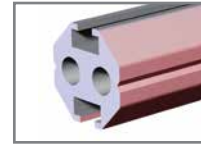


30mm Boom Deflection and Torsion Charts

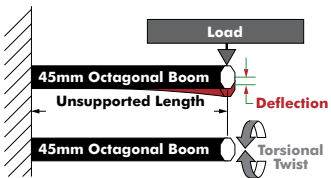


5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
15 Kgf	33.0 lbf

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

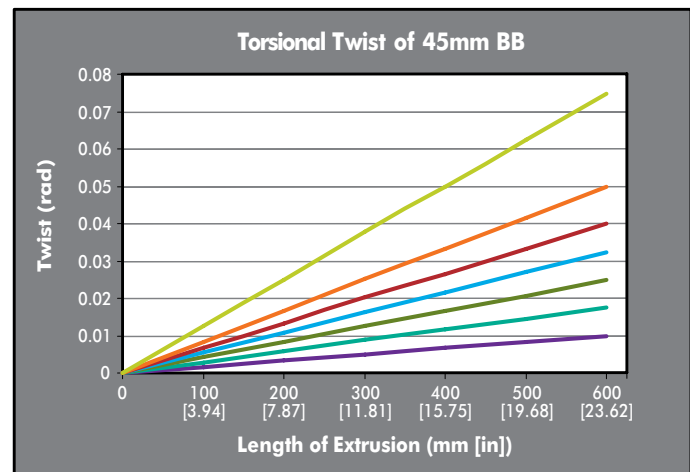
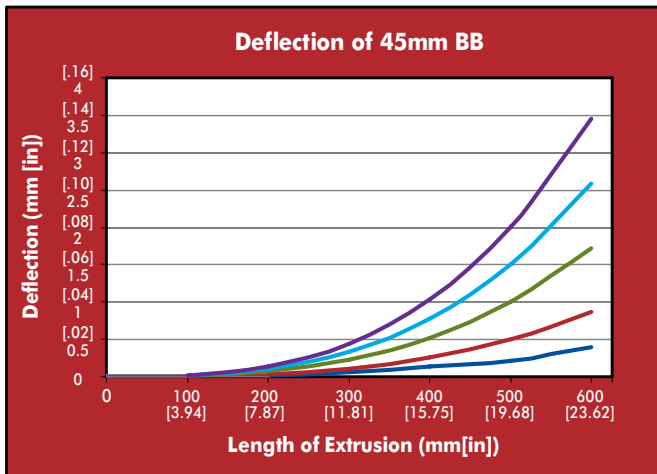
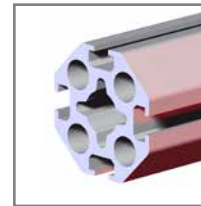


45mm Boom Deflection and Torsion Charts



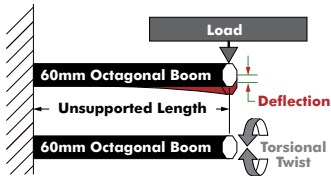
5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf

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



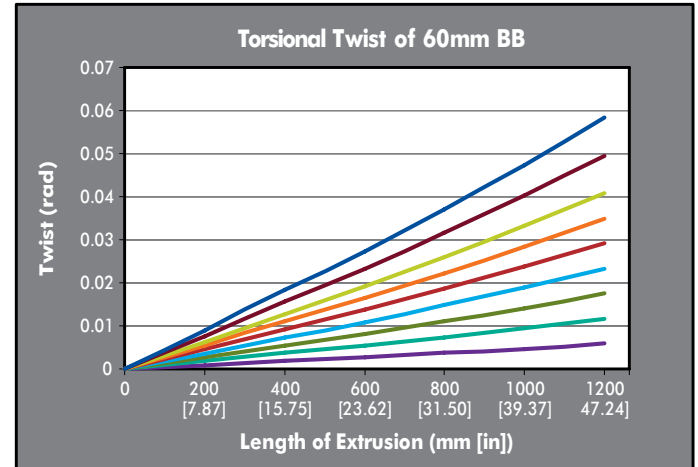
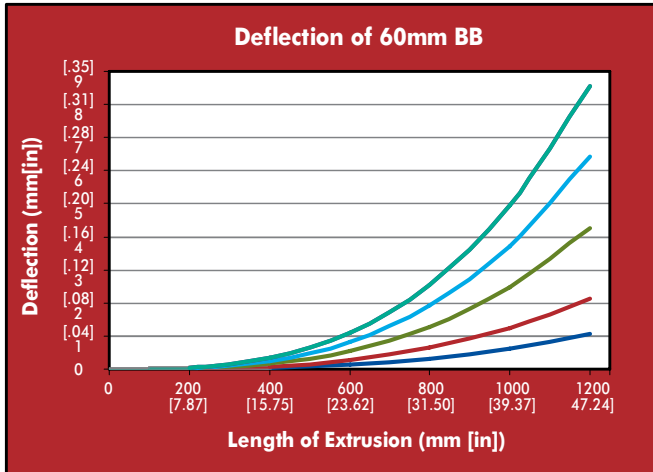
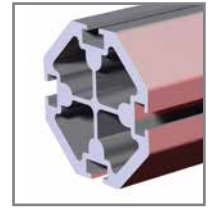
Note: Performance may vary if used with non-DESTACO components

60mm Boom Deflection and Torsion Charts

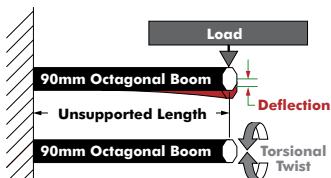


5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf
50 Kgf	110.2 lbf

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

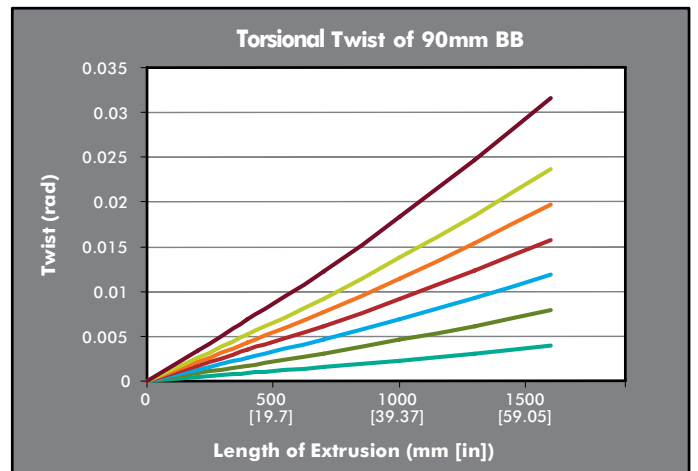
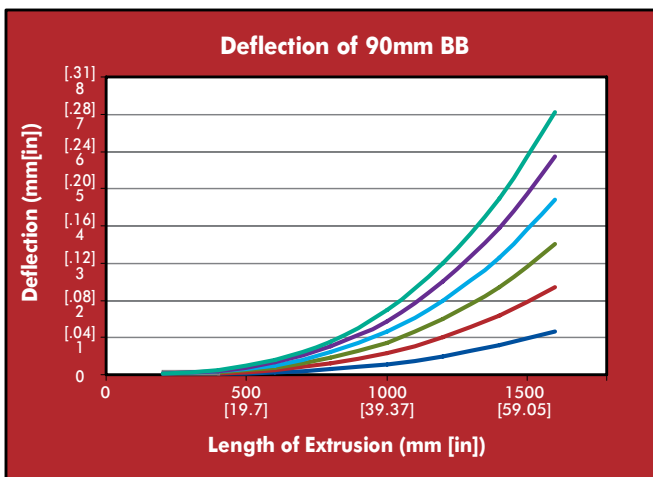
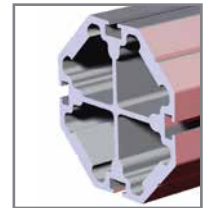


90mm Boom Deflection and Torsion Charts



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

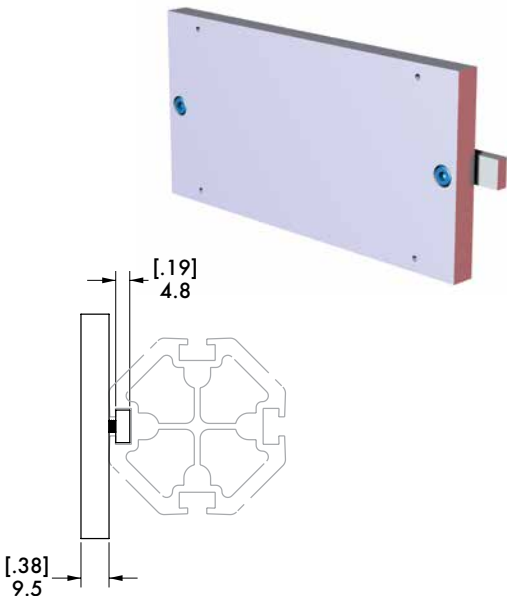
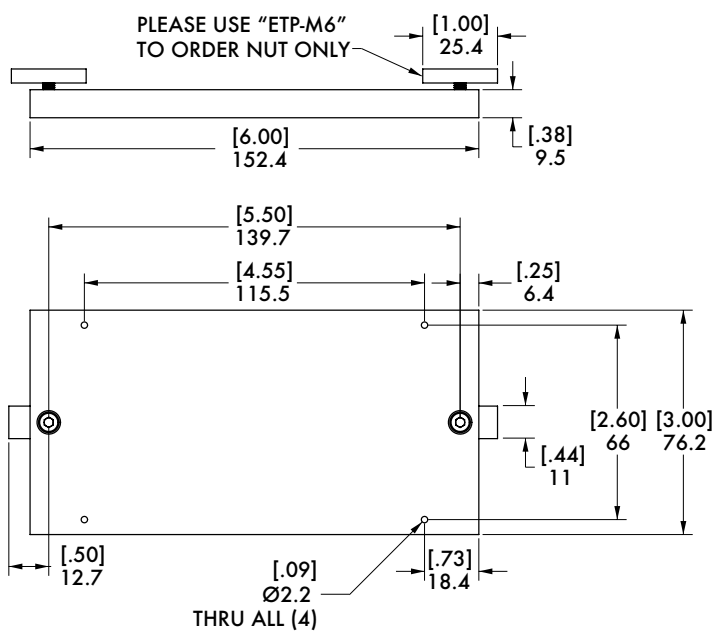
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



ETP-35 Extrusion Accessory Mount

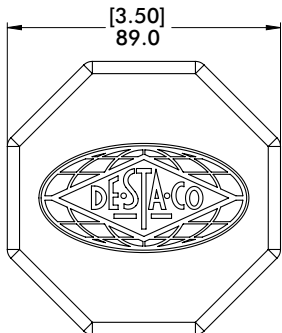


Specifications:
Material: Aluminum

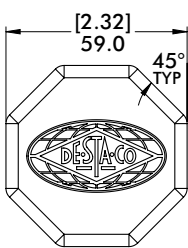


Model Number	Weight
CPI-ETP-35	.31 kg [.68 lb]

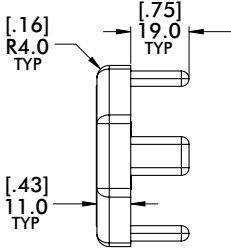
EC-60 60mm Bodybuilder Octagonal Boom End Cap



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]

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

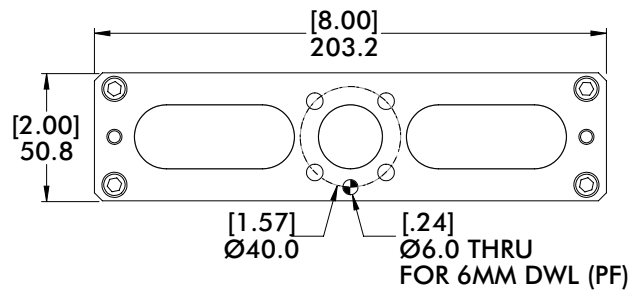
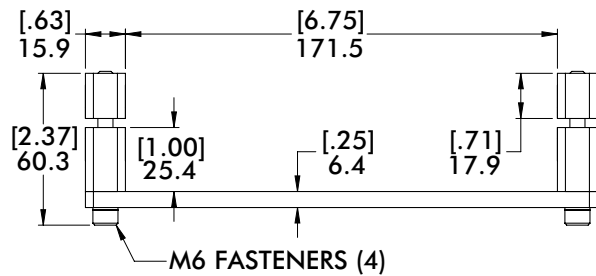
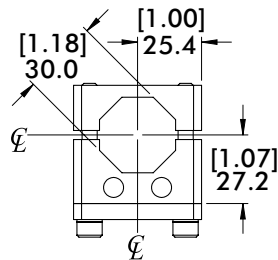
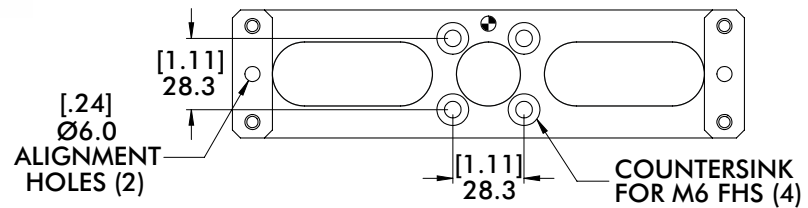
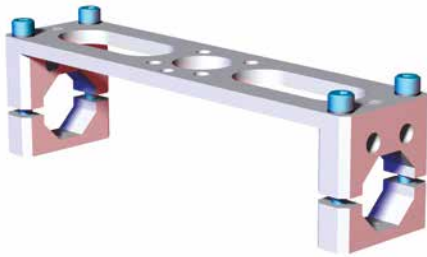


Specifications:

Max. Static Product Load:

102 Nm [75 ft-lb]

Material: Aluminum



Model Number

Weight

CPI-RMM-30B-40BC-08-90

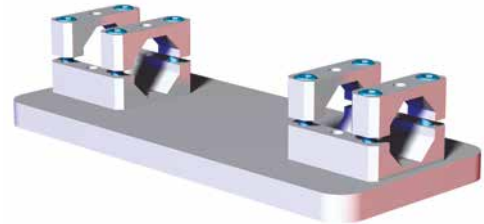
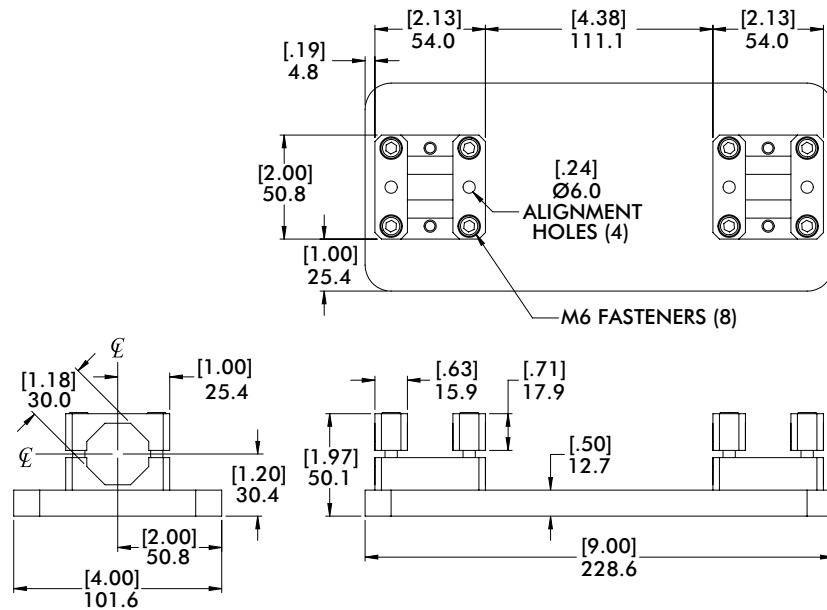
.28 kg [.62 lb]

BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

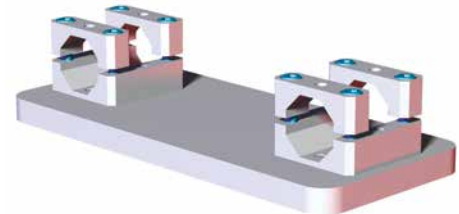
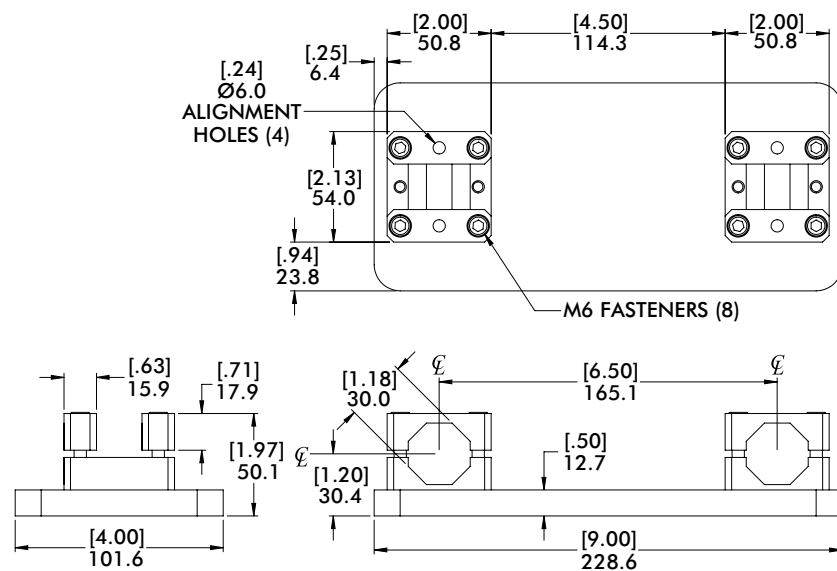


Specifications:

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

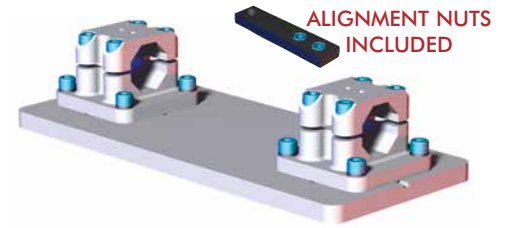
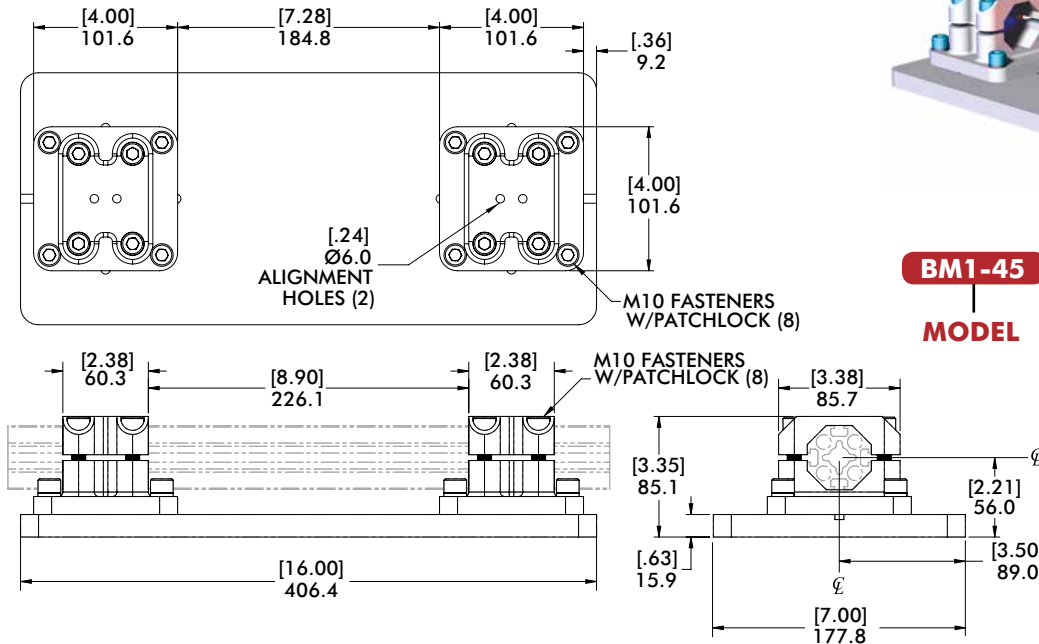


Specifications:

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



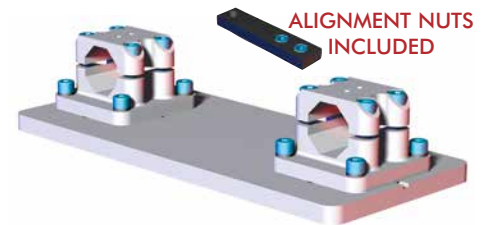
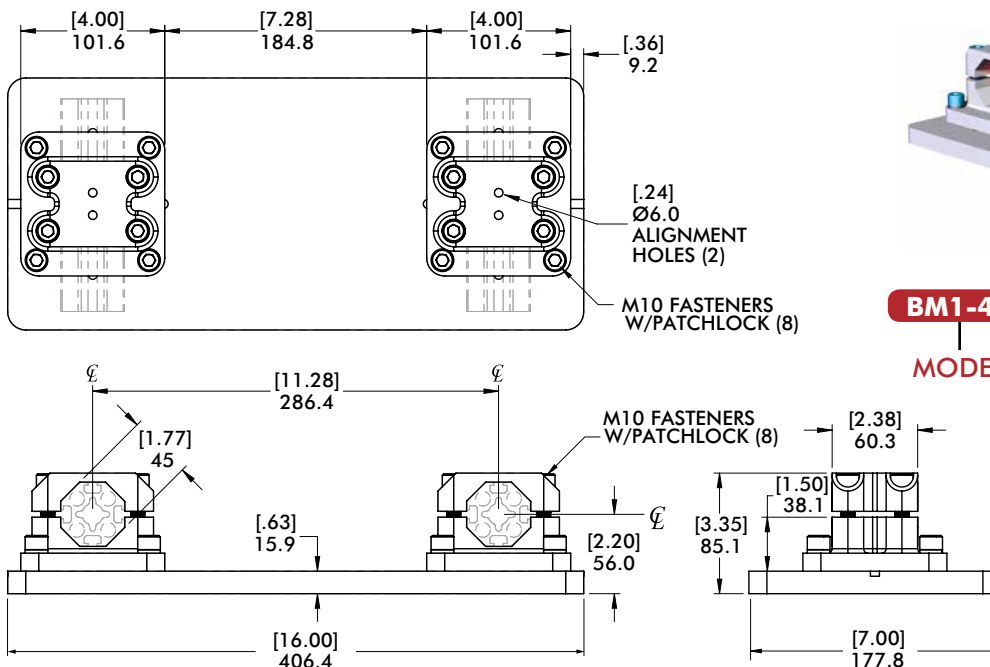
BM1-45 — **SE** — **RXX**
MODEL **BOOM SETUP (SINGLE)** **ROBOT INTERFACE PATTERN (PAGE 19-21)**

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]

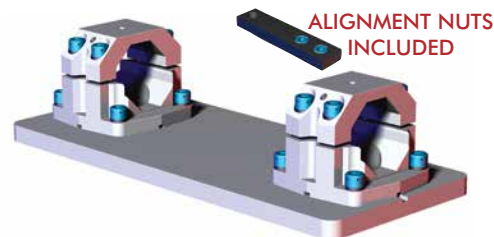
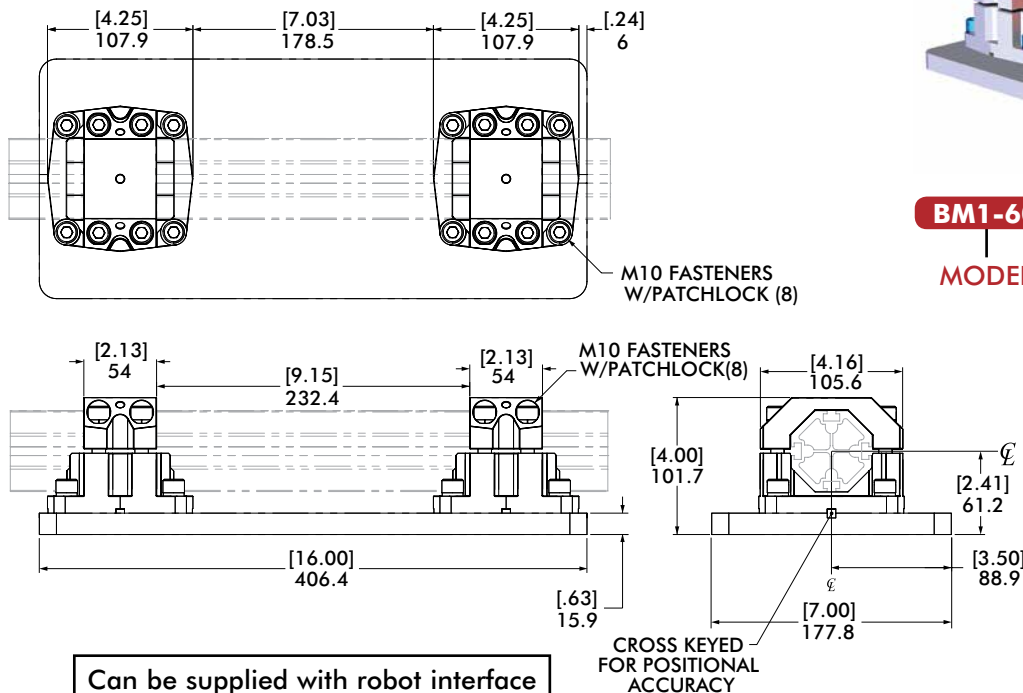
Can be supplied with robot interface hole patterns. (See pages 19-21).

BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

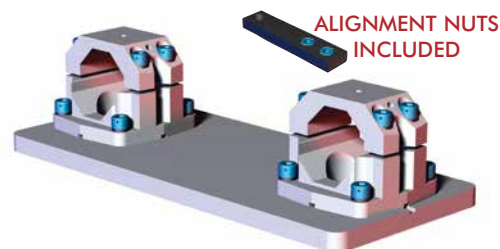
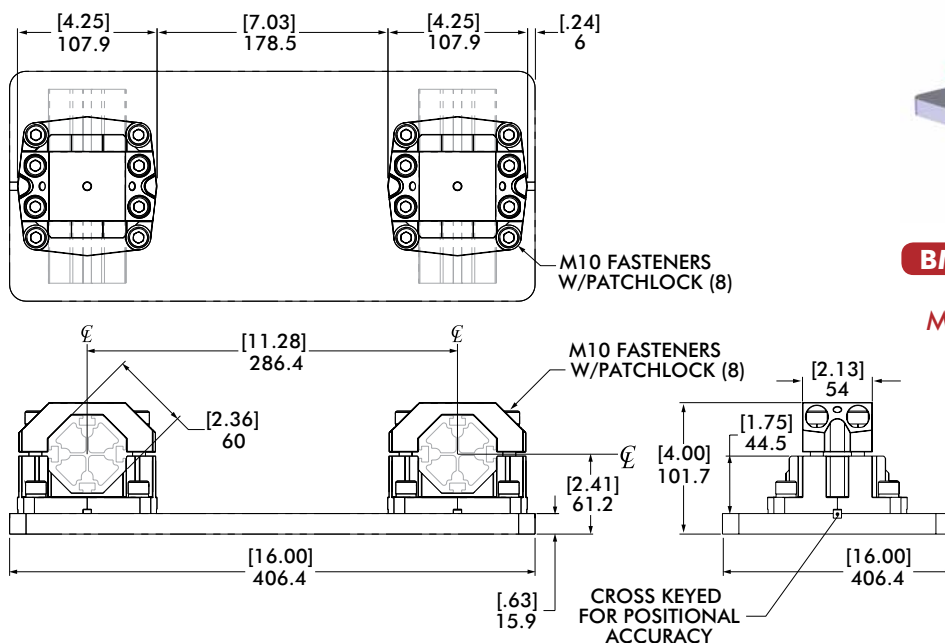


BM1-60 — **SE** — **RXX**
MODEL — **BOOM SETUP (SINGLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

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



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]

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

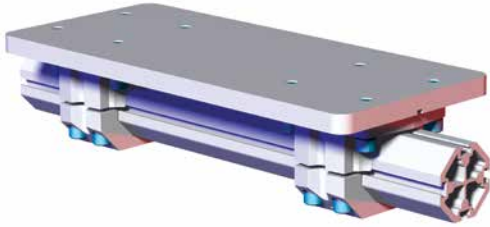
BM1-45/BM1-60 Mid Mount Assembly - Mount Plate

Specifications:

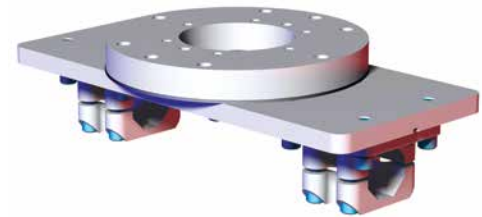
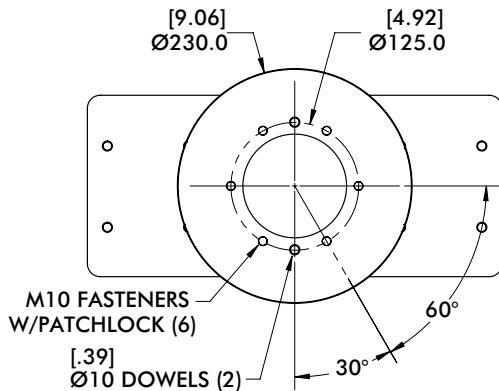
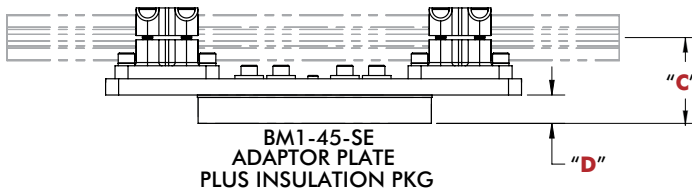
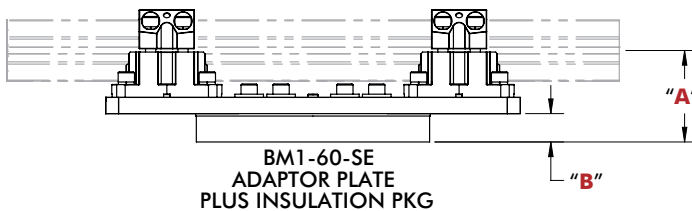
Material: Aluminum

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

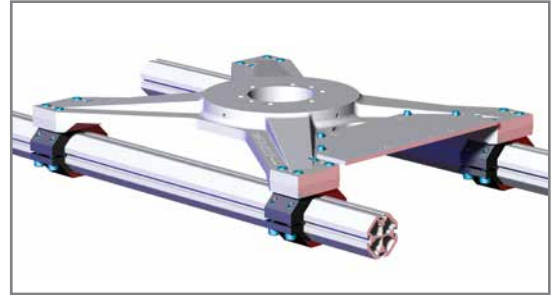
Features:

- 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



ROBOT INTERFACE PLATE SHOWN BLANK.

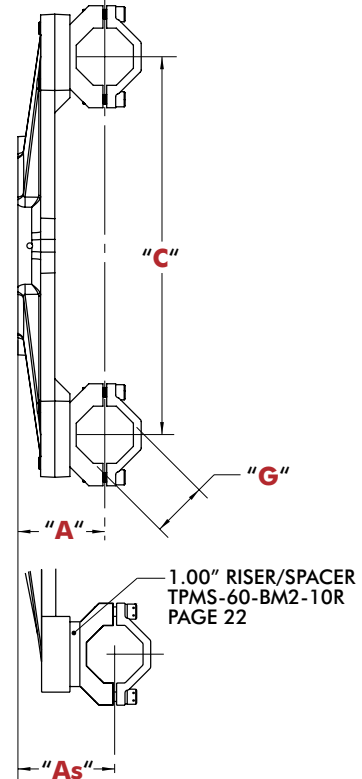
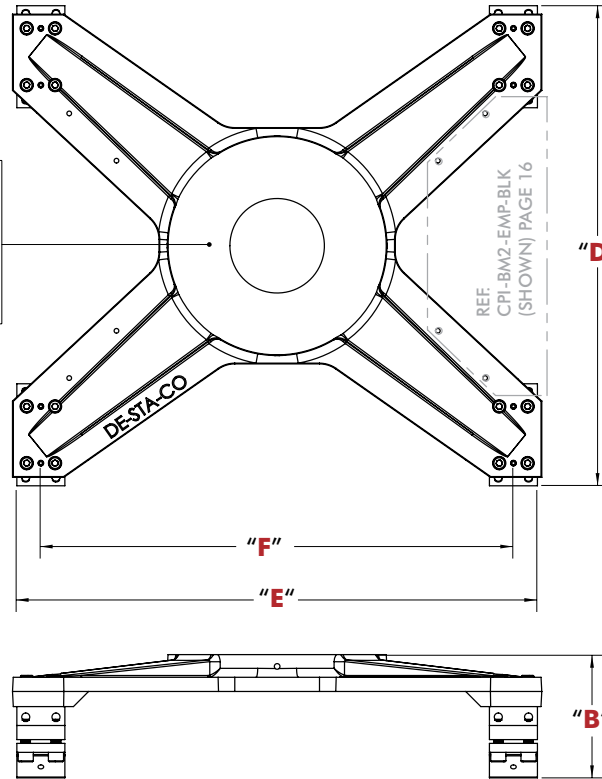
PLEASE REFER TO PAGES 20-22 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

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

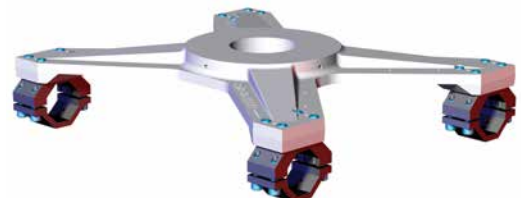


HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

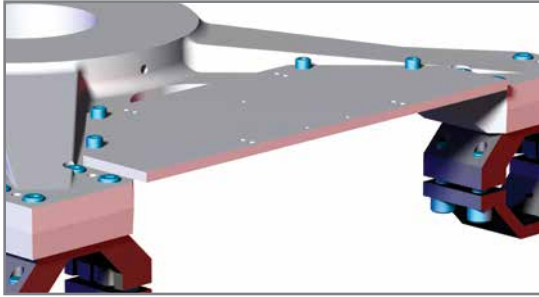
Model	"A"	"As"	"B"	"C"	"D"	"E"	"F"	"G"	Weight
RM4-45 (45mm)	85.6 [3.37]	111 [4.37]	117.6 [4.63]	400 [15.75]	490 [19.29]	560 [22.05]	500.0 [19.69]	45	13.6 kg [30.0 lb]
RM4-60 (60mm)	91.9 [3.62]	117.3 [4.62]	131.7 [5.185]	400.0 [15.75]	508 [20.00]	560.8 [22.85]	500.0 [19.69]	60	15.5 kg [34.2 lb]

RM4-XX — **RXX** — **S** — **XX**

MODEL **ROBOT INTERFACE PATTERN** **SPACER (Skip if NONE)** **ACCESSORY (e.g. EPM-01) (Leave Blank if NONE)**



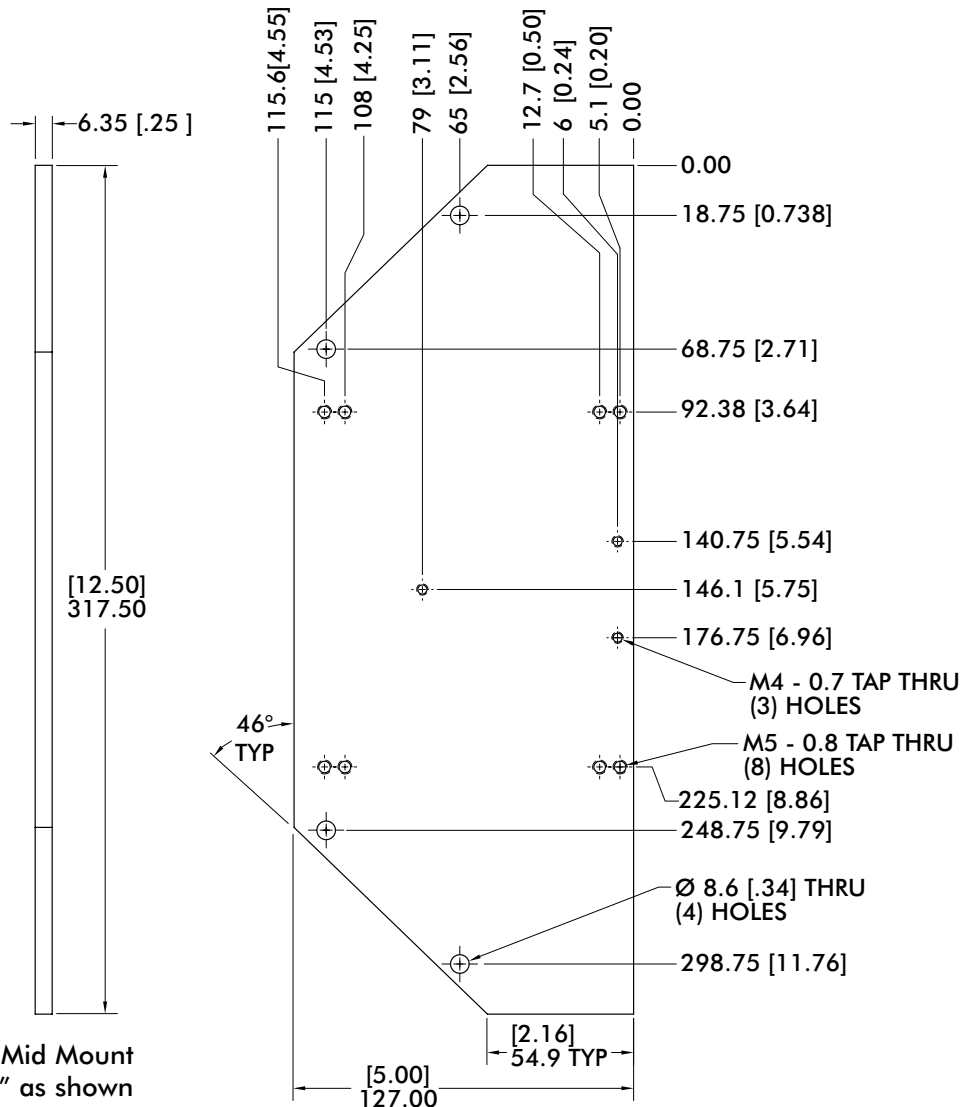
BM2-EPM Accessory Mount Plate



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

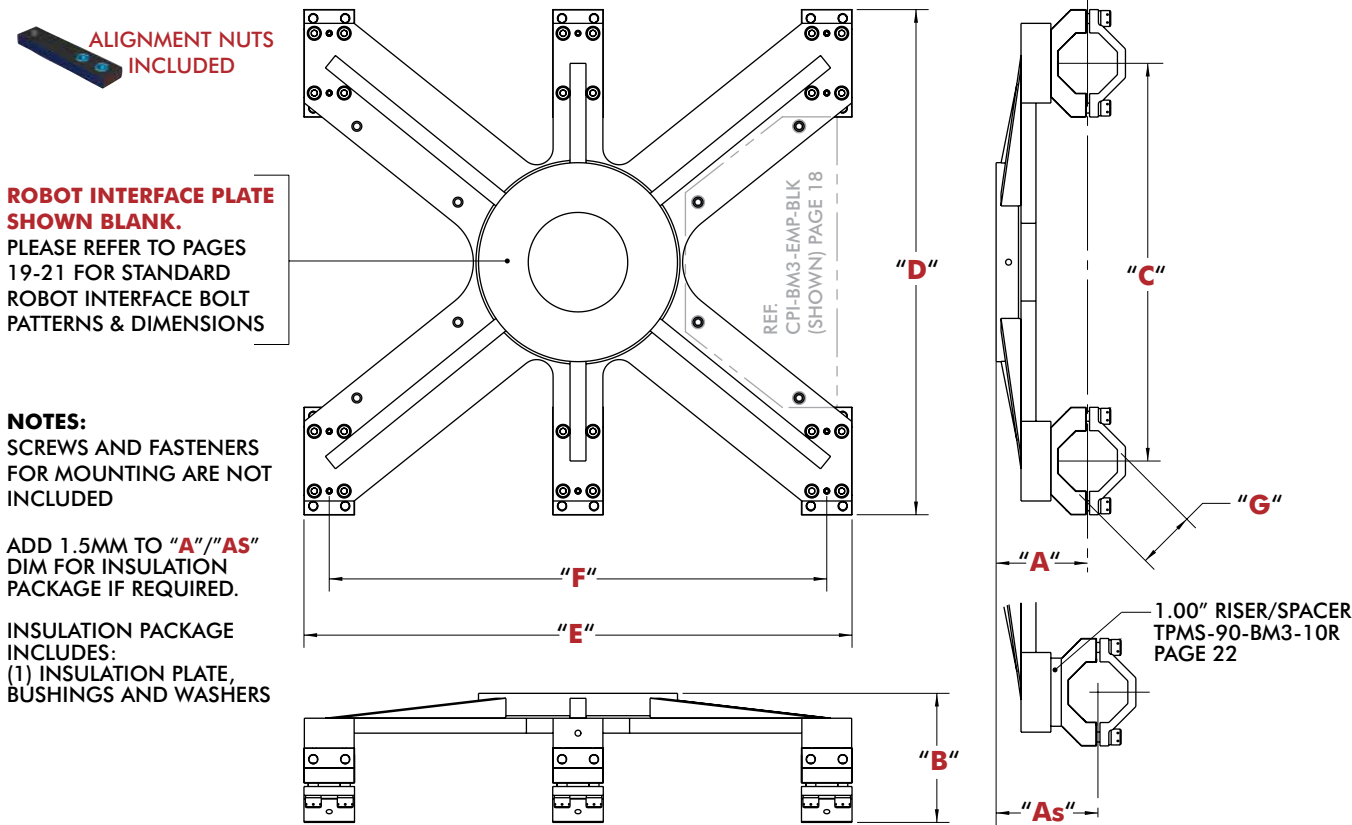
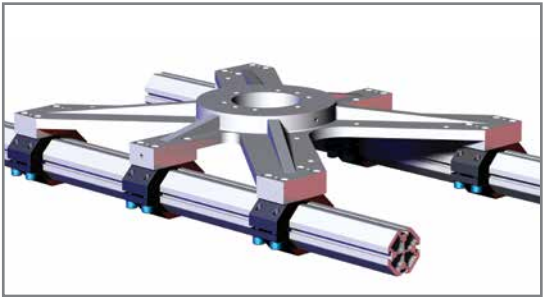
Features:

- 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



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]

BM3-90

MODEL

RXX

ROBOT INTERFACE PATTERN

S

SPACER (Skip if NONE)

XX

ACCESSORY (e.g. EPM-01) (Leave Blank if NONE)



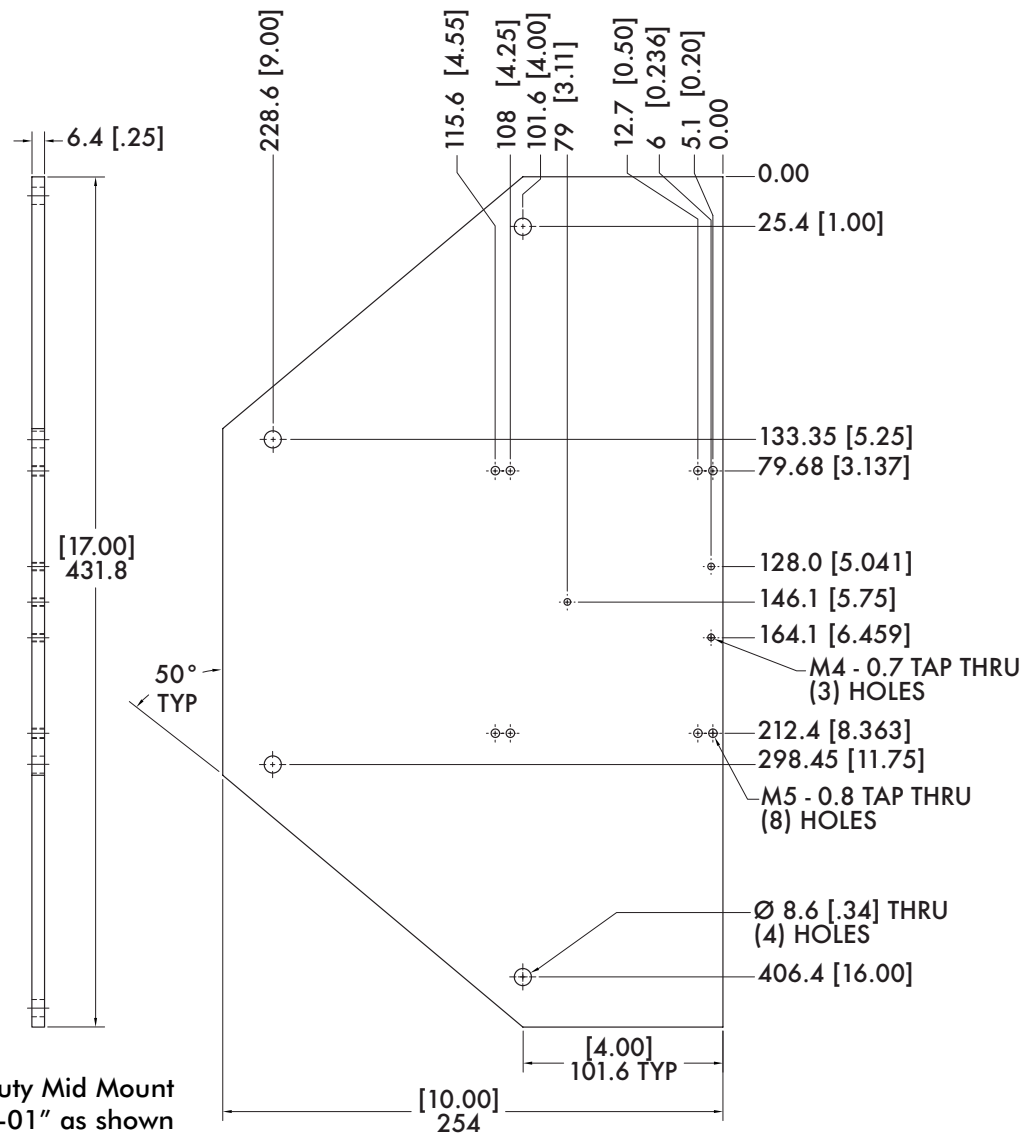
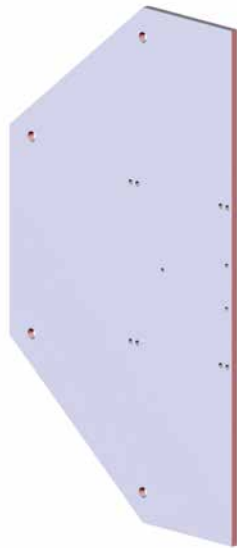
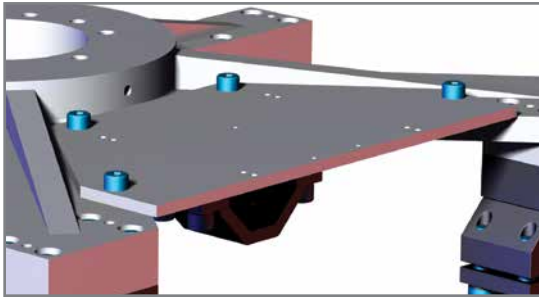
BM3-EPM Accessory Mount Plate

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

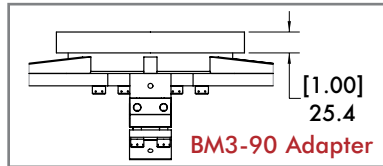
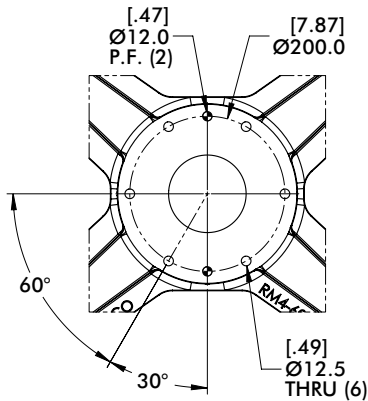
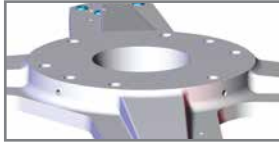
Model Number	Weight
CPI-BM3-EPM-xx	1.54 kg [3.39 lb]

BODYBUILDER™ MID MOUNT BOLT PATTERNS

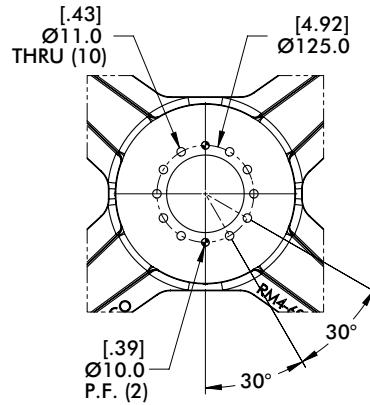
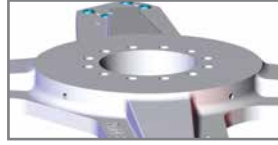
BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns



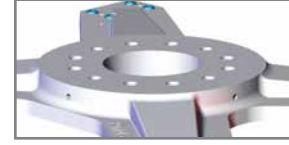
R01 (Ø200mm Bolt Circle)



R02 (Ø125mm Bolt Circle)

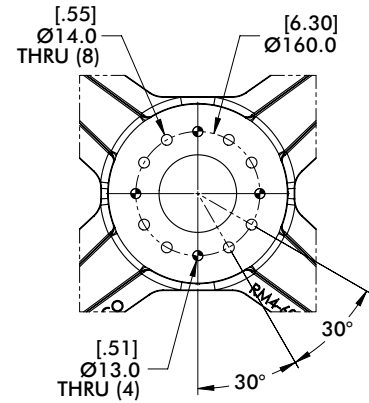


R03 (Ø160mm Bolt Circle)

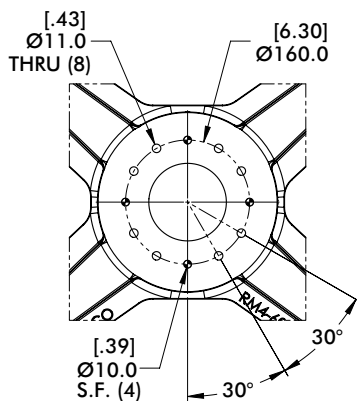
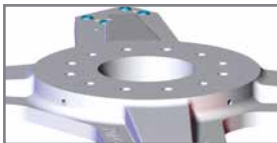


Includes Insulation

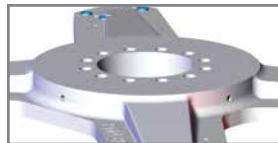
Add 1.5mm to Height Dim "A"/"AS"



R04 (Ø160mm Bolt Circle)

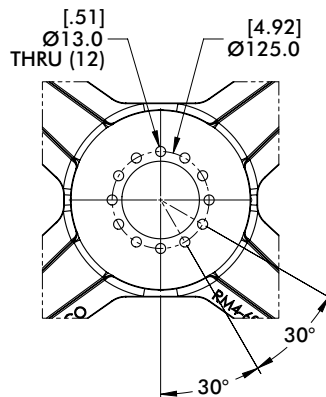


R05 (Ø125mm Bolt Circle)

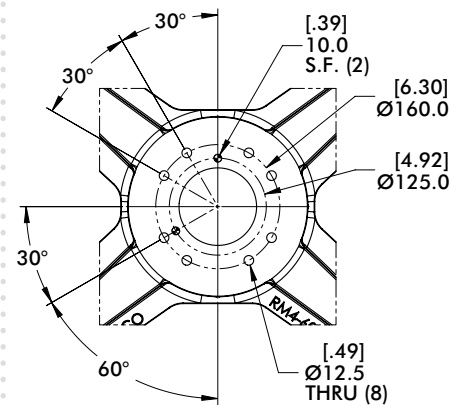
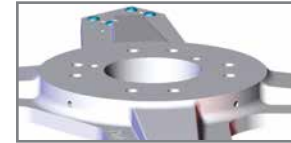


Includes Insulation

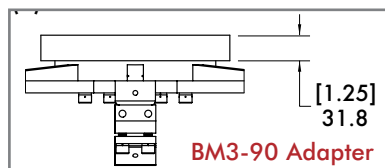
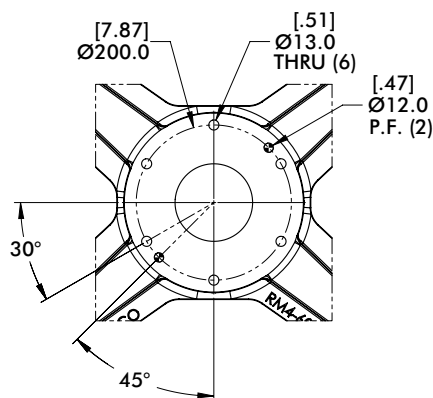
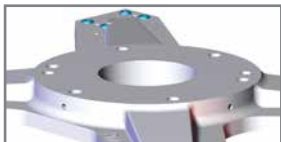
Add 1.5mm to Height Dim "A"/"AS"



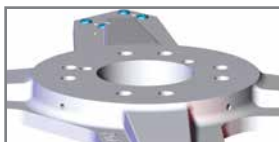
R06 (Ø125/160mm Bolt Circle)



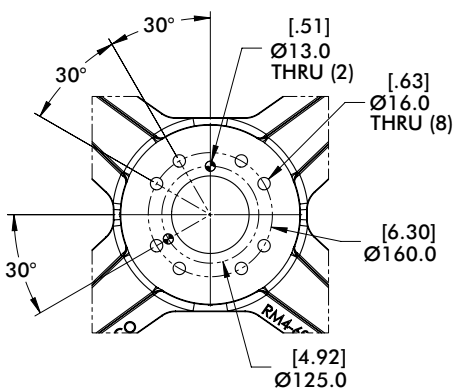
R07 (Ø200mm Bolt Circle)



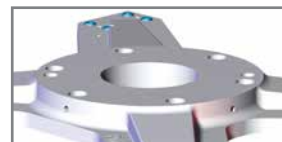
R08 (Ø125/160mm Bolt Circle)



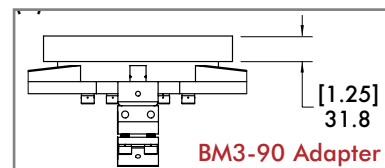
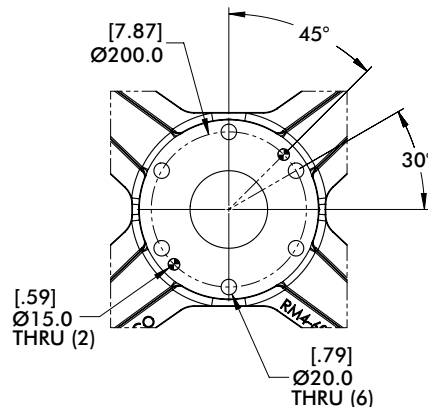
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



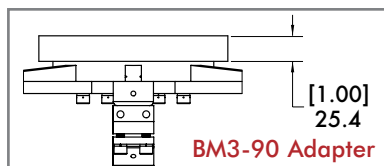
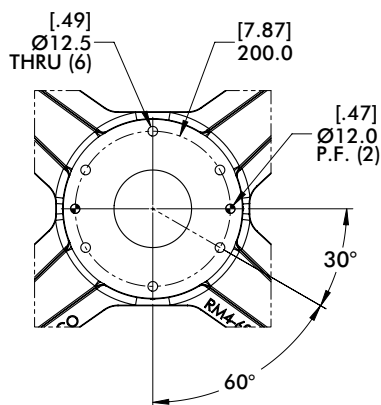
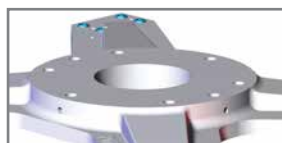
R09 (Ø200mm Bolt Circle)



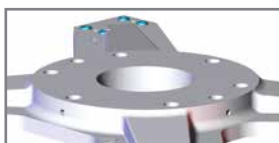
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



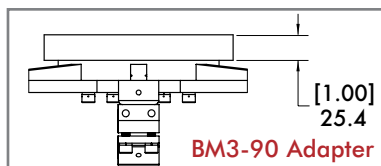
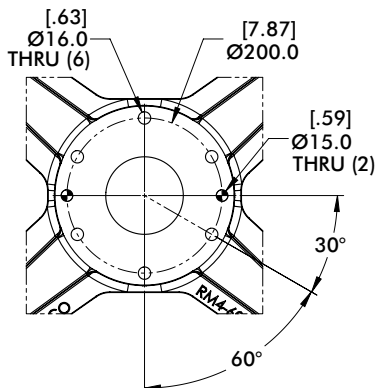
R10 (Ø200mm Bolt Circle)



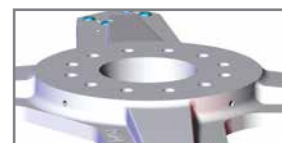
R11 (Ø200mm Bolt Circle)



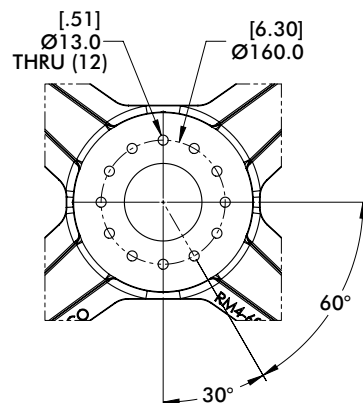
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R12 (Ø160mm Bolt Circle)



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

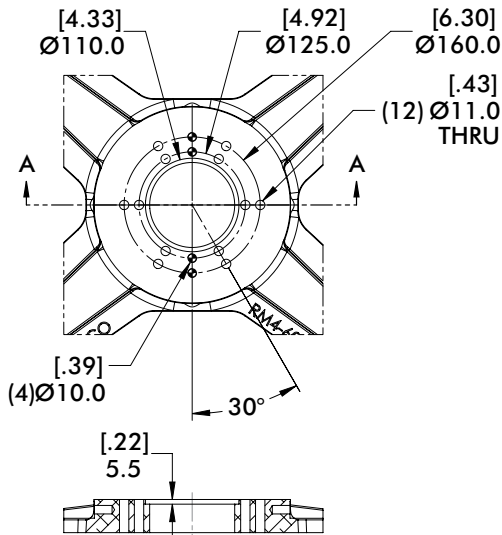
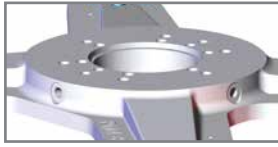


BODYBUILDER™ MID MOUNT BOLT PATTERNS

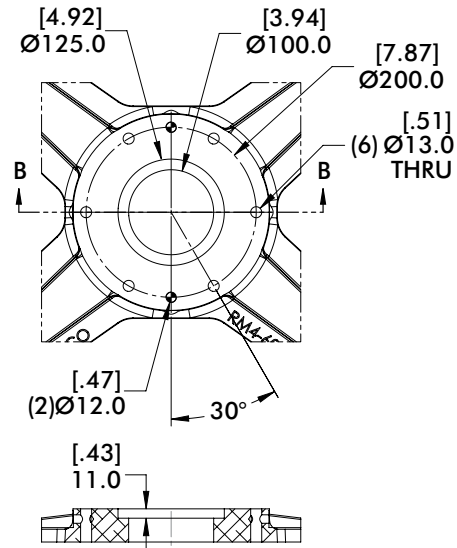
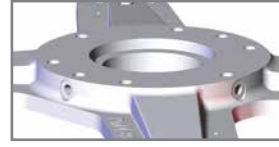
BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns



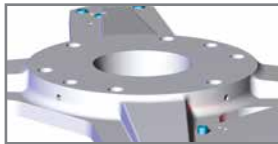
**R13 (Ø125/160mm Bolt Circle)
(Ø110mm Pilot, 5.5mm Deep)**



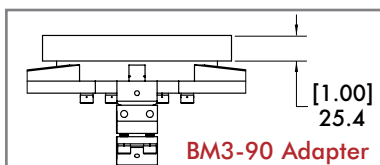
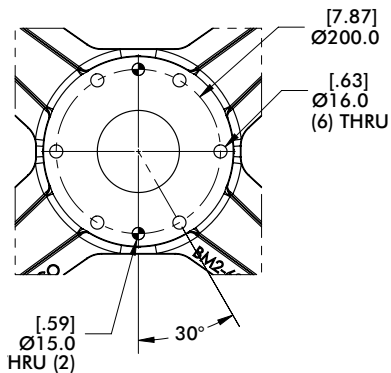
**R14 (Ø200mm Bolt Circle)
(Ø125mm Pilot, 11mm Deep)**



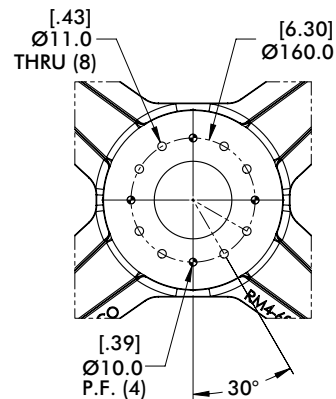
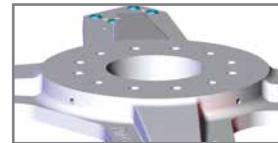
R16 (Ø200mm Bolt Circle)



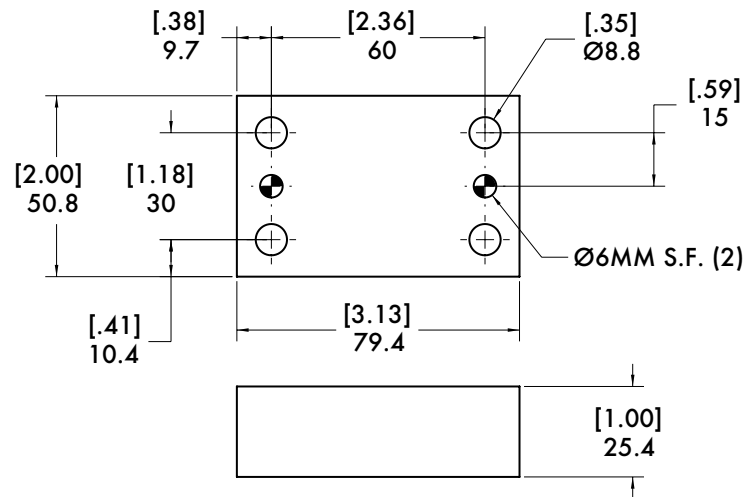
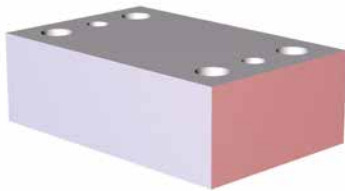
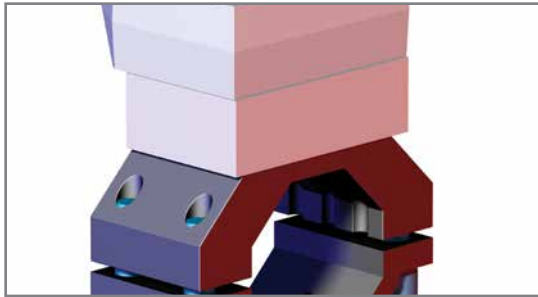
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R17 (Ø160mm Bolt Circle)



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



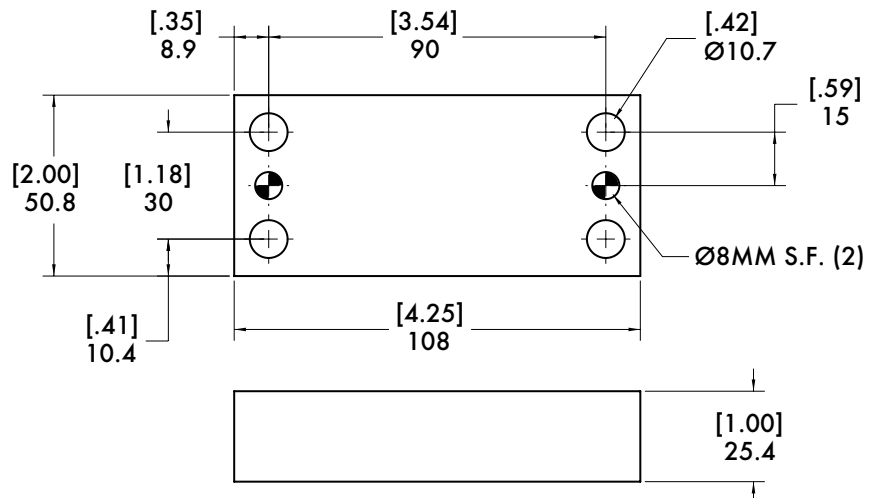
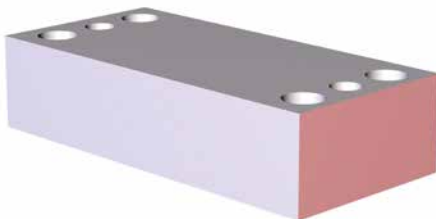
When ordering with Heavy Duty Mid Mount add designation (S) as shown:

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



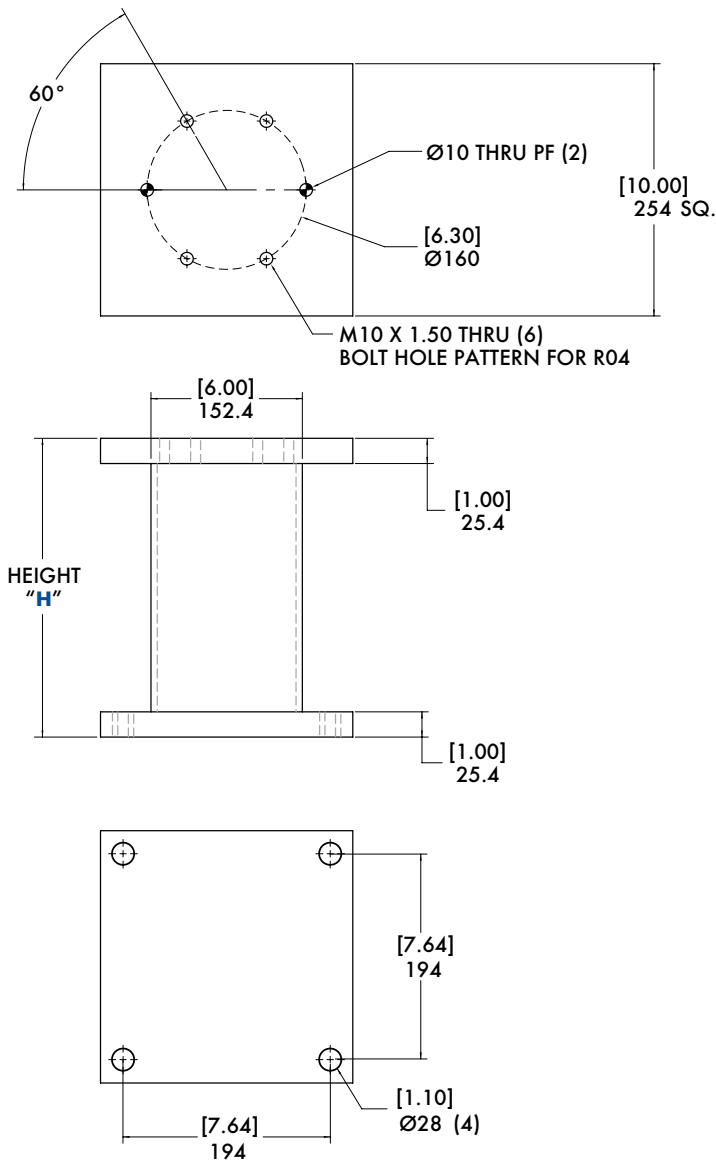
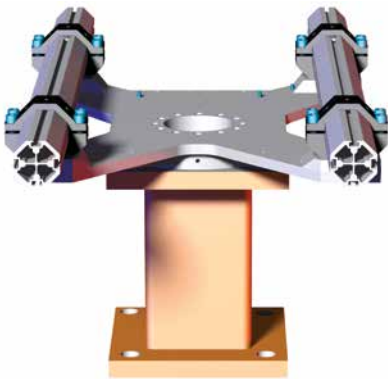
HTW 6" SQ. Pedestal Hold Table Weldment

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

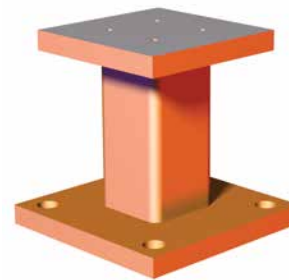
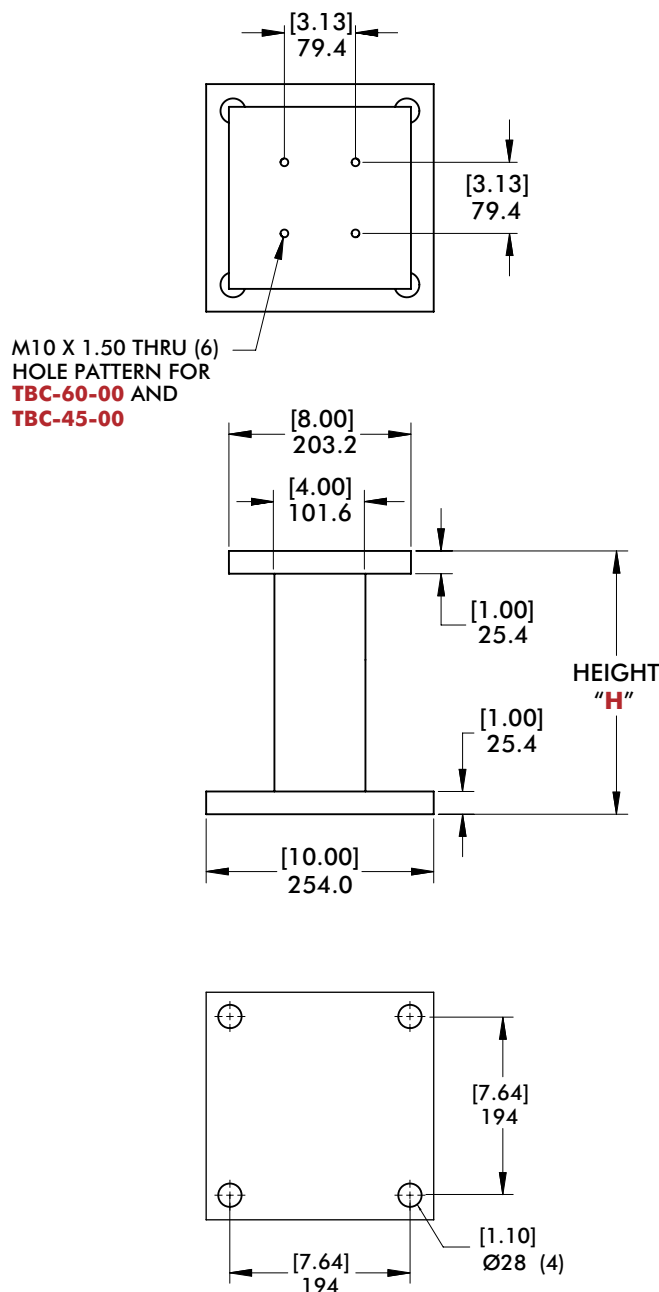
"H"	Model Number	Weight
250	CPI-HTW-250	32.43 kg [71.30lb]
300	CPI-HTW-300	33.75 kg [74.40lb]
350	CPI-HTW-350	35.16 kg [77.50lb]
400	CPI-HTW-400	36.56 kg [80.60lb]
450	CPI-HTW-450	37.97 kg [83.70lb]
500	CPI-HTW-500	39.37 kg [86.81lb]
550	CPI-HTW-550	40.78 kg [89.91lb]
600	CPI-HTW-600	42.19 kg [93.01lb]
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]



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.



CPI-HTW-"H"-4 HOLD TABLE WELDMENT

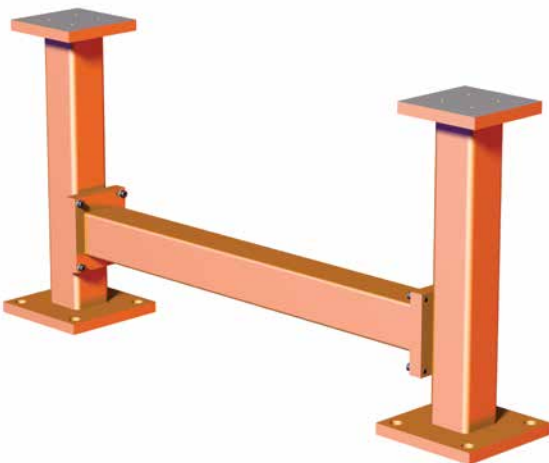
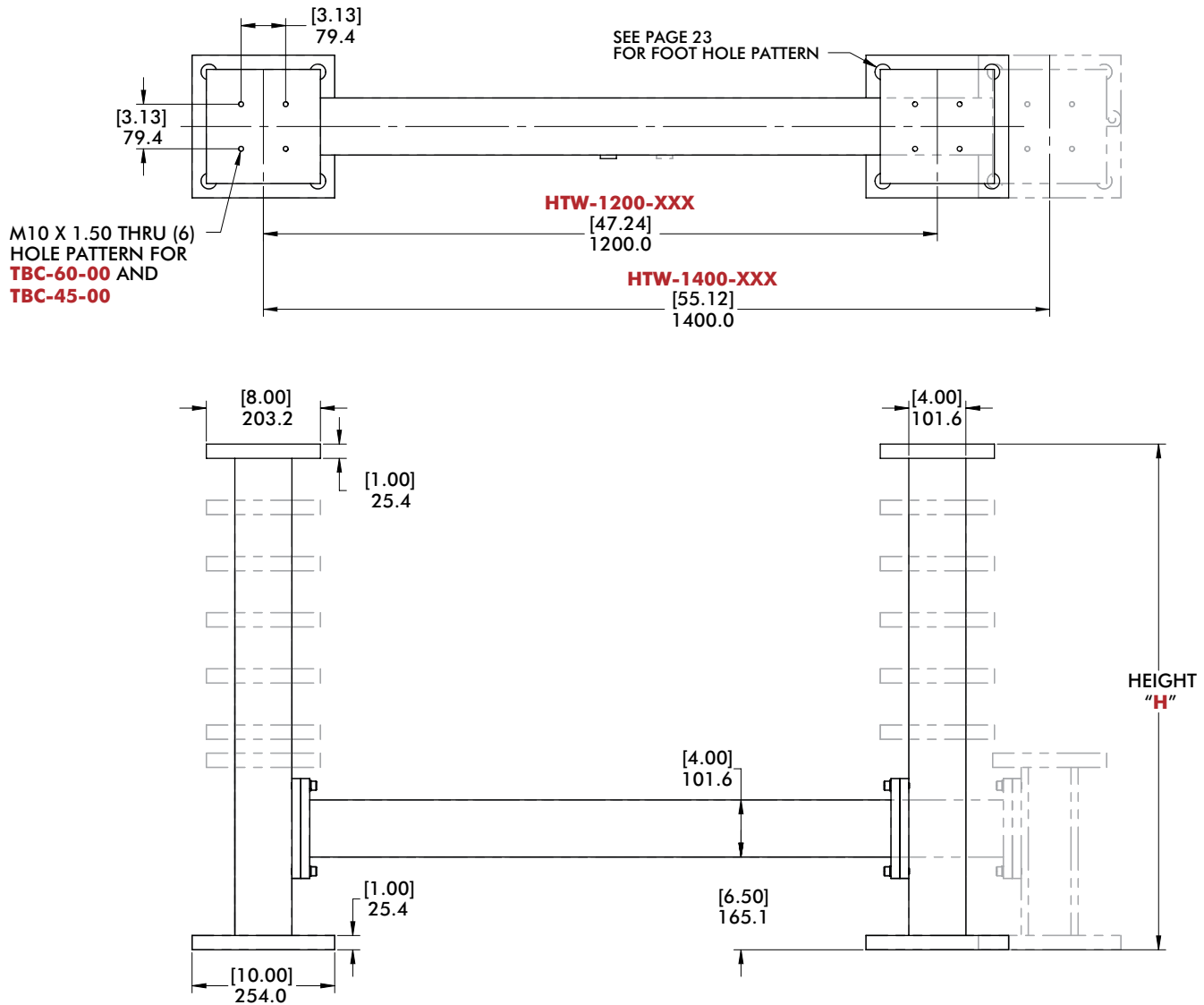
"H"	Model Number	Weight
250	CPI-HTW-250-4	24.02 kg [52.97lb]
300	CPI-HTW-300-4	24.93 kg [54.96lb]
350	CPI-HTW-350-4	25.83 kg [56.95lb]
400	CPI-HTW-400-4	26.73 kg [58.94lb]
450	CPI-HTW-450-4	27.63 kg [60.93lb]
500	CPI-HTW-500-4	28.54 kg [62.92lb]
550	CPI-HTW-550-4	29.44 kg [63.82lb]
600	CPI-HTW-600-4	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

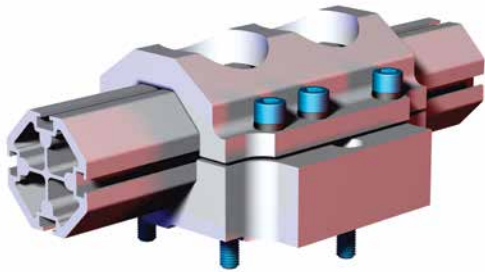


HTW-1200/1400 Pass-Thru Hold Table Weldment



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]

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



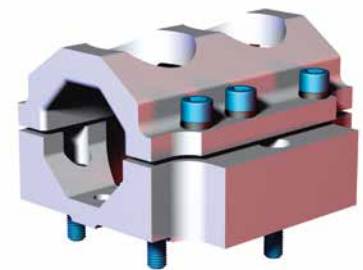
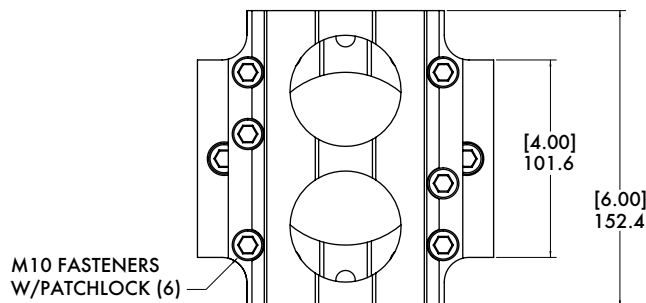
Specifications:

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

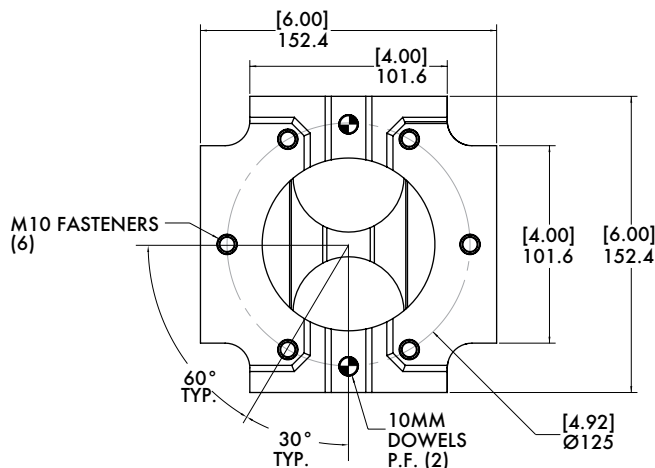
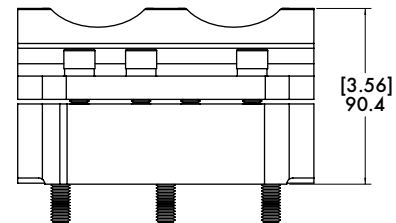
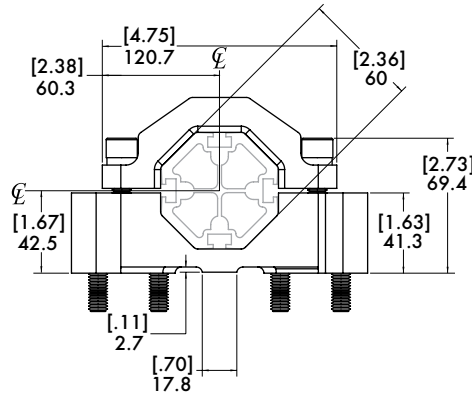
Material: Aluminum

Features:

- Can be used as direct robot interface.



Fasteners included, Dowels not included



Model Number

Weight

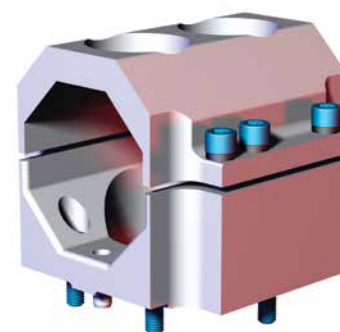
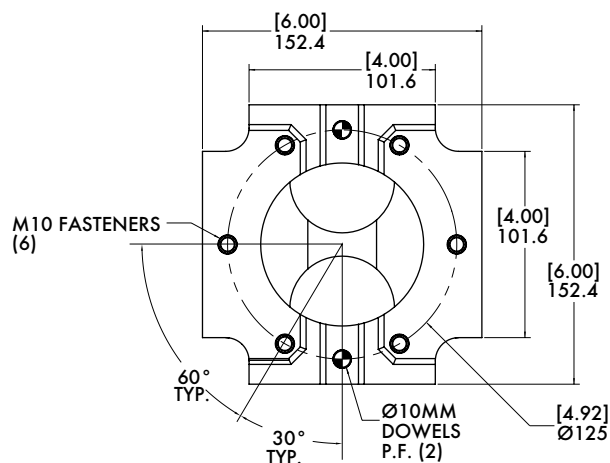
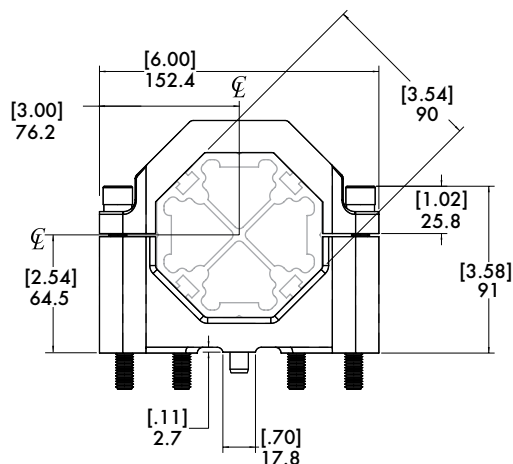
CPI-ATI-151-90HD-60BB 3.22 kg [7.10 lb]

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

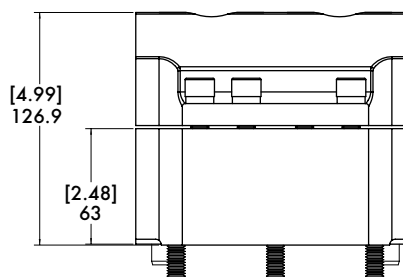


- Can be used as direct robot interface.

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

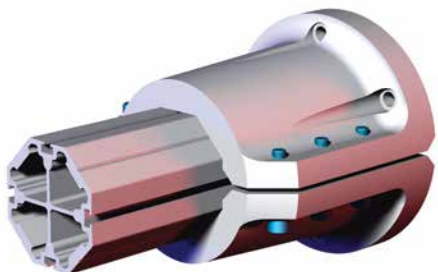


Fasteners and Dowels Included



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

CL-90B-160F 90mm End Mount



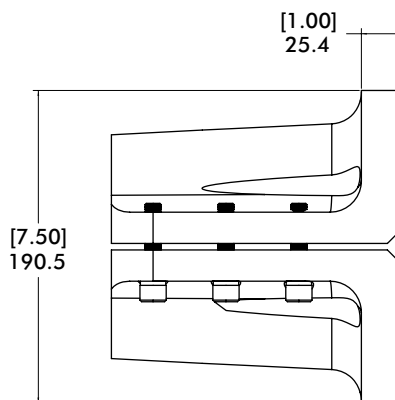
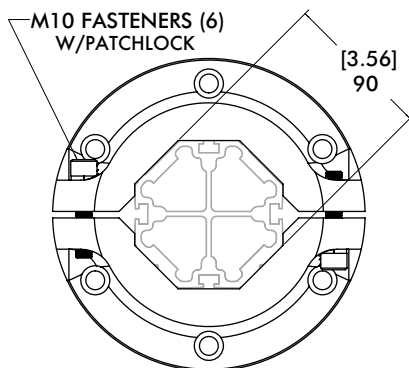
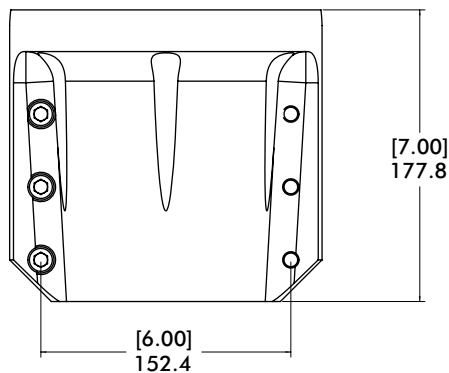
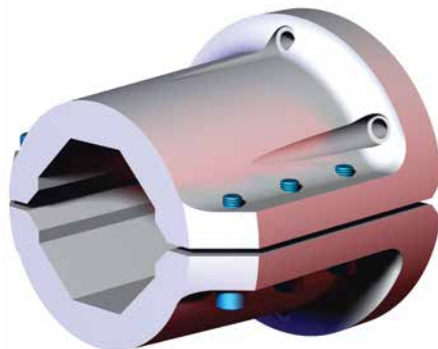
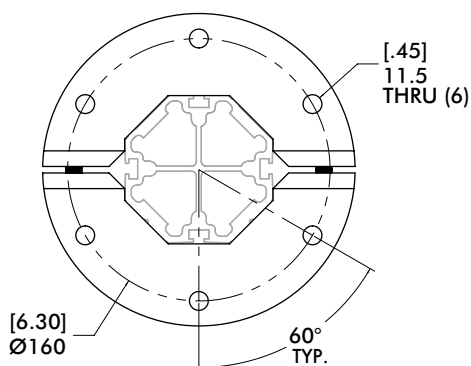
Specifications:

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

Material: Aluminum

Features:

- Can be used as direct robot interface.



Model Number

CPI-CL-90B-160F

Weight

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.

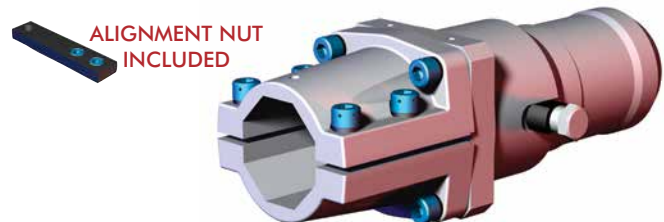
Specifications:

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

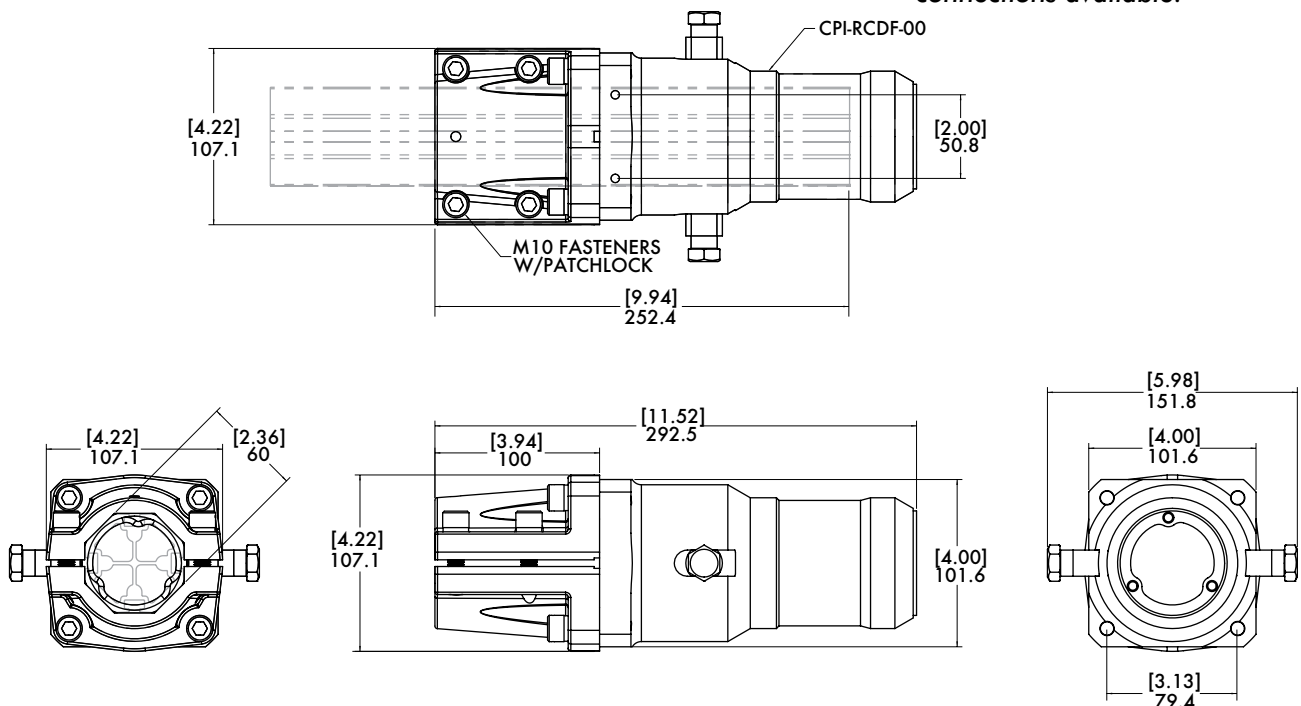
Material:
Body: Aluminum
Pins: Steel



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]

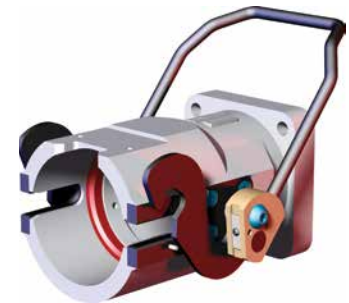
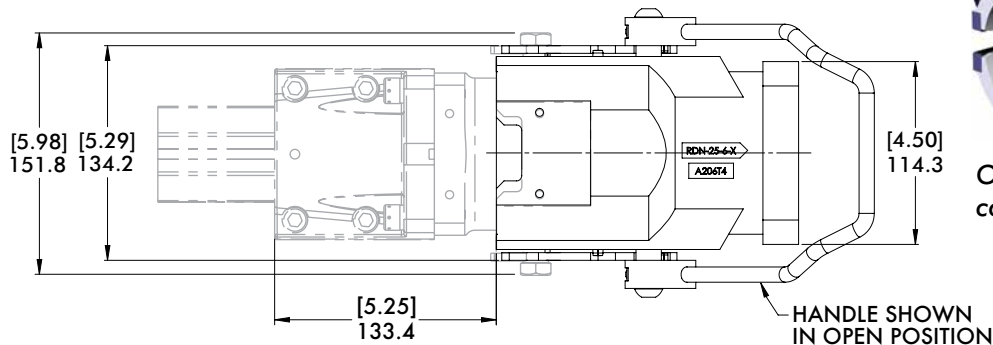
Material:

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

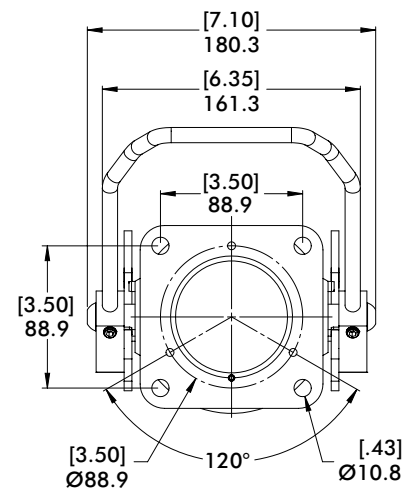
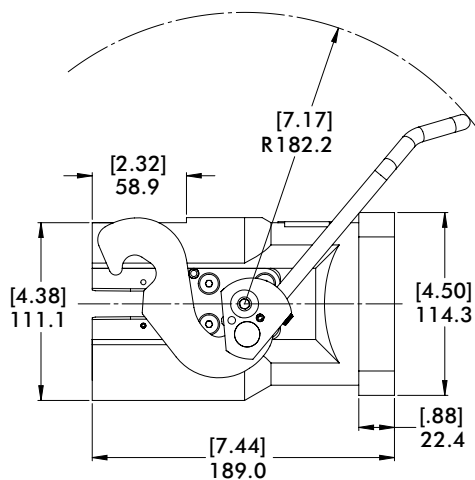
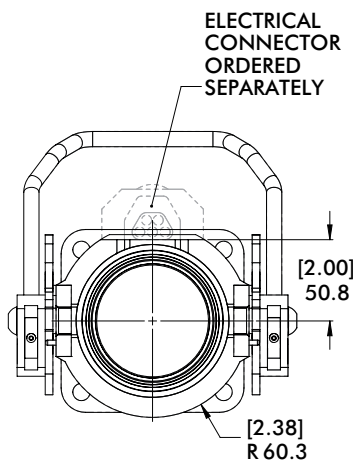
Features:

- 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

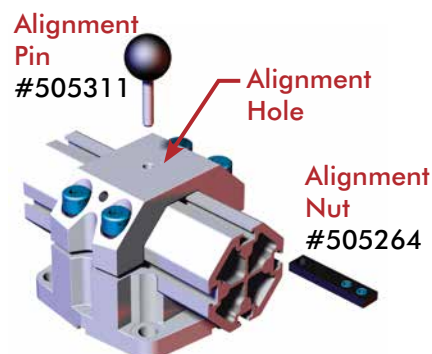


BodyBuilder™ Octagonal Tooling | Explaining the Patented Alignment System

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

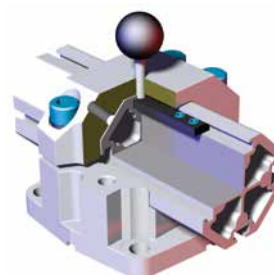
Once the BodyBuilder™ structure bracket mount is secured into place during set-up, insert the alignment nut into the octagonal boom channel groove.

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.

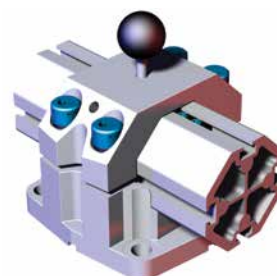


Slide the alignment nut along the boom groove and underneath the bracket mount until the hole in the block and the appropriate calibration hole in the bracket mount is aligned visual.

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.



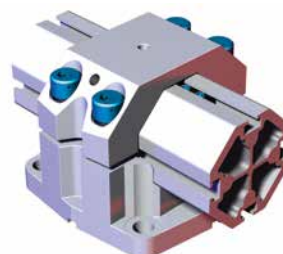
The alignment nut remains in place even when the bracket mount is removed.

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

Alignment Pin **#505311**, Alignment Nut **#505264**



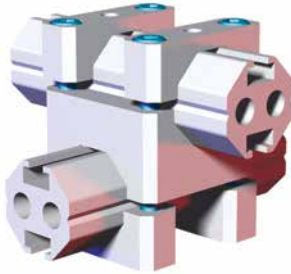
To Replace the Bracket mount, place the assembled bracket mount on the Bodybuilder™ boom until the alignment holes are visually aligned. Insert the alignment pin to secure bracket mount in place, and tighten the fasteners.



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



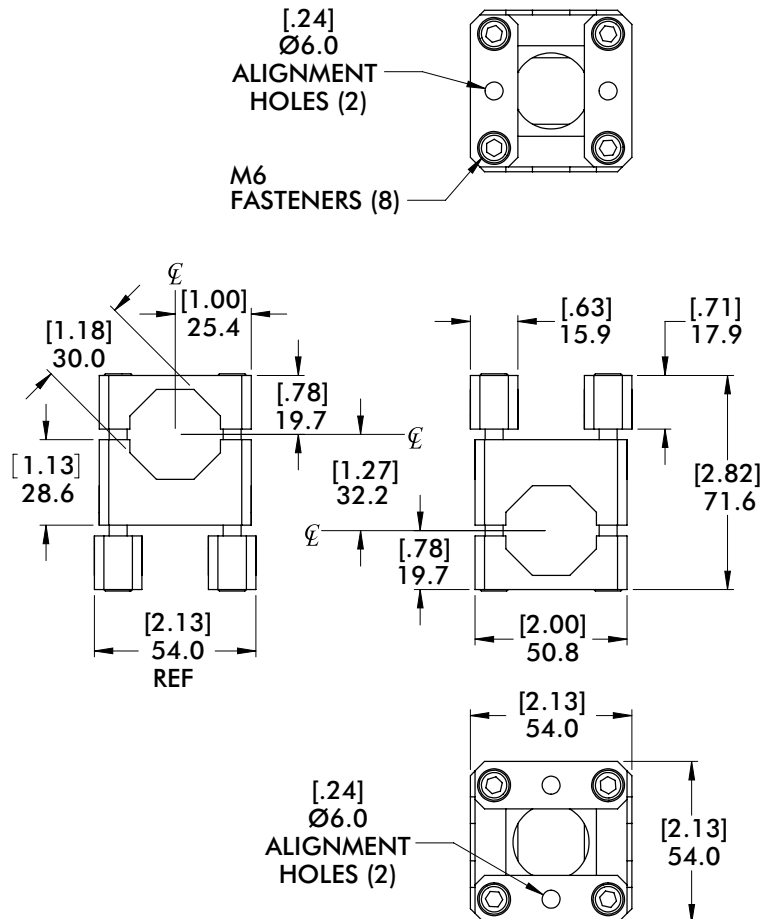
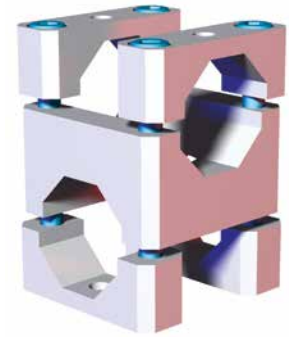
Specifications:

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

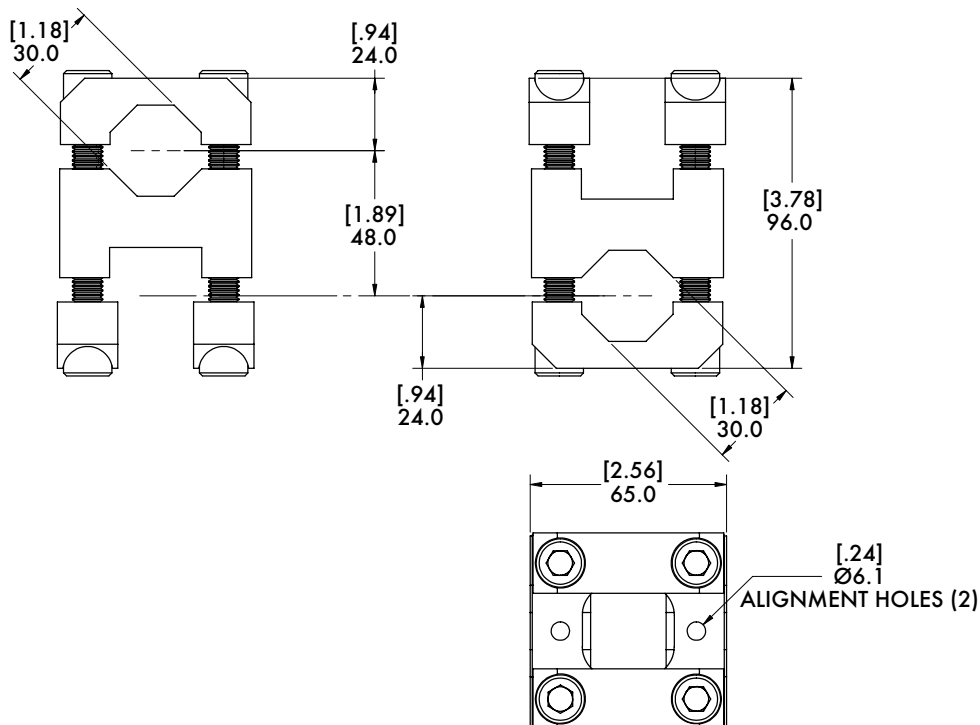
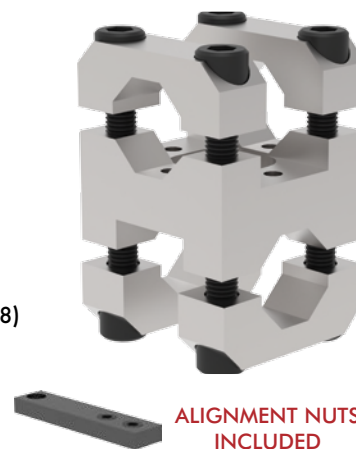
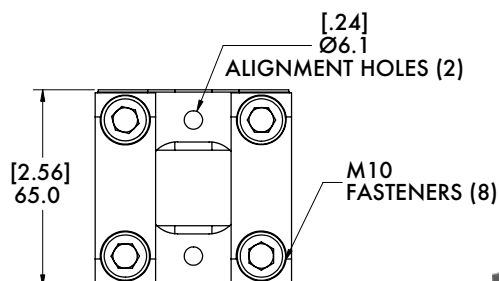
Features:

- 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



Model Number

M-30B-30B-M

Weight

.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:

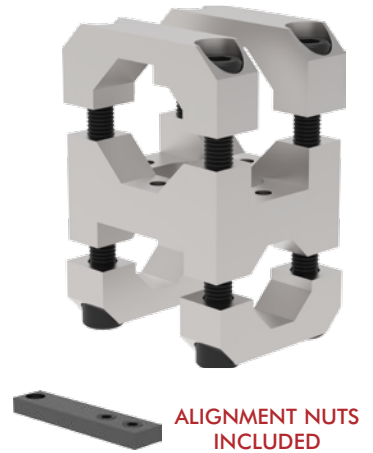
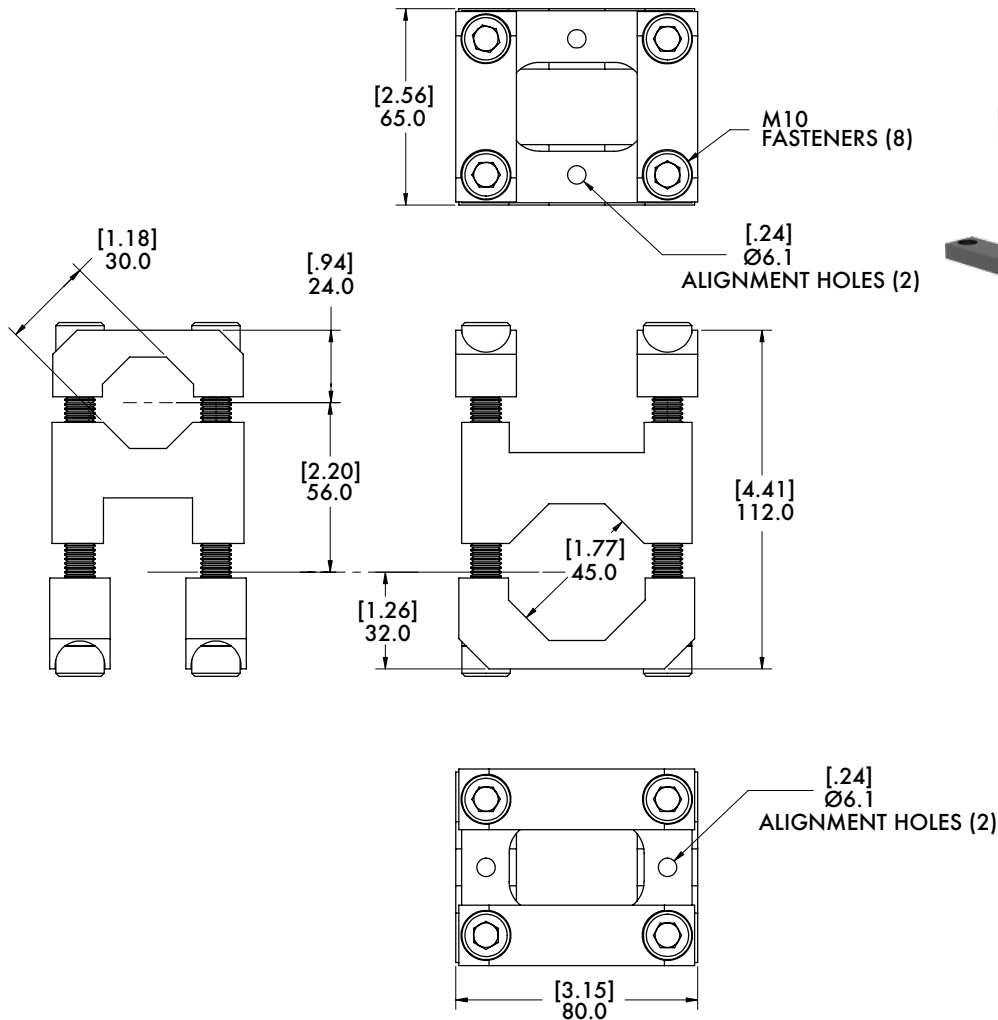
45mm: 475 Nm [350 ft-lb]

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

M-30B-45B-M

Weight

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

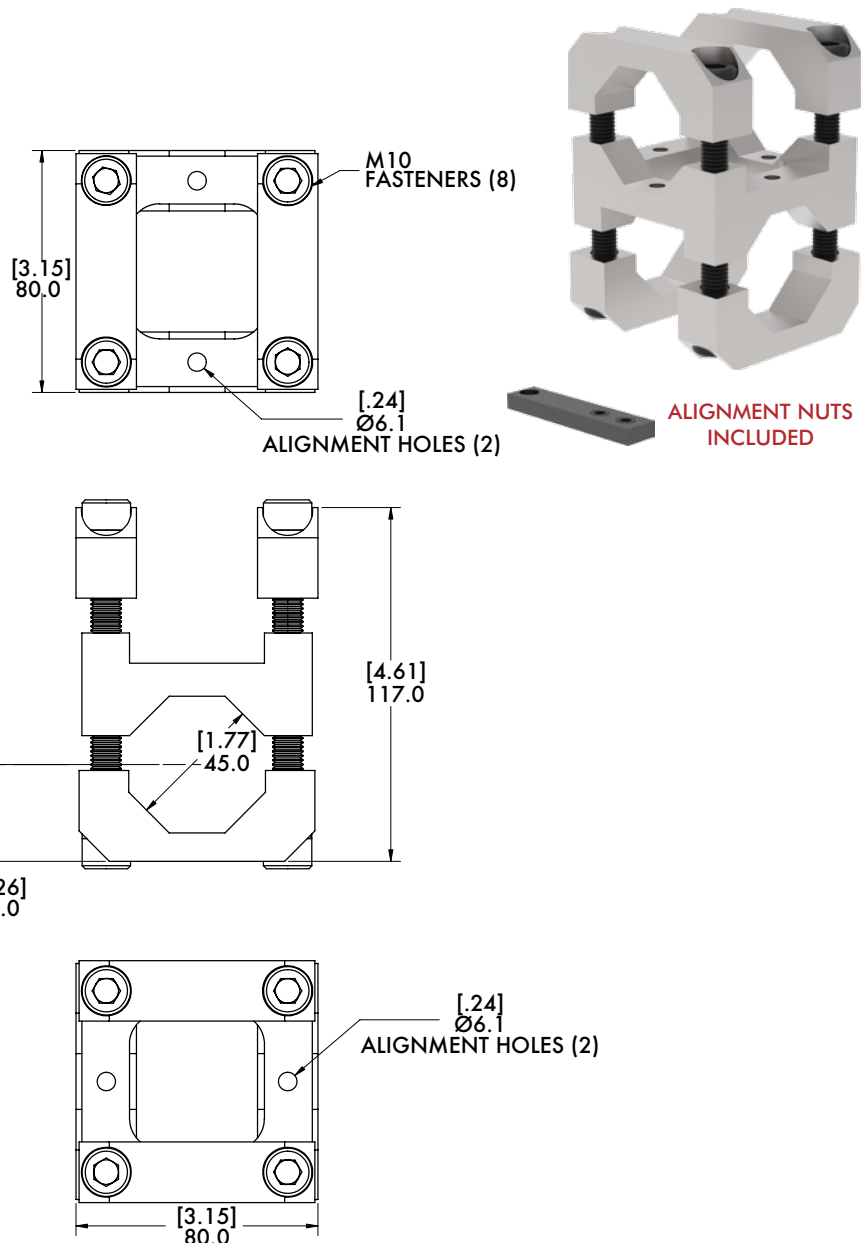
Features:

- 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



Model Number

M-45B-45B-M

Weight

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:

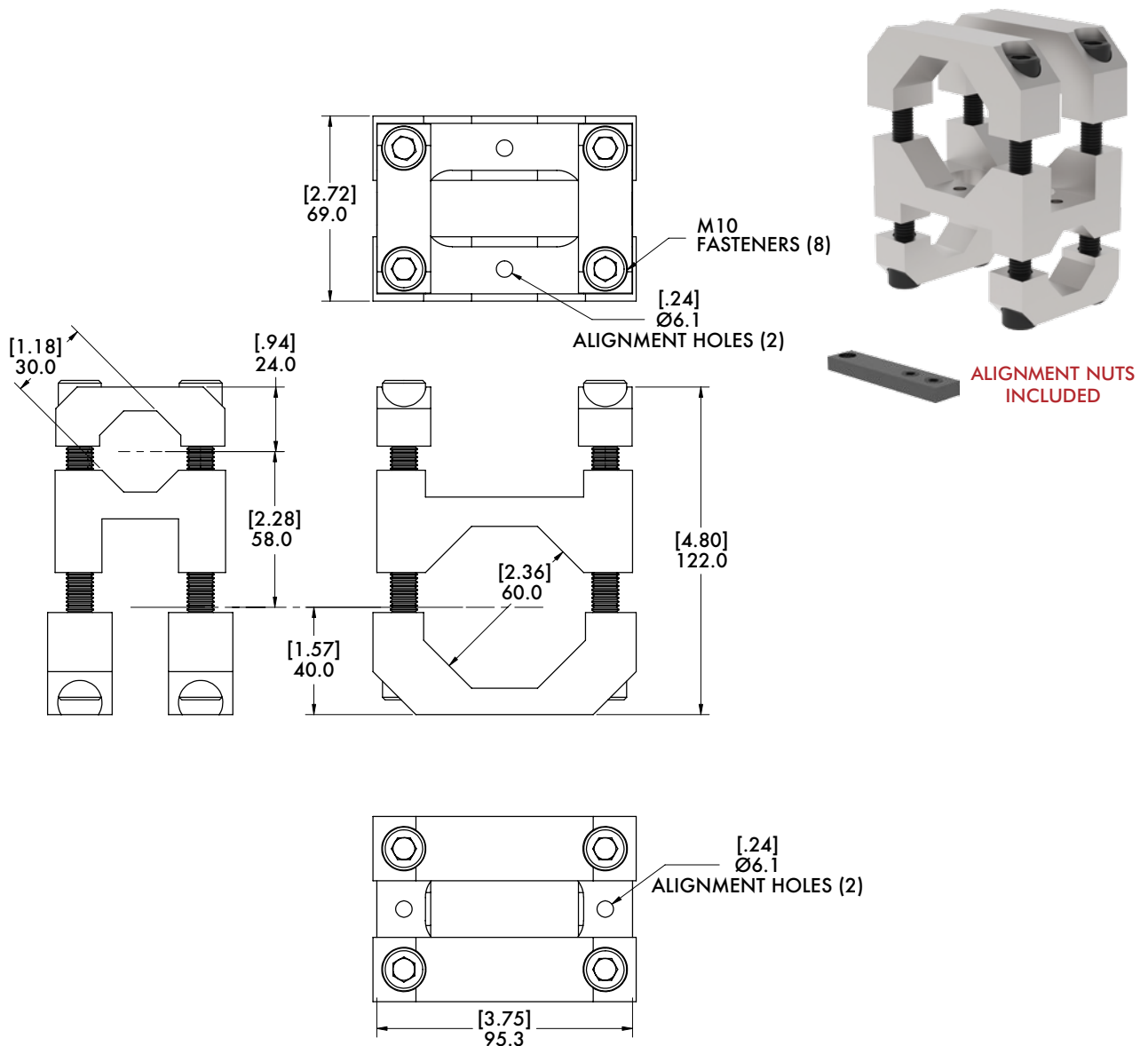
60mm: 746 Nm [550 ft-lb]

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



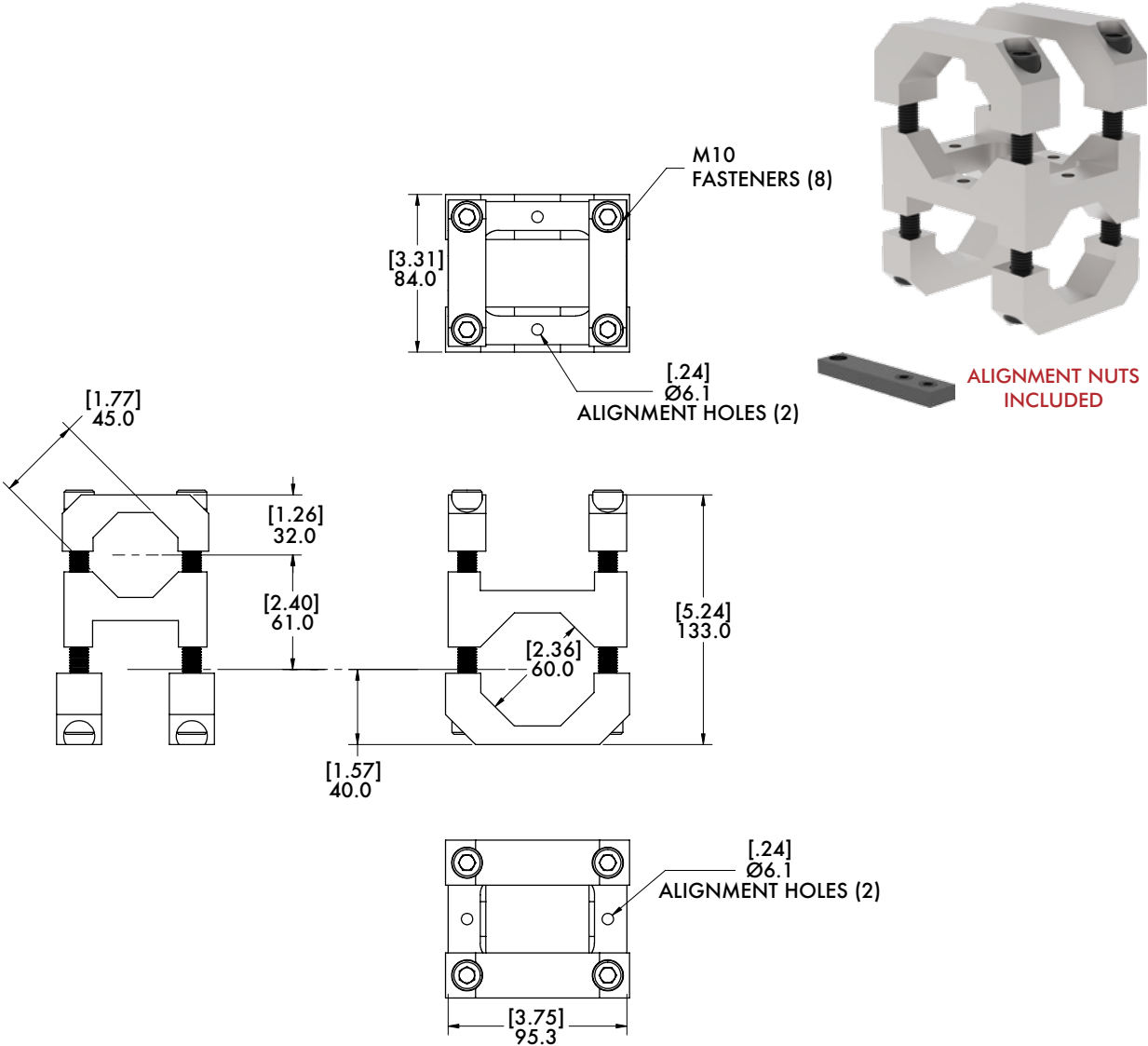
45B-60B 45mm to 60mm Transition Bracket Assembly

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

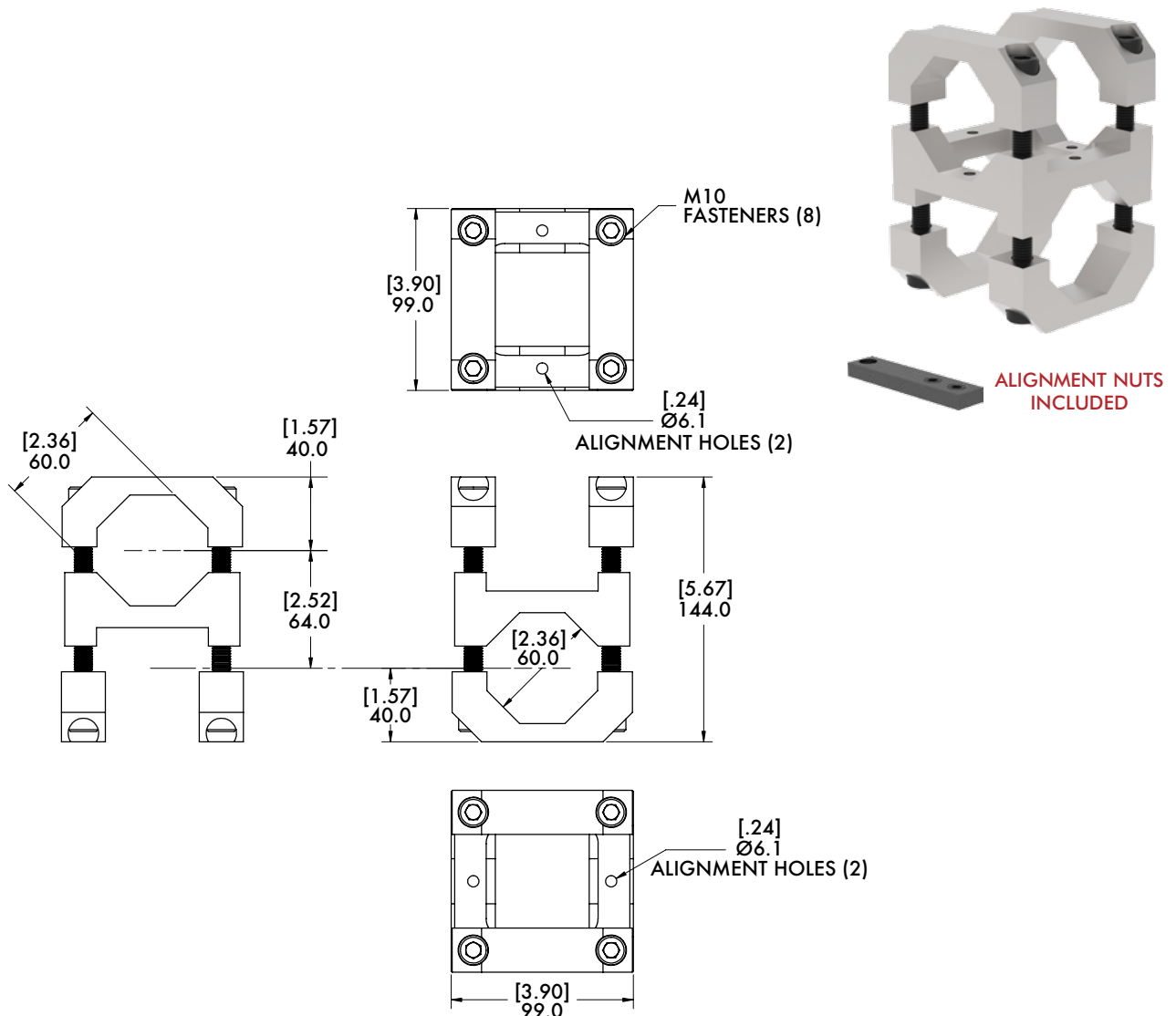
Specifications:

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

M-60B-60B-M

Weight

1.36 kg [3.00 lb]

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



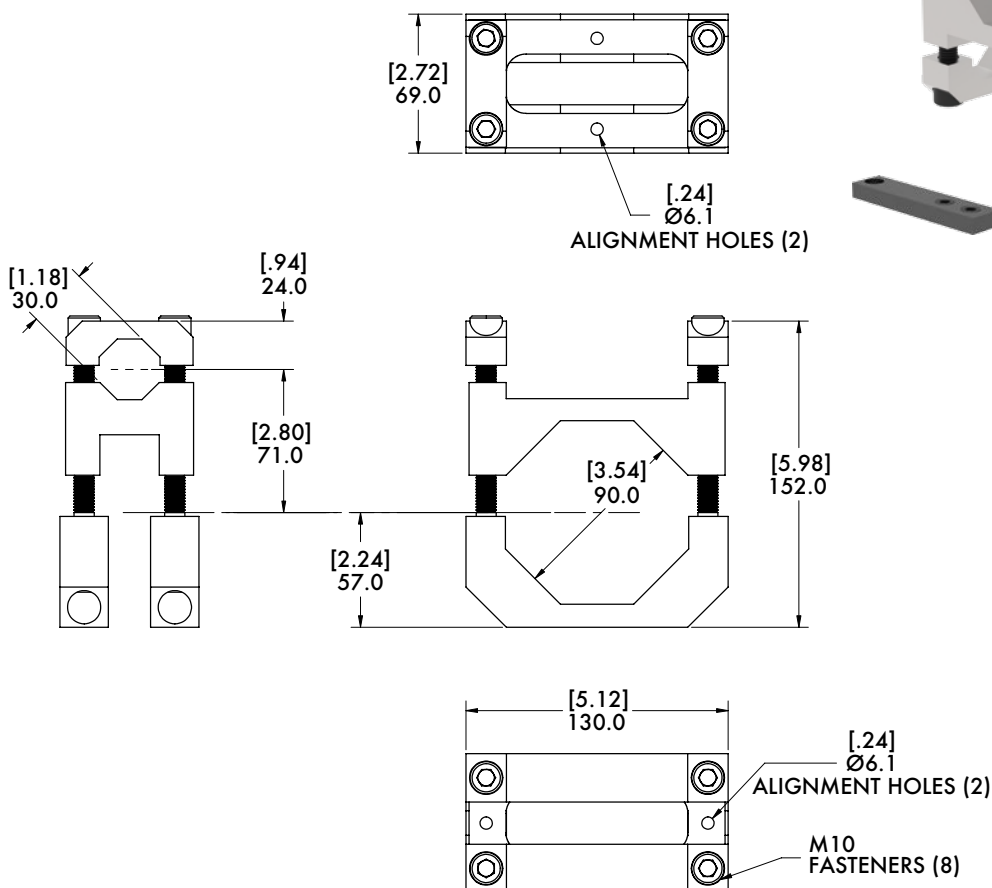
30B-90B 30mm to 90mm Transition Bracket Assembly

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



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:

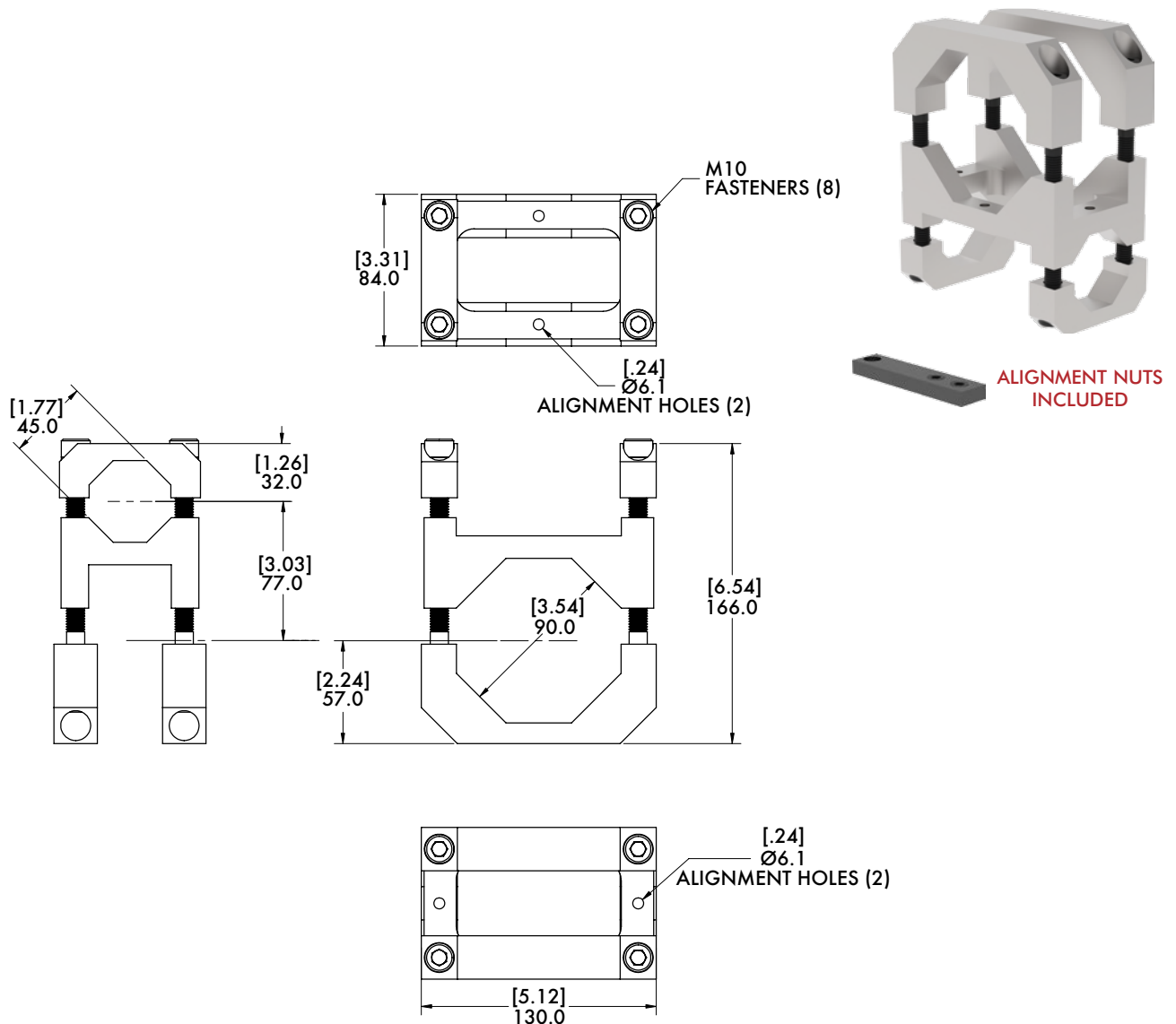
45mm: 475 Nm [350 ft-lb]

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:

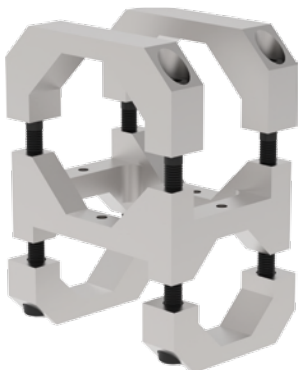
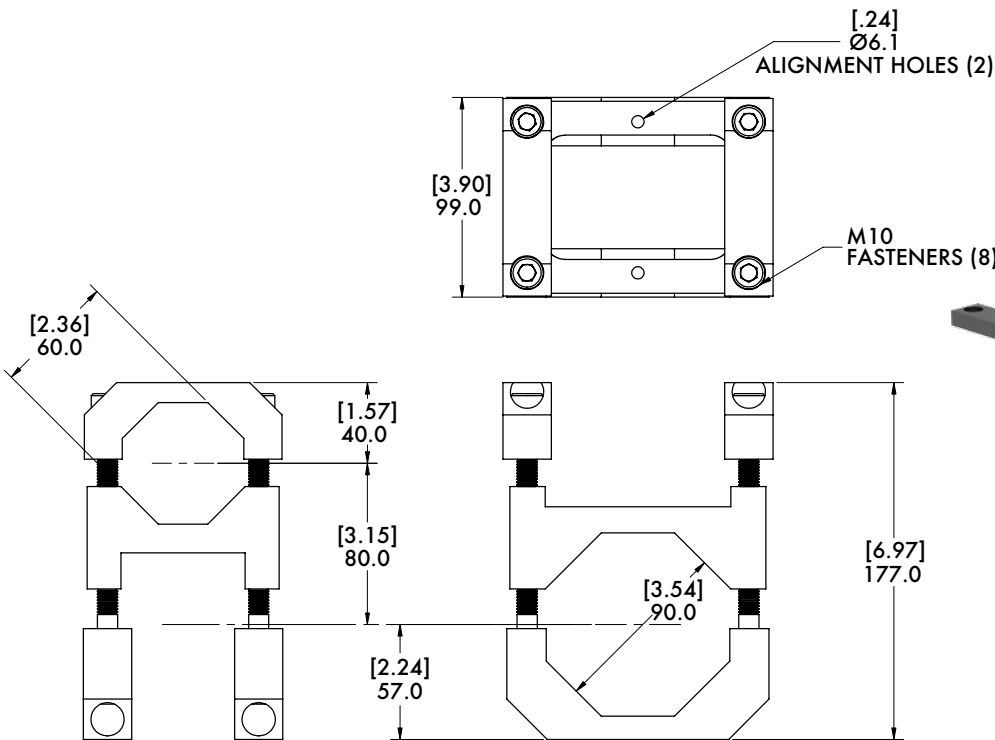
- Connects 60mm and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

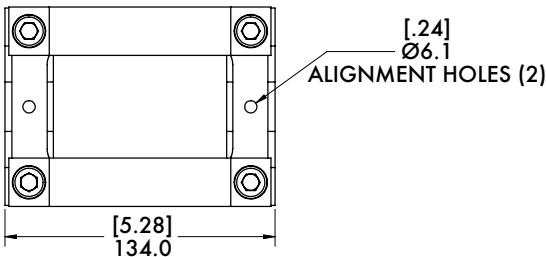
Maximum Clamp Load:

60mm and 90mm:
746 Nm [550 ft-lb]

Material: Aluminum



ALIGNMENT NUTS INCLUDED



Model Number

M-60B-90B-M

Weight

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

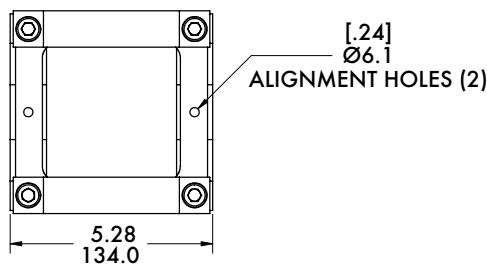
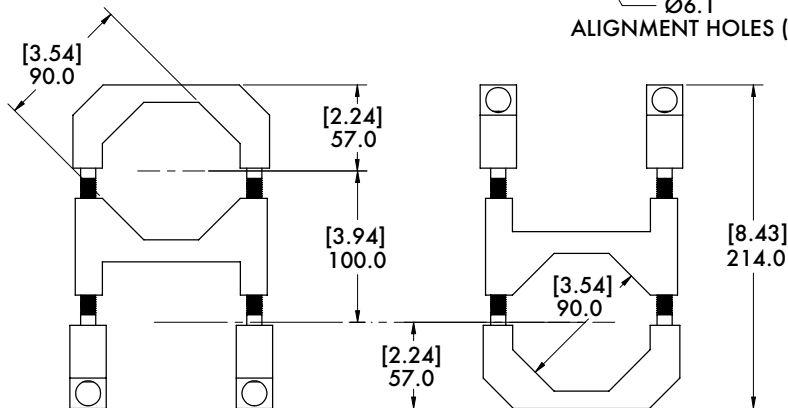
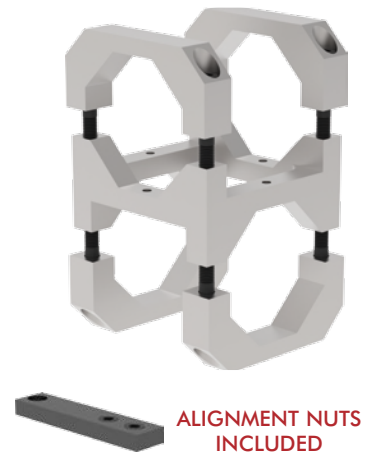
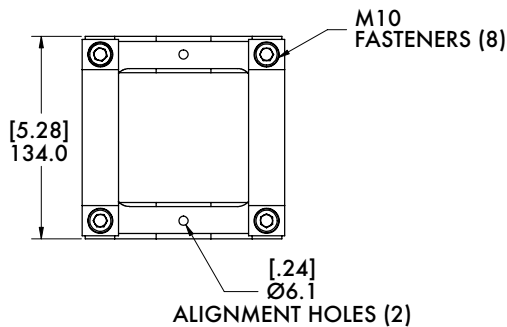
Specifications:

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



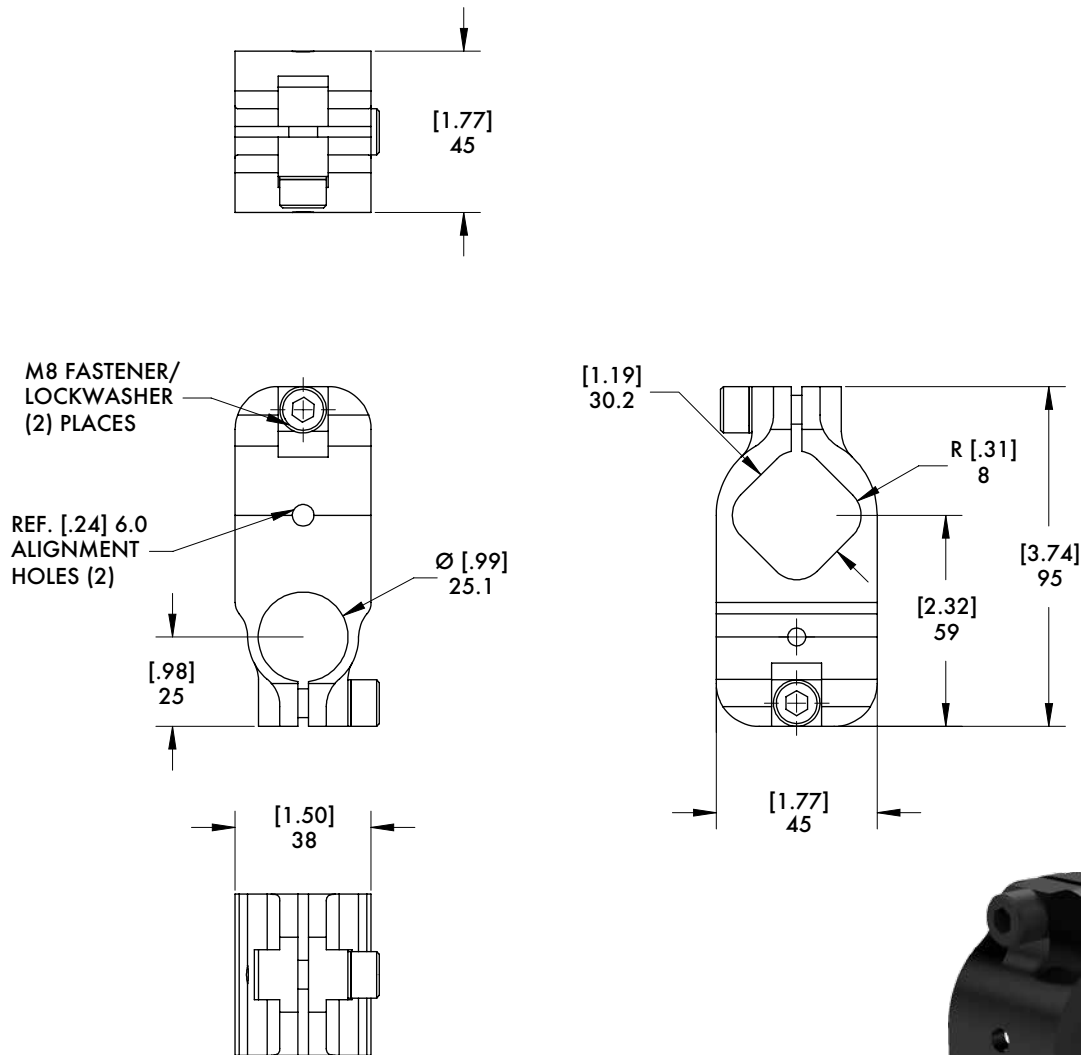
30B-25M 30mm Octagon to 25mm Round

Specifications:

Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



Model Number

M-30B-25M-M

Weight

203g [0.45lbs]

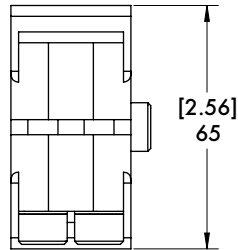
45B-25M (-10E) 45mm Octagon to 25mm or 1 in. Round

Specifications:

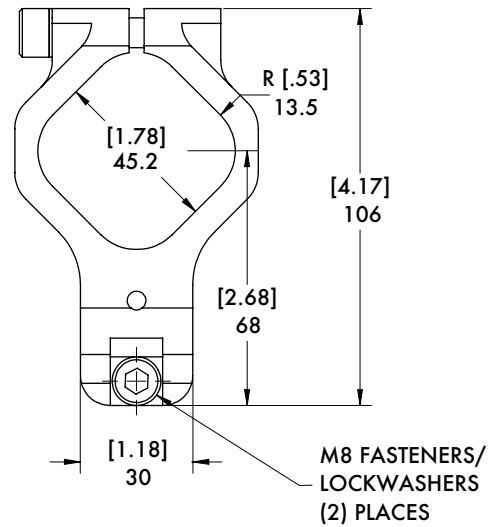
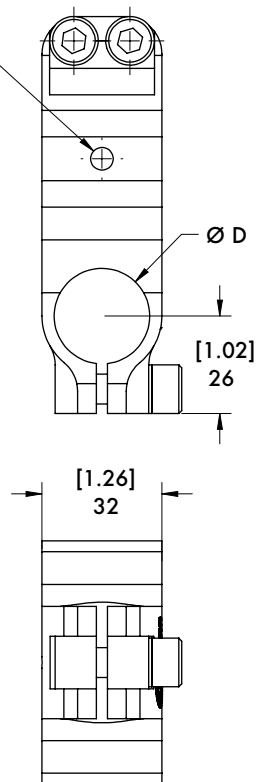
Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



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



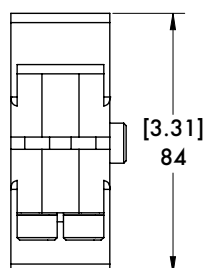
Model Number	Weight	ØD
M-45B-25M-M	239g [0.53lbs]	25mm
M-45B-10E-M	237g [0.52lbs]	1 in.

TRANSITION SQUARE CLAMPS

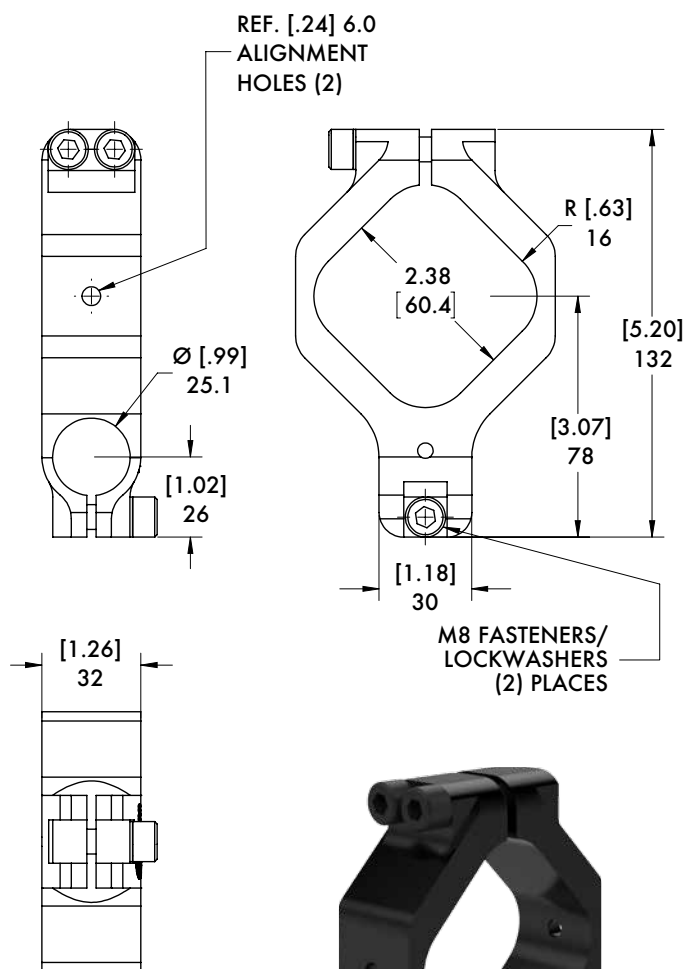
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

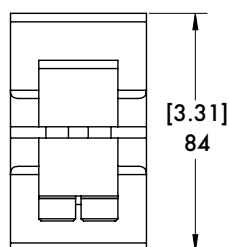


Specifications:
Max. Static Clamp Load:
 407 Nm [300 ft-lb]
Material: High Strength Aluminum

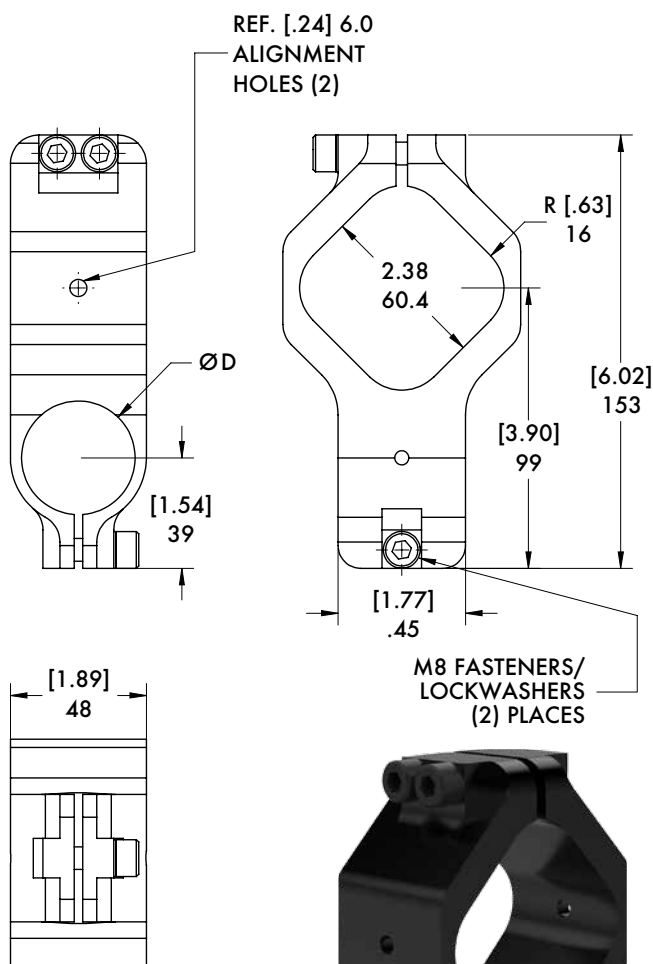


Model Number	Weight
M-60B-25M-M	356g [0.78lbs]

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	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

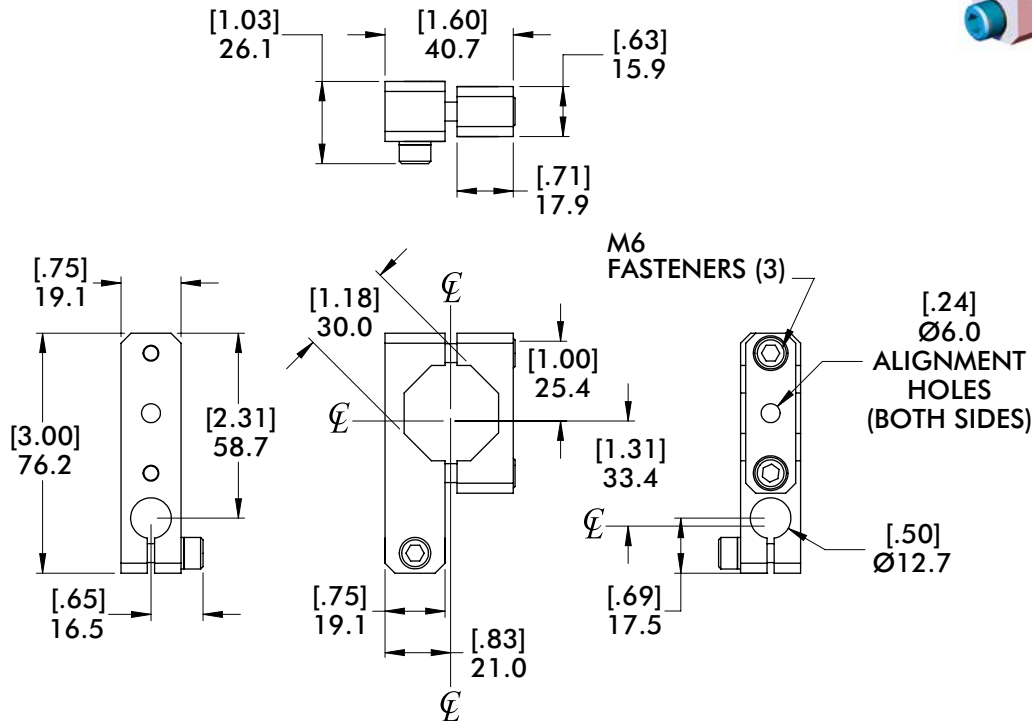
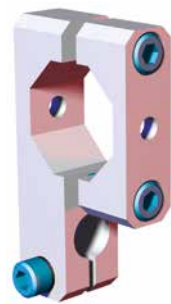
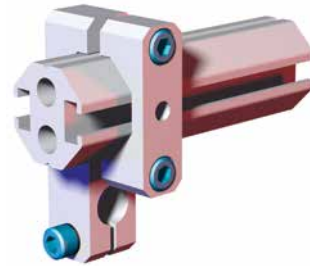
Features:

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

Specifications:

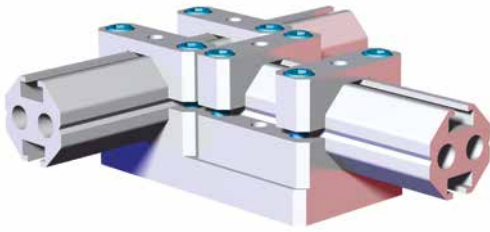
Max. Static Clamp Load:
102 Nm [75 ft-lb]

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



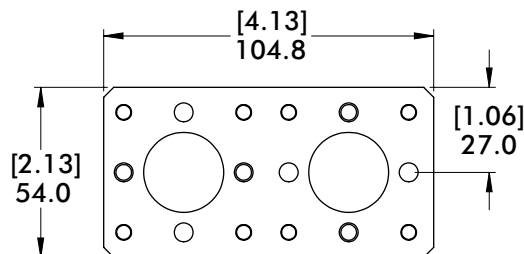
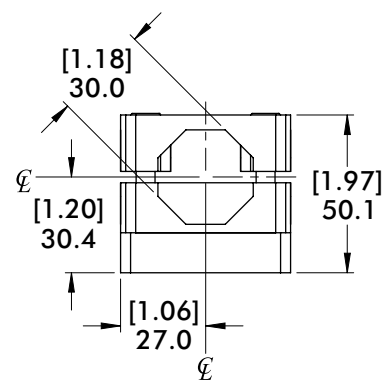
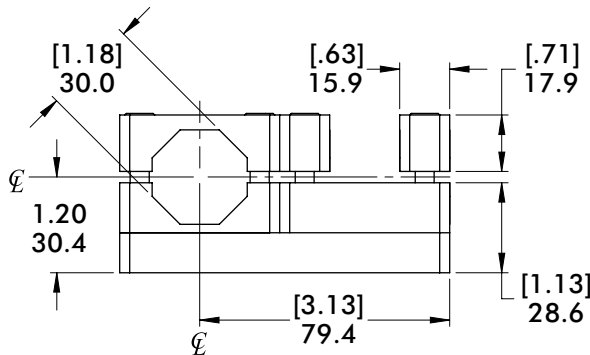
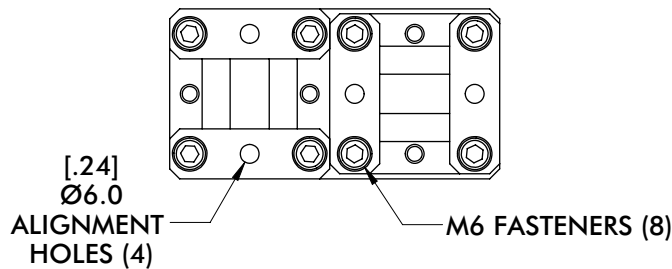
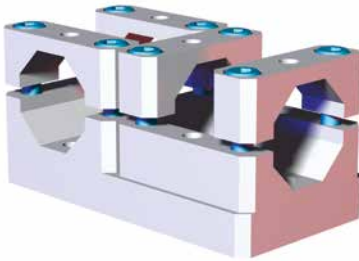
Specifications:

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

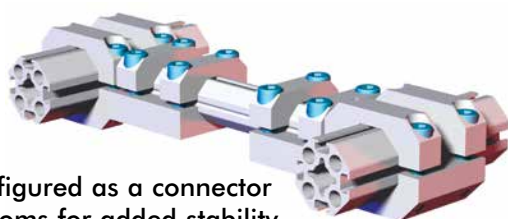
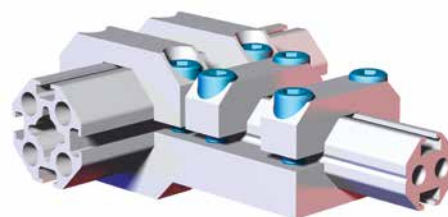
.45 kg [.99 lb]

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

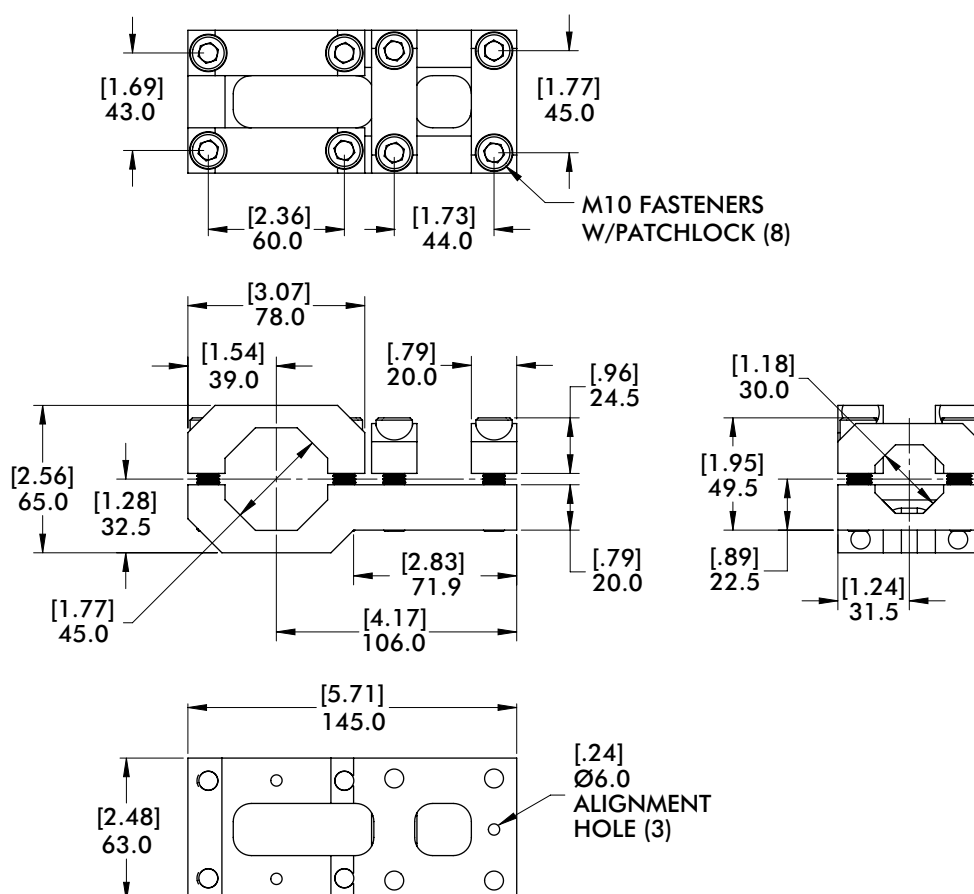
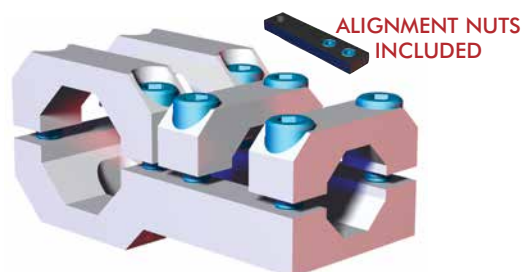


- Connects 30mm and 45mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

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

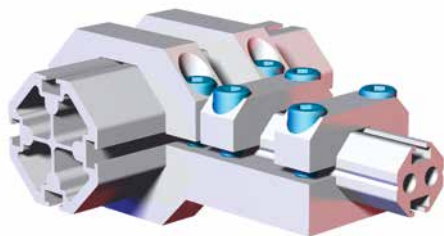


Can be configured as a connector between booms for added stability



Dimensions and technical information are subject to change without notice

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



Specifications:

Max. Static Clamp Load:

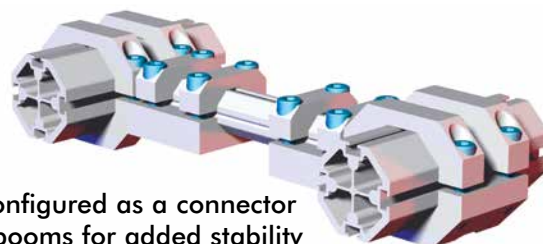
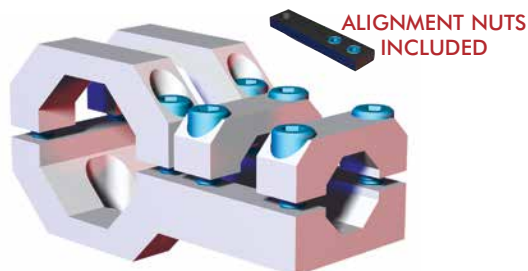
60mm: 746 Nm [550 ft-lb]

30mm: 271 Nm [200 ft-lb]

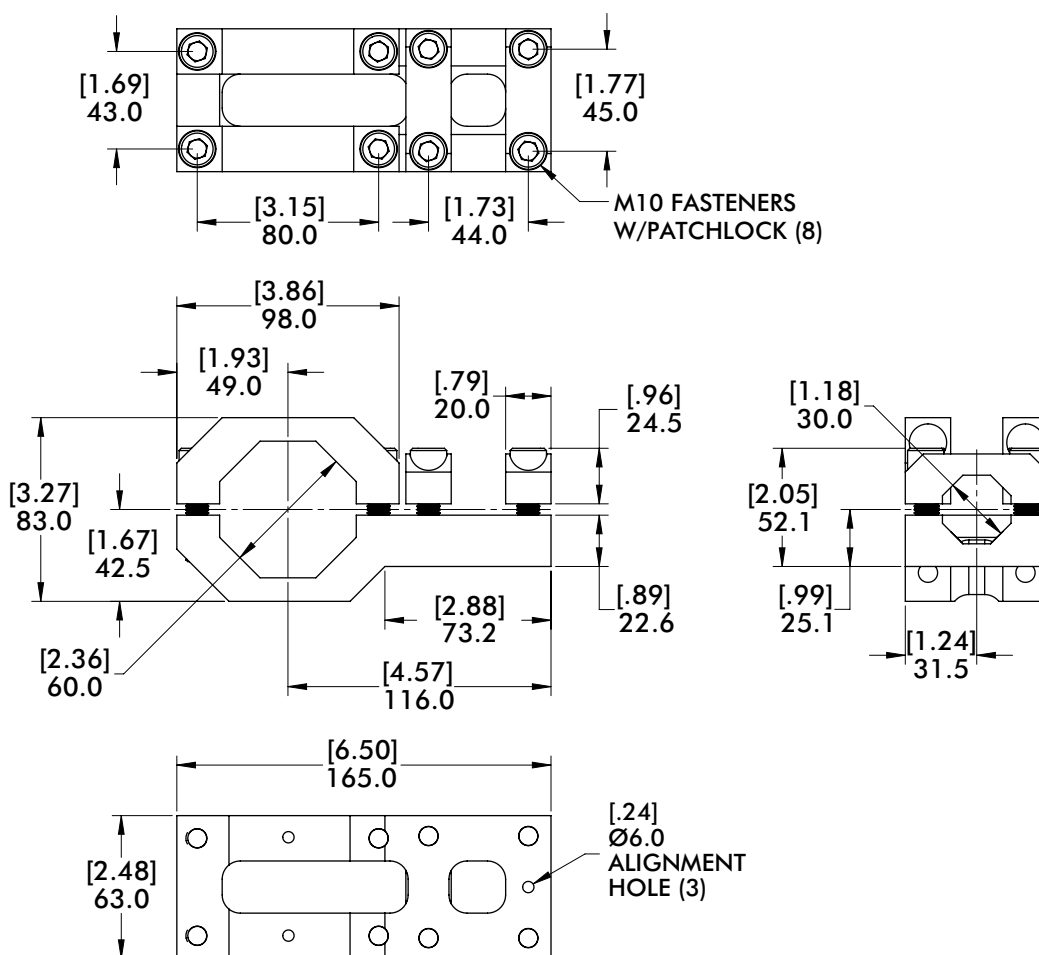
Material: Aluminum

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



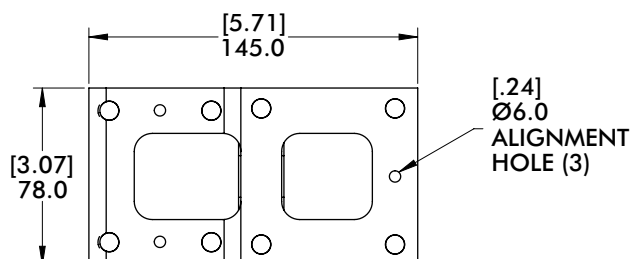
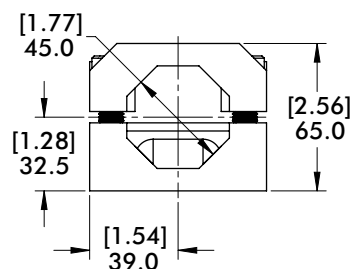
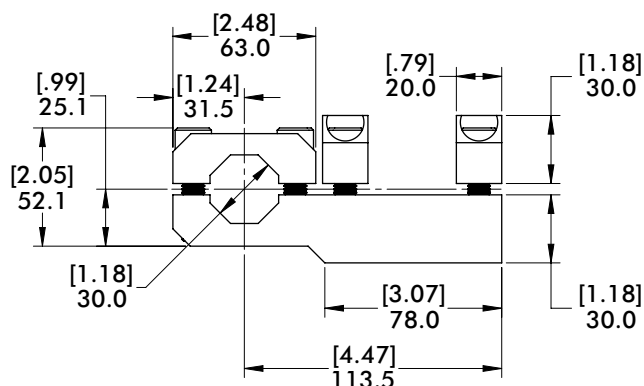
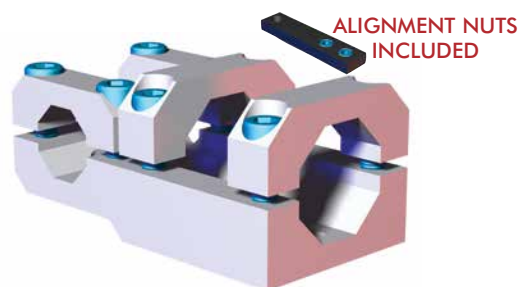
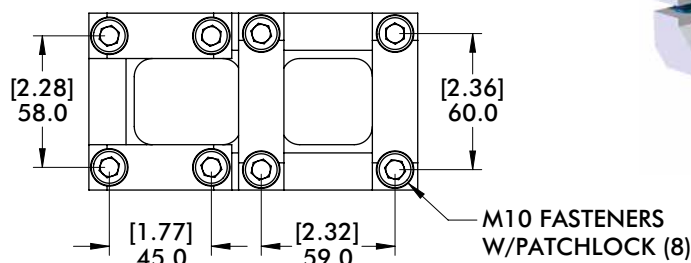
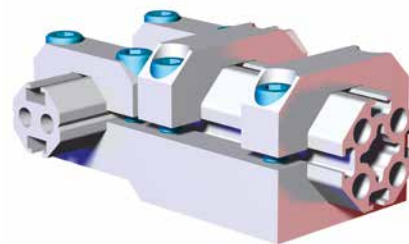
TCA-45B-30B 45mm to 30mm Octagon T-Clamp Bracket Assembly

Features:

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

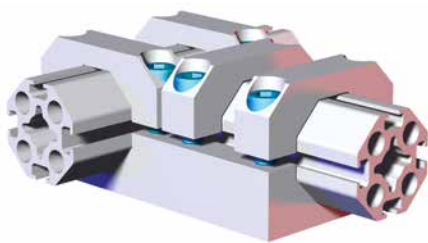
Specifications:

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



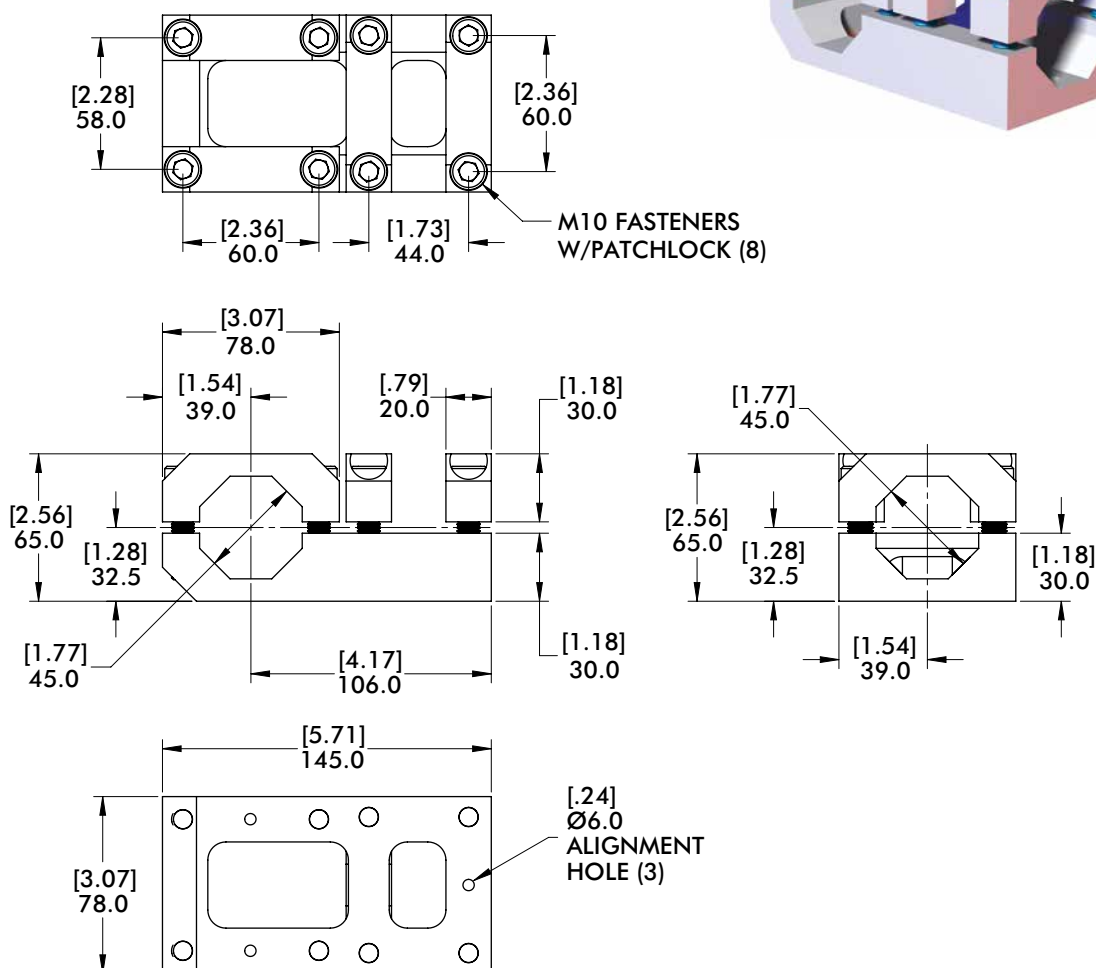
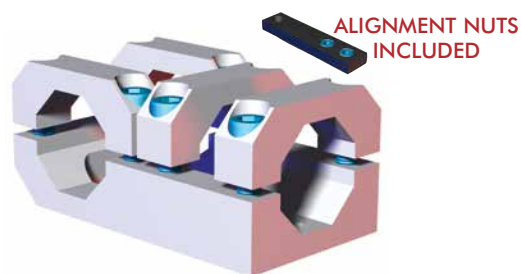
Specifications:

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



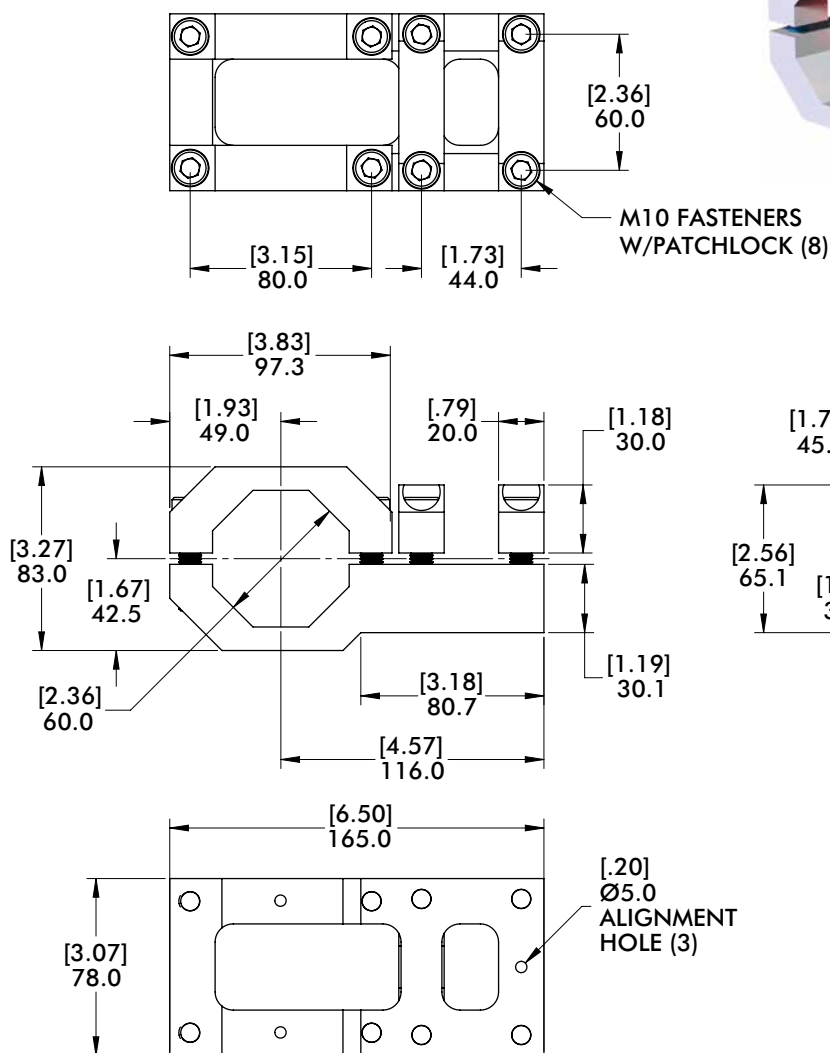
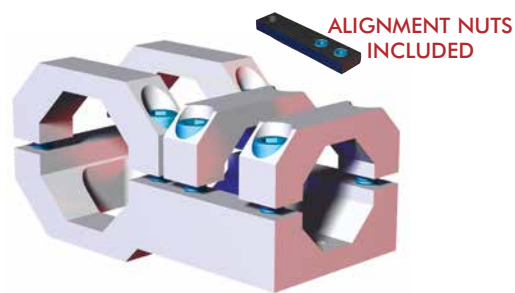
TCA-45B-60B 45mm to 60mm Octagon T-Clamp Bracket Assembly

Features:

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

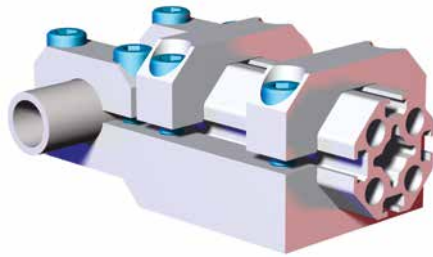
Specifications:

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:

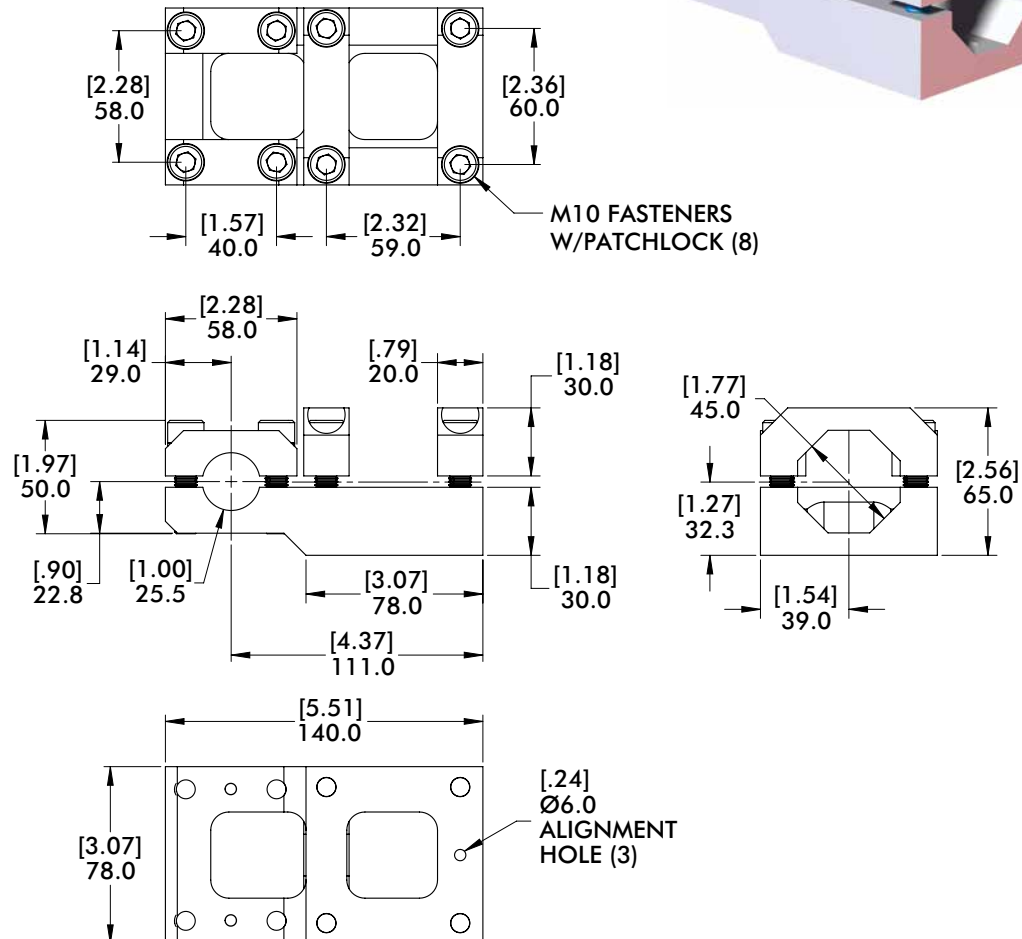
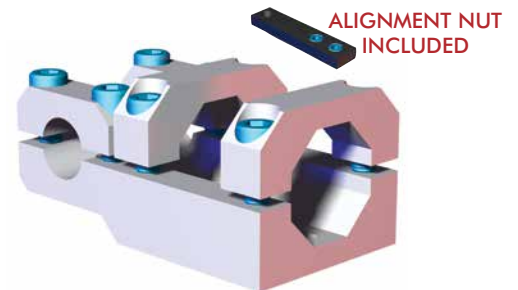
45mm: 475 Nm [350 ft-lb]

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™ Octagonal Tooling | Dimensions | Technical Specifications



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

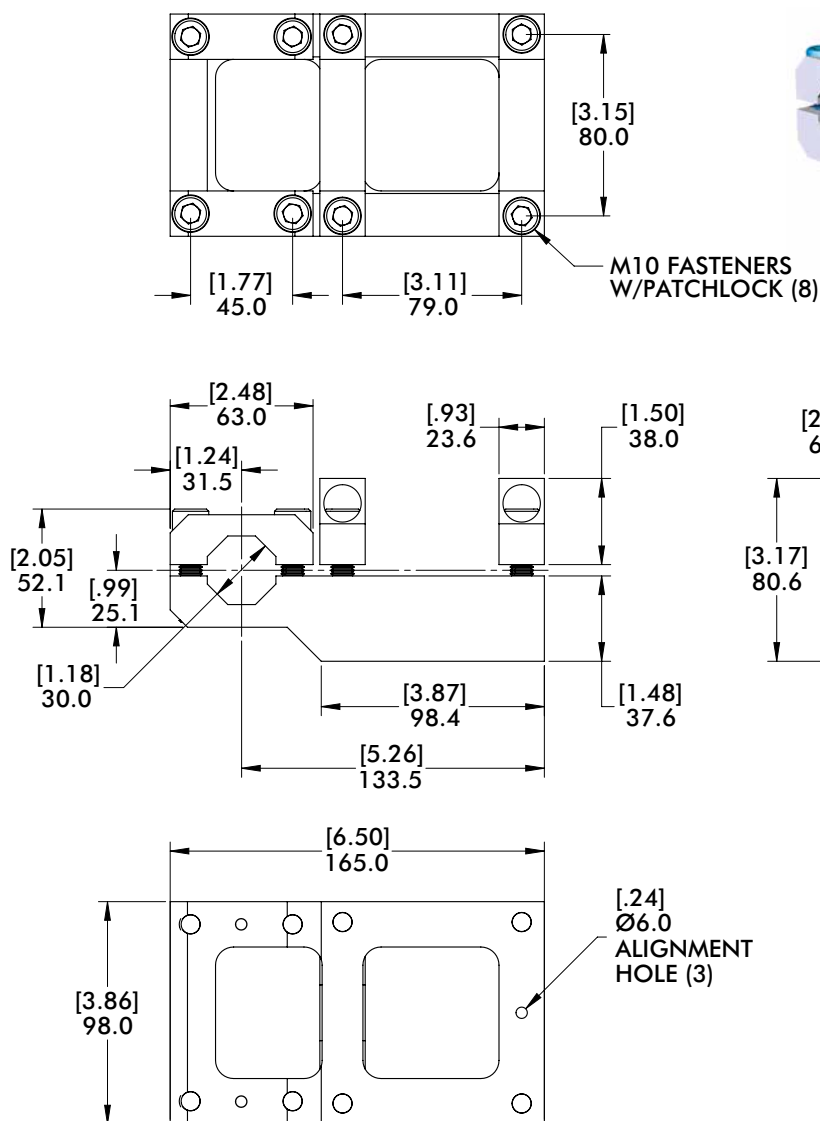
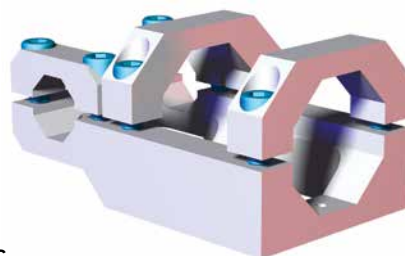
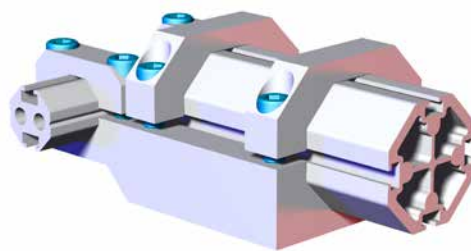
Features:

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

Specifications:

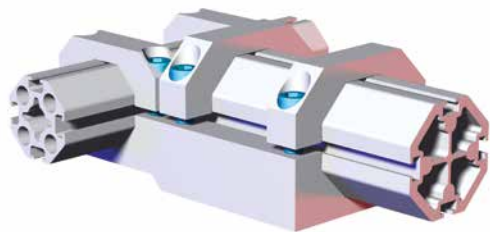
Max. Static Clamp Load:
60mm: 746 Nm [550 ft-lb]
30mm: 271 Nm [200 ft-lb]

Material: Aluminum



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:

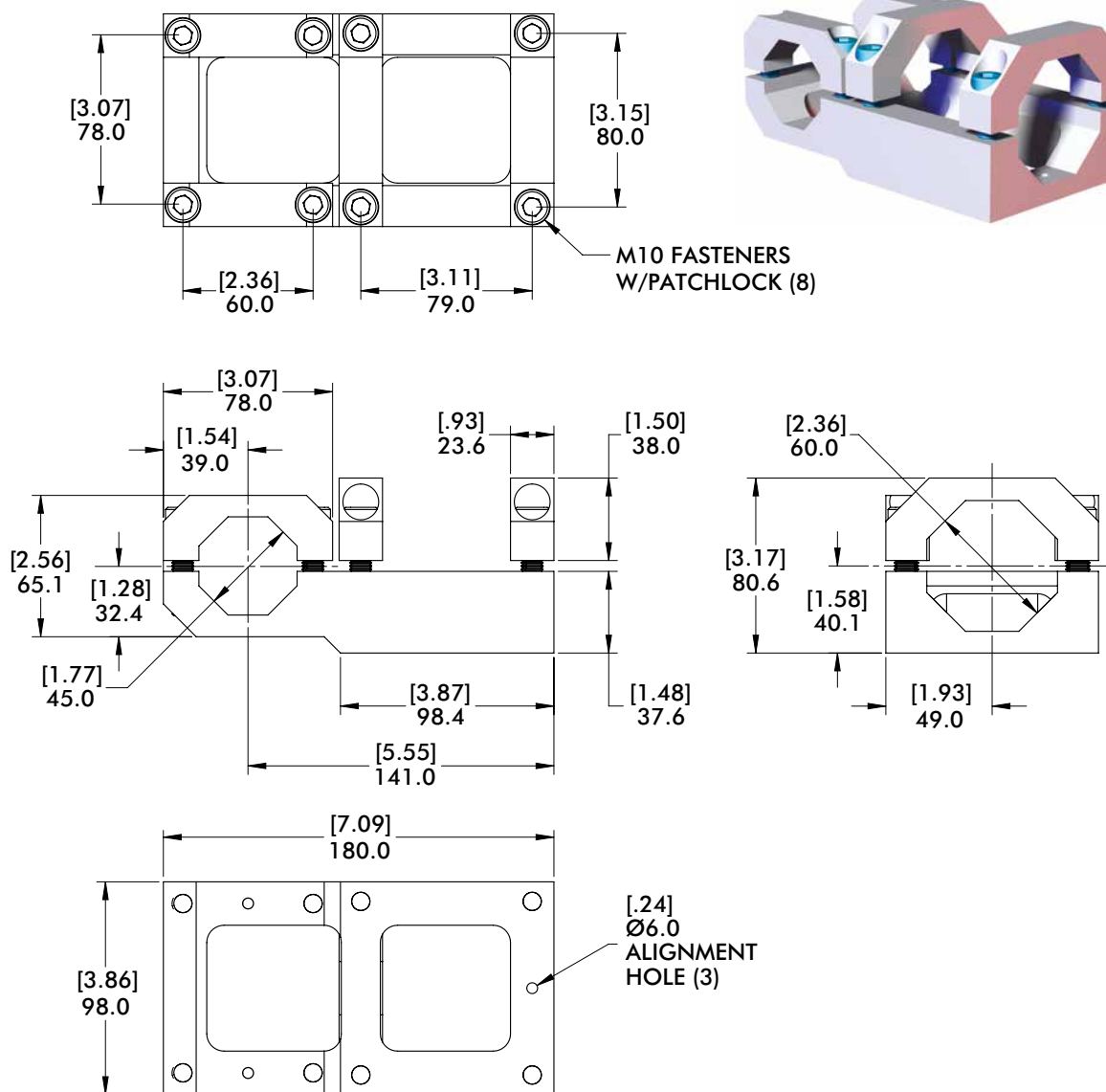
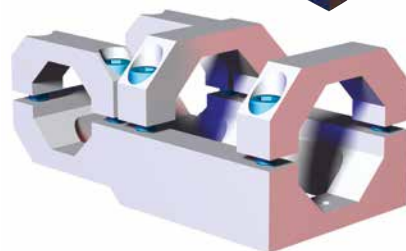
60mm: 746 Nm [550 ft-lb]

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.



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

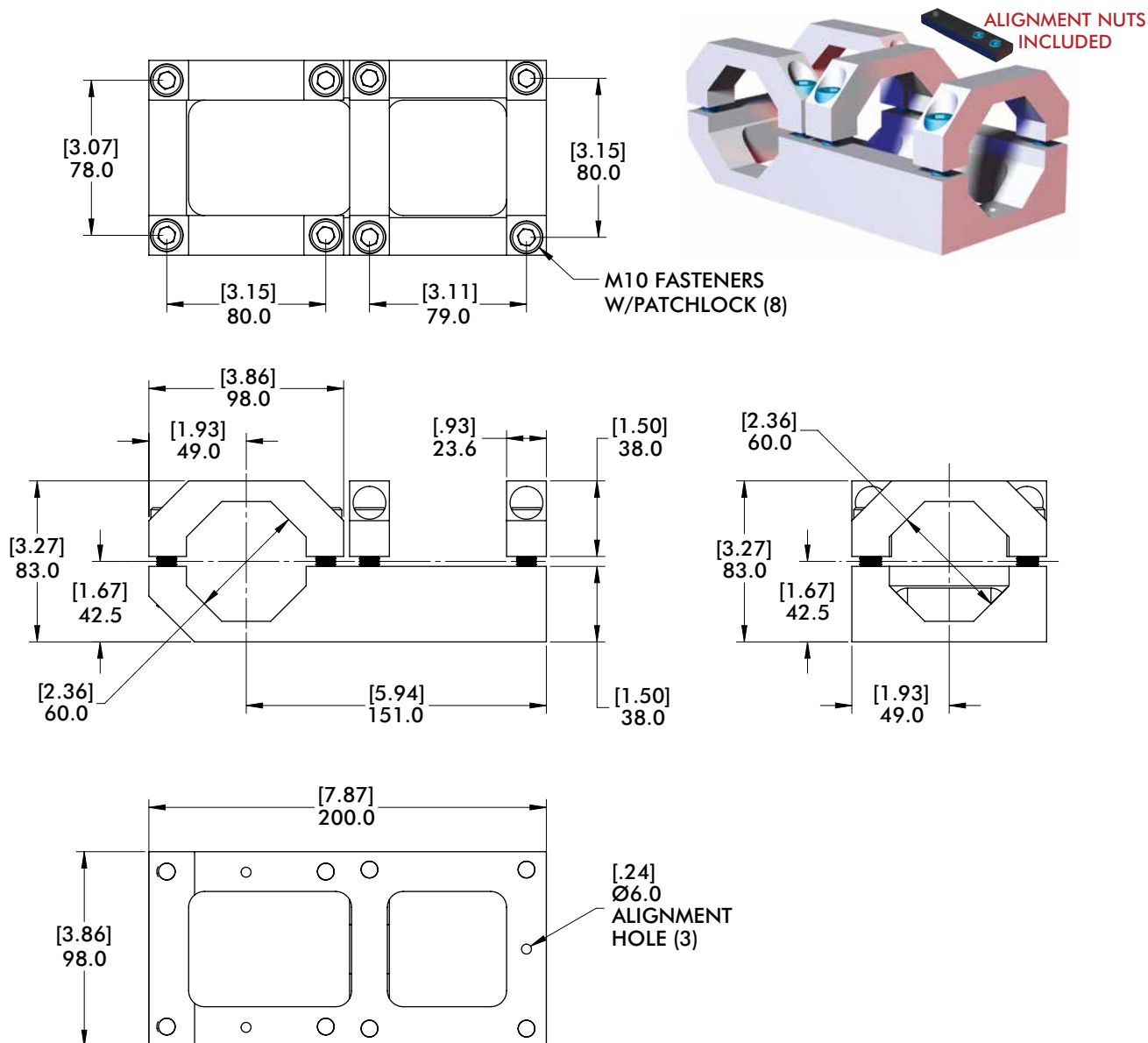
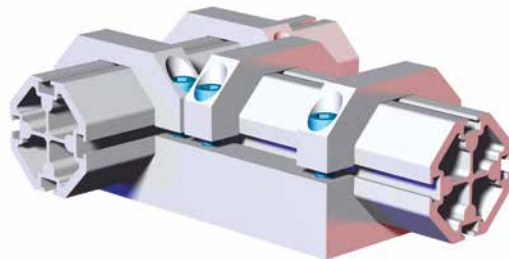
Features:

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

Specifications:

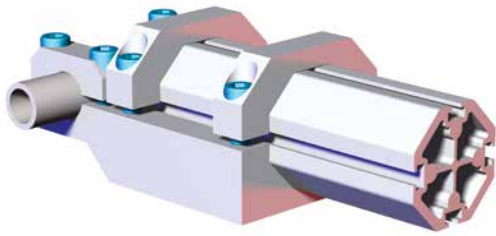
Max. Static Clamp Load:
60mm: 746 Nm [550 ft-lb]

Material: Aluminum



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:

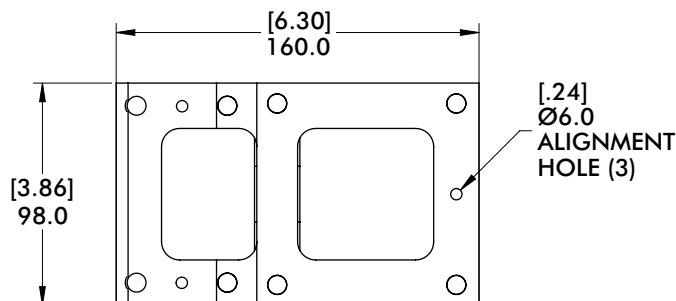
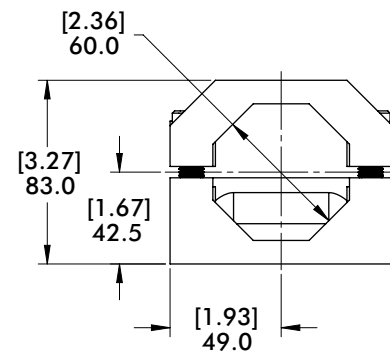
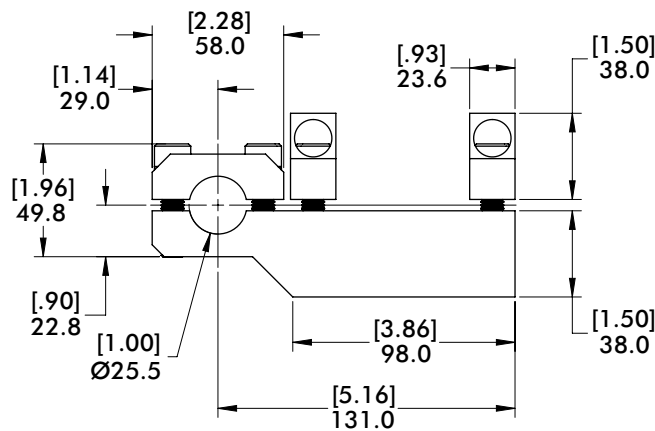
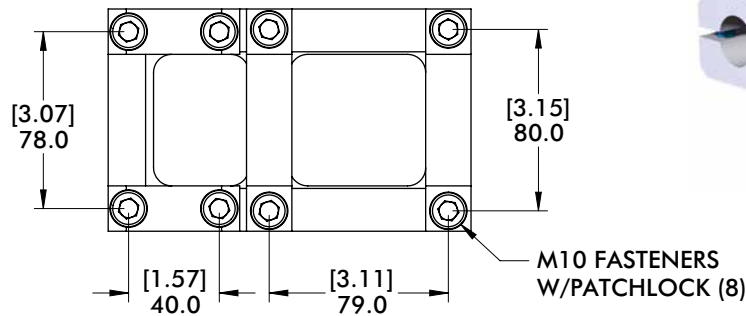
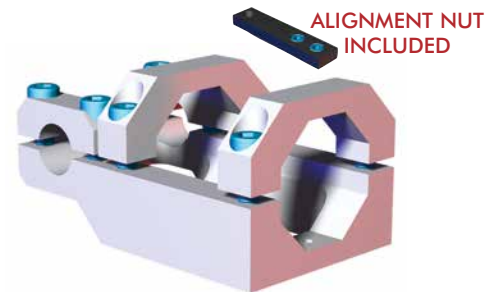
60mm: 746 Nm [550 ft-lb]

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

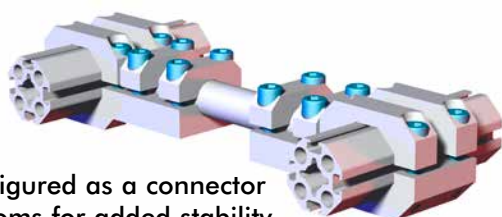
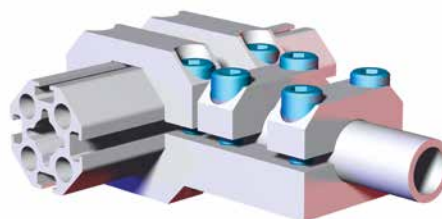
1.25 kg [2.76 lb]

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

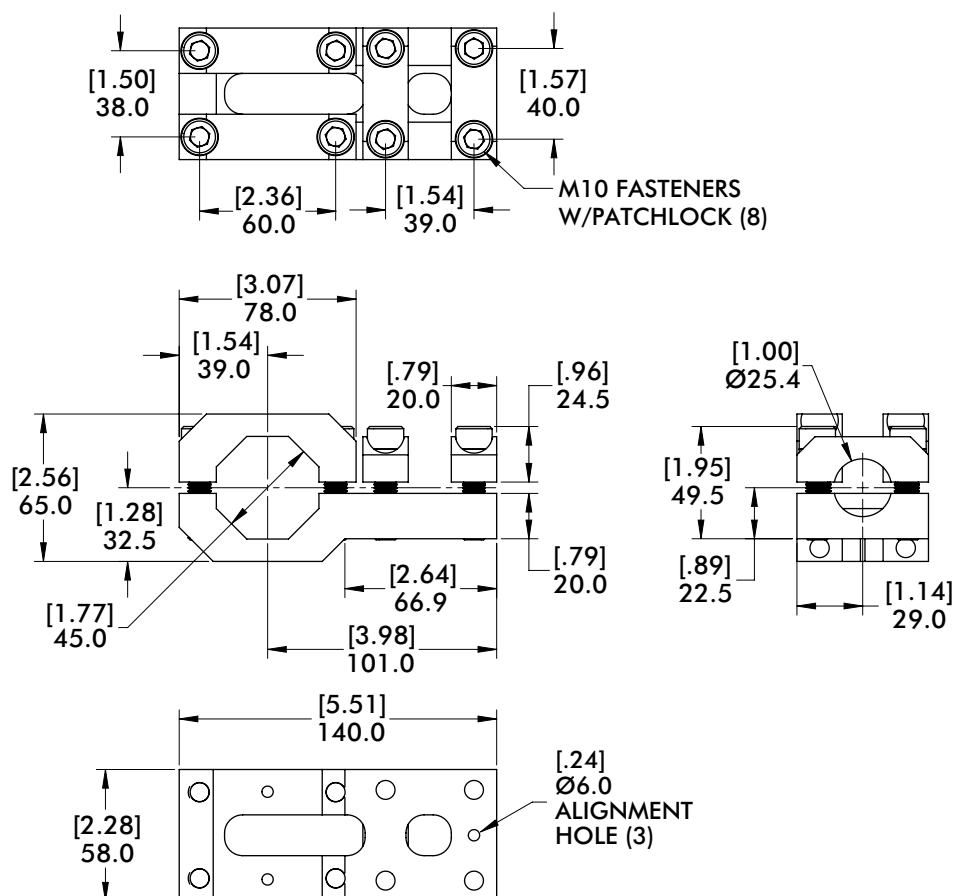
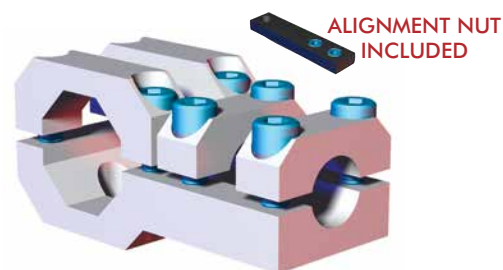


- Connects 25mm round and 45mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

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

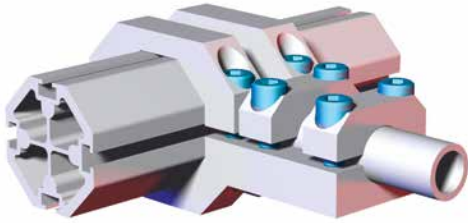


Can be configured as a connector between booms for added stability



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:

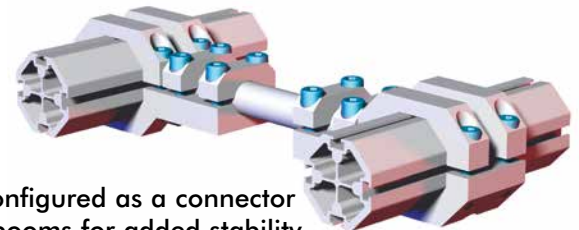
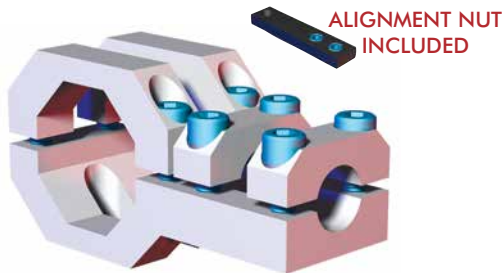
60mm: 746 Nm [550 ft-lb]

25mm: 271 Nm [200 ft-lb]

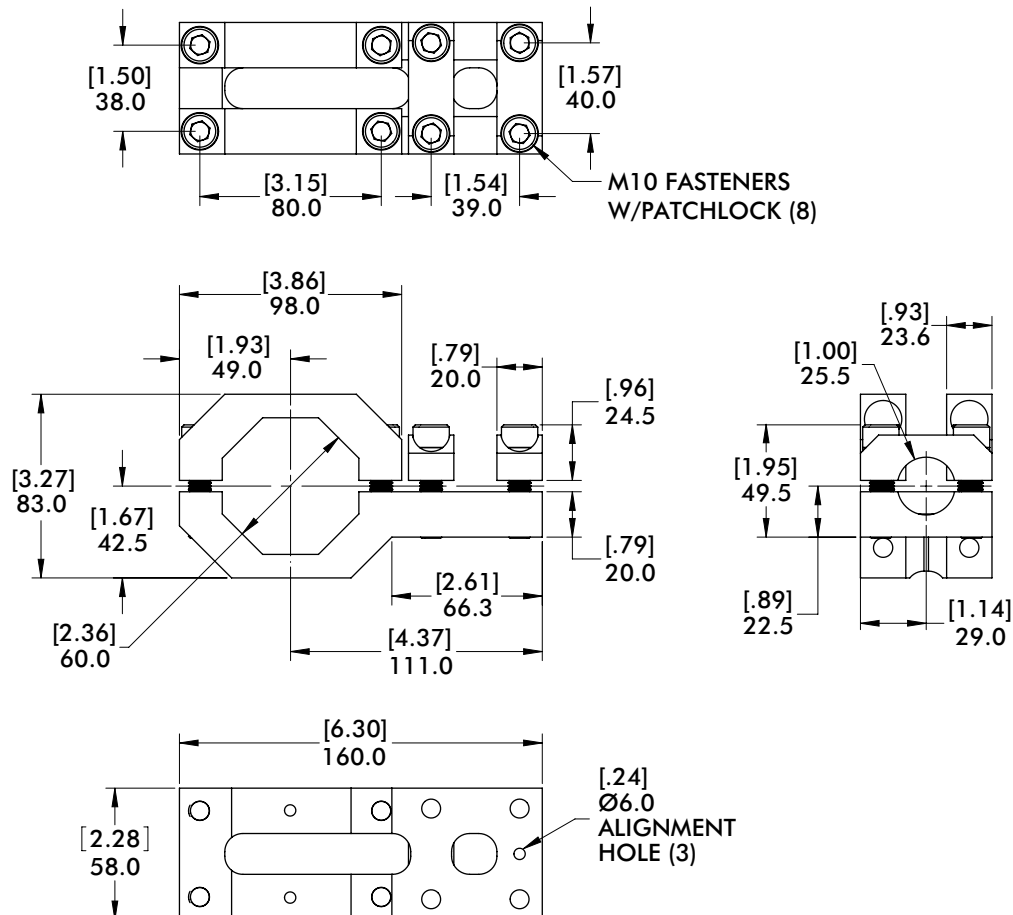
Material: Aluminum

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



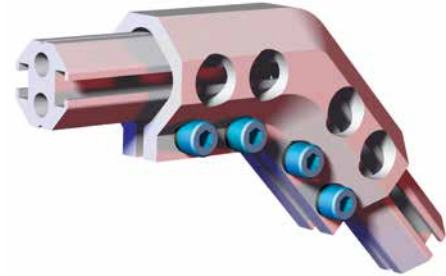
45° Angular Boom Clamp Brackets

Features:

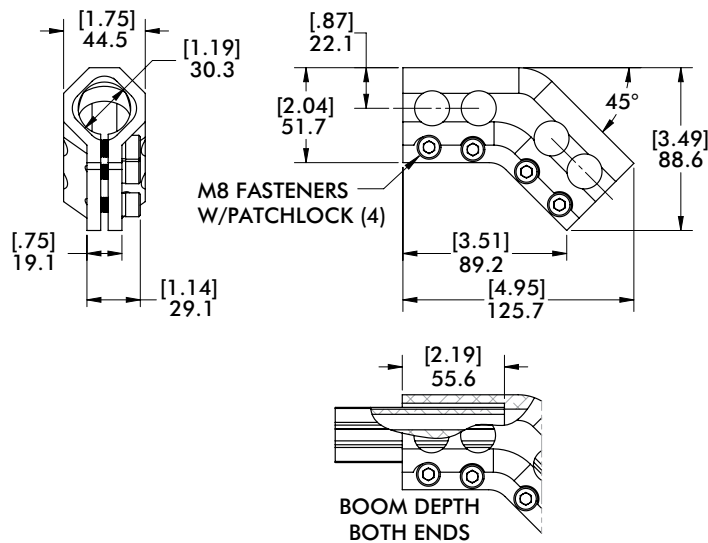
- Mounts (2) Bodybuilder extrusion booms inline at a 45° angle.

Specifications:

Material: Aluminum

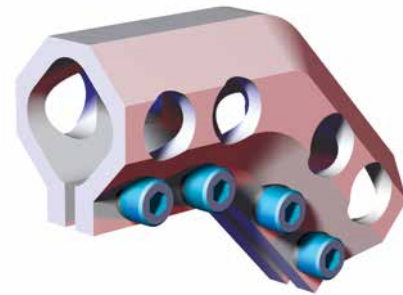


DC-3030B-45 30mm to 30mm 45° External Boom Clamp Brackets



Specifications:

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



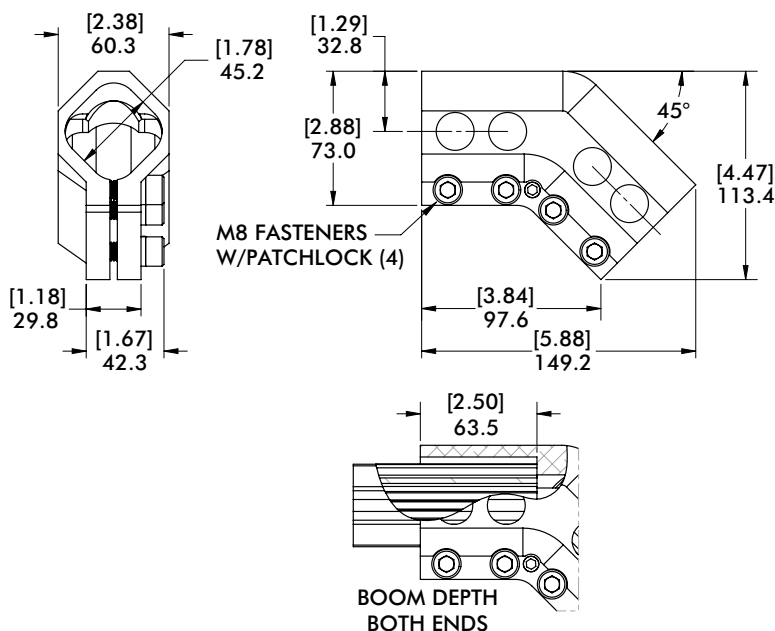
Model Number

Weight

CPI-DC-3030B-45

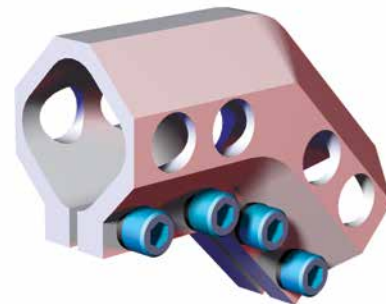
.30 kg [.66 lb]

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



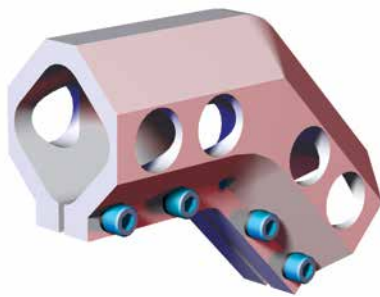
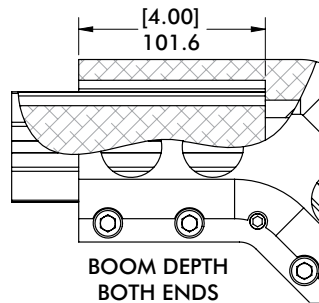
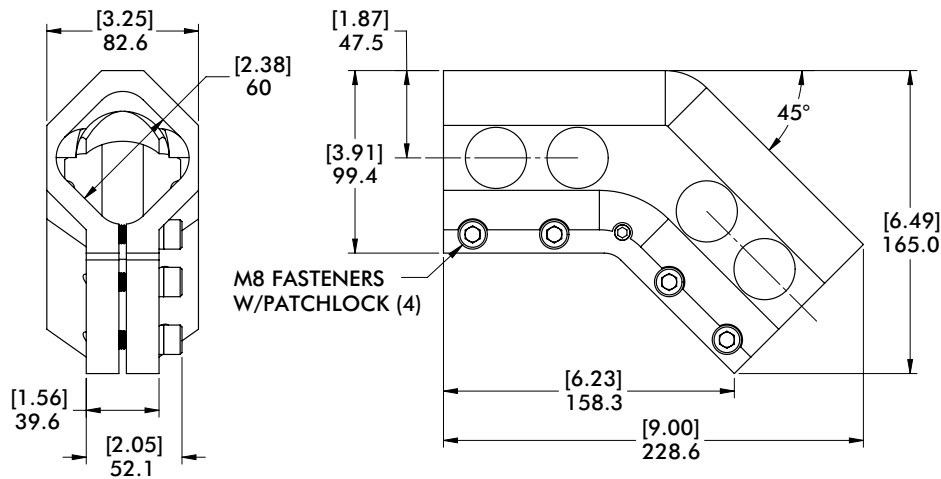
Specifications:

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

Material: Aluminum

Features:

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



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

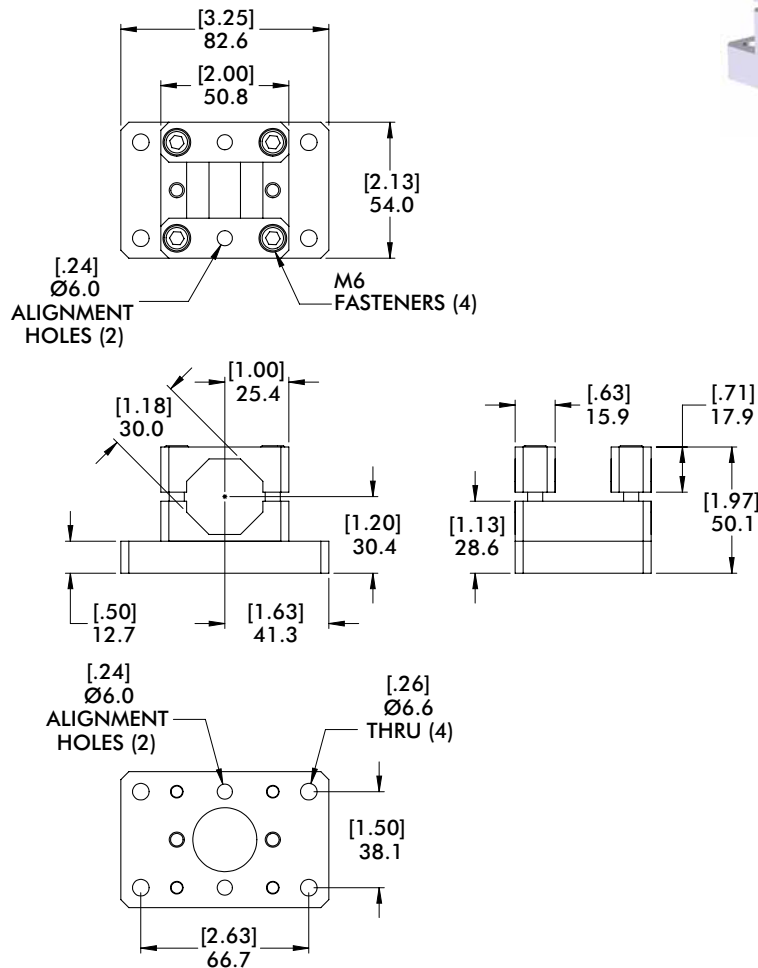
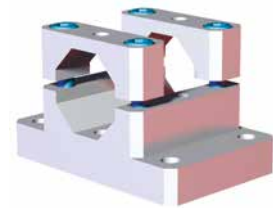
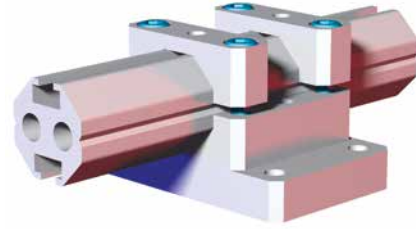
Features:

- 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



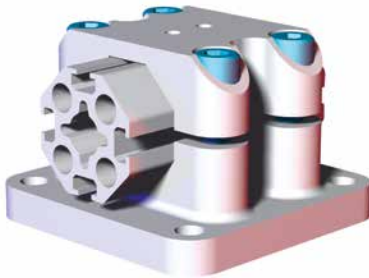
Model Number

CPI-CLM-30B-152F-90

Weight

0.28 kg [.61 lb]

TBC-45 45mm Mid Flange Clamp Mount



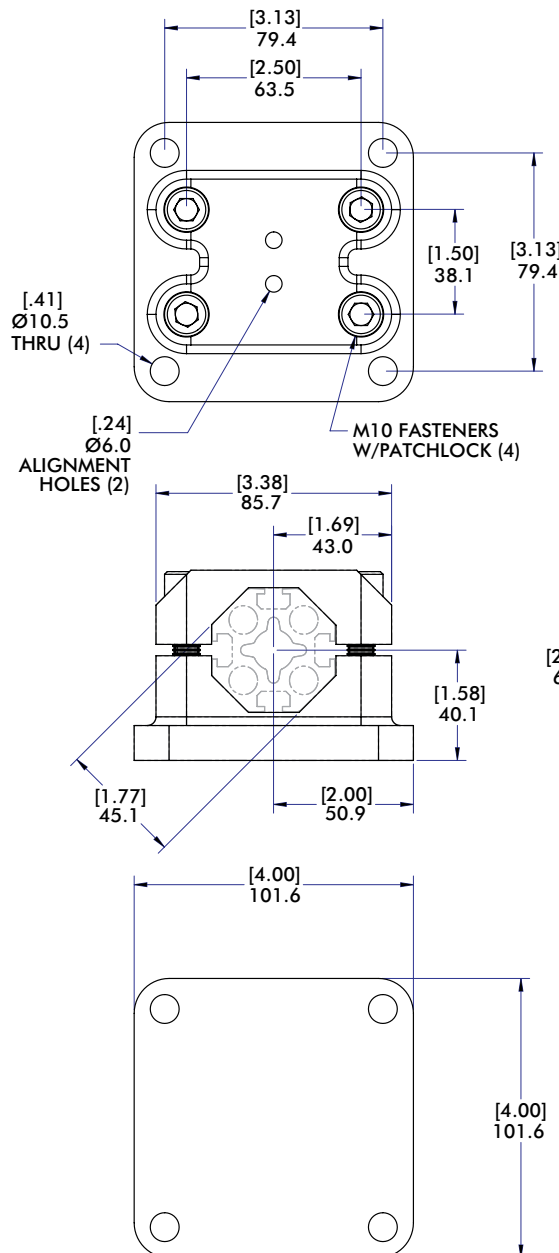
Specifications:

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

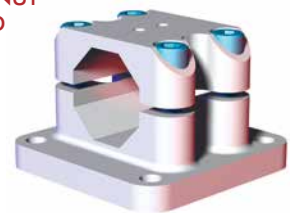
Material: Aluminum

Features:

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



ALIGNMENT NUT INCLUDED



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

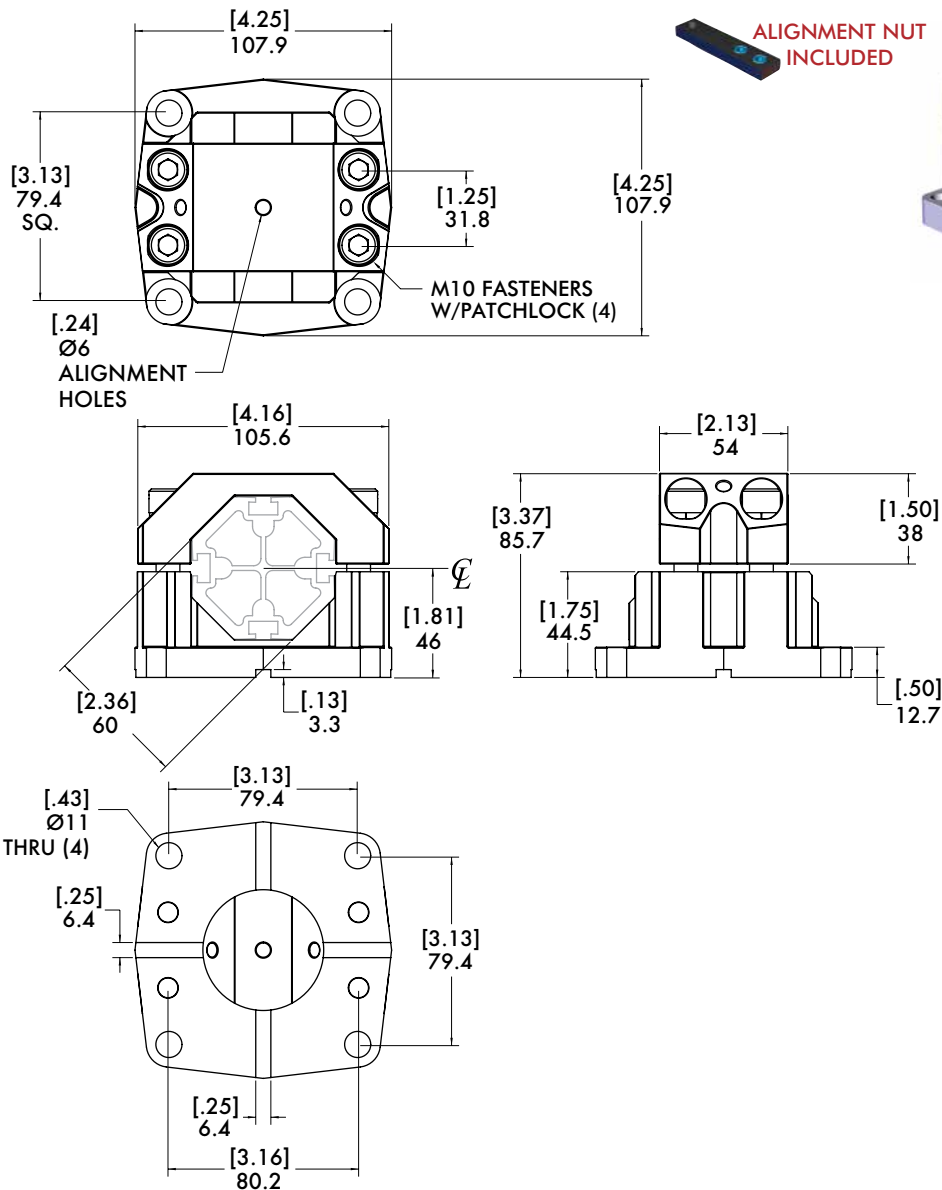
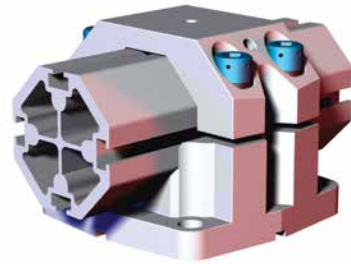
Features:

- 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]

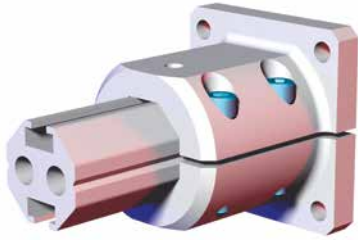
Material: Cast Aluminum



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



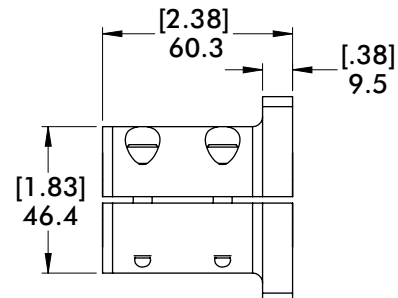
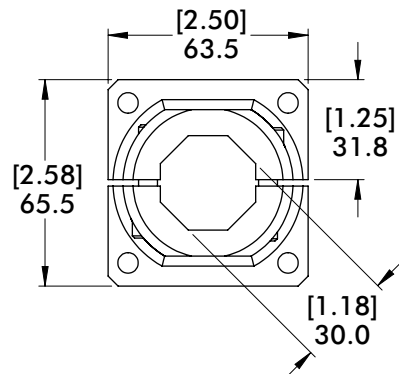
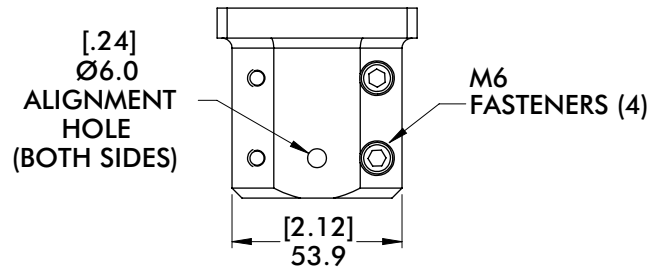
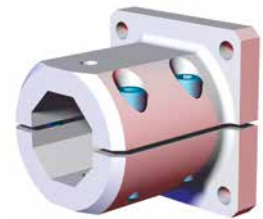
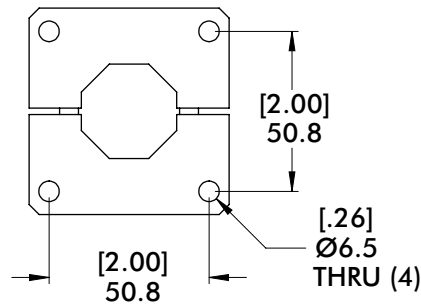
Specifications:

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

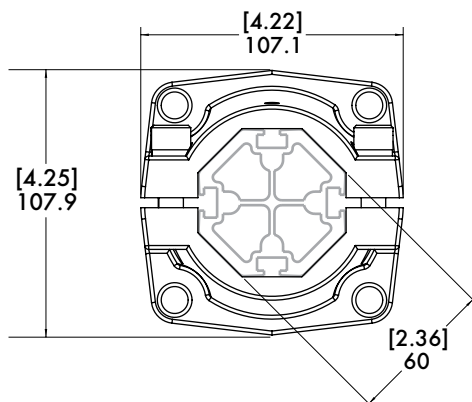
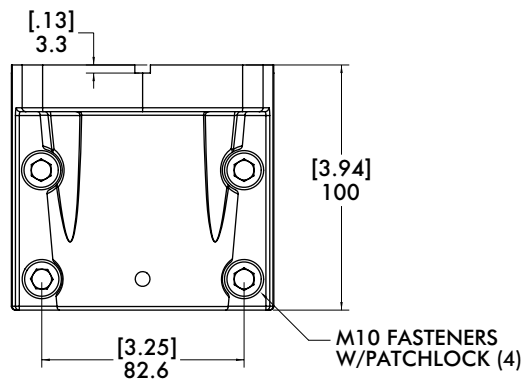
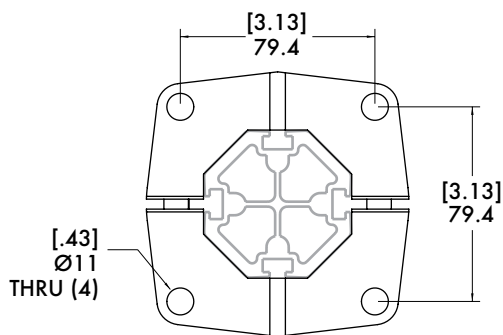
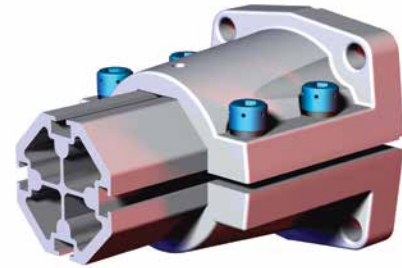
Features:

- 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.

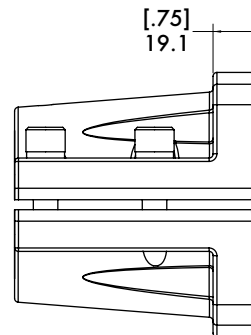
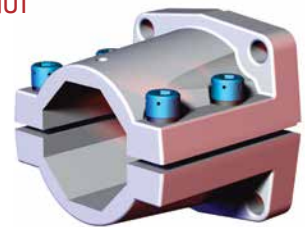
Specifications:

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

Material: Cast Aluminum



ALIGNMENT NUT
INCLUDED



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

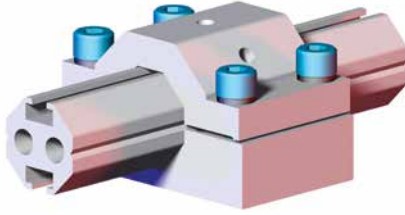
Model Number

BECC-60-00

Weight

1.21 kg [2.67 lb]

TPM-30 30mm Accessory Mounting Bracket



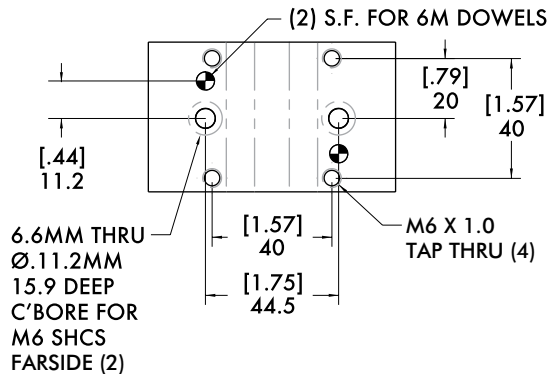
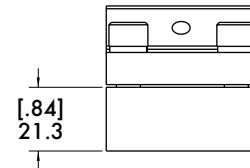
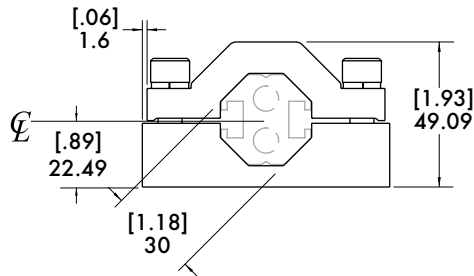
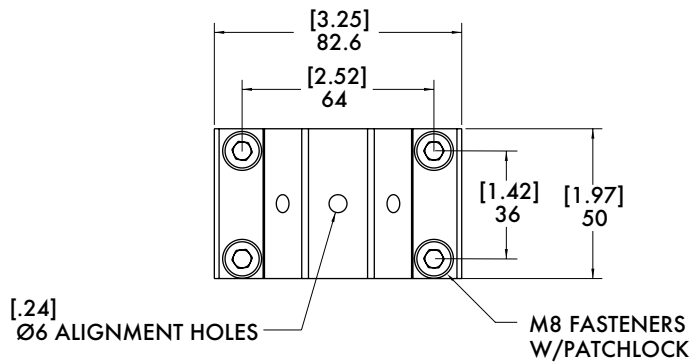
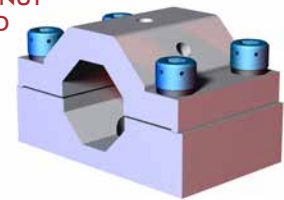
Specifications:

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

Material: Aluminum

Features:

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



Model Number

TPM-30

Weight

.36 kg [.80 lb]

BODYBUILDER™ ACCESSORY MOUNTS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



TPM(S)-45 45mm Accessory Mounting Bracket

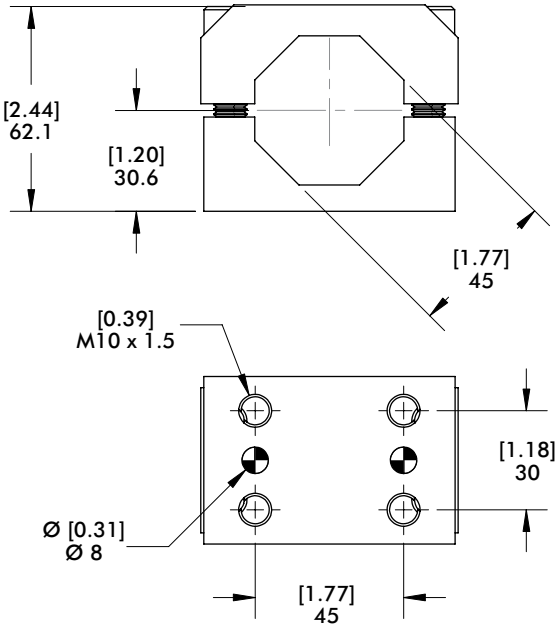
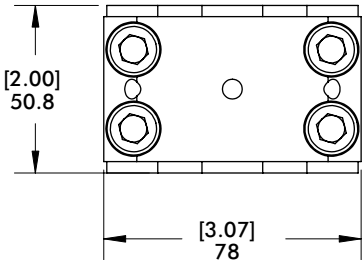
Features:

- 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]

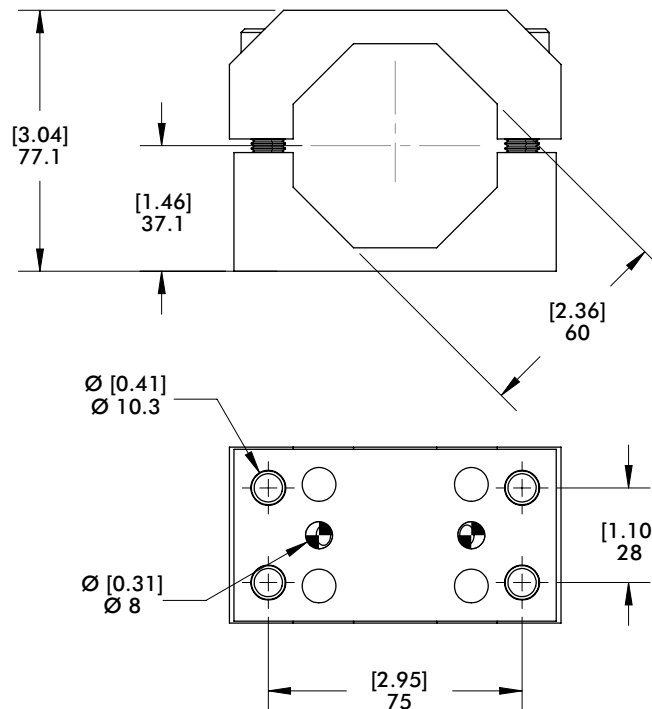
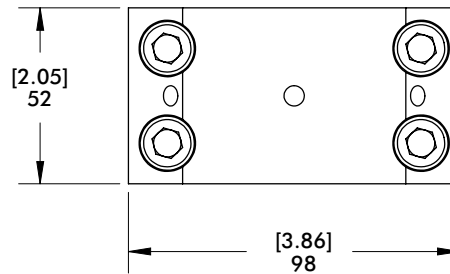
Material: Steel

Features:

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



ALIGNMENT NUT
INCLUDED



Model Number

TPMS-60

Weight

1.3 kg [2.90 lb]

BODYBUILDER™ ACCESSORY MOUNTS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



TPMS-90 90mm Accessory Mounting Bracket

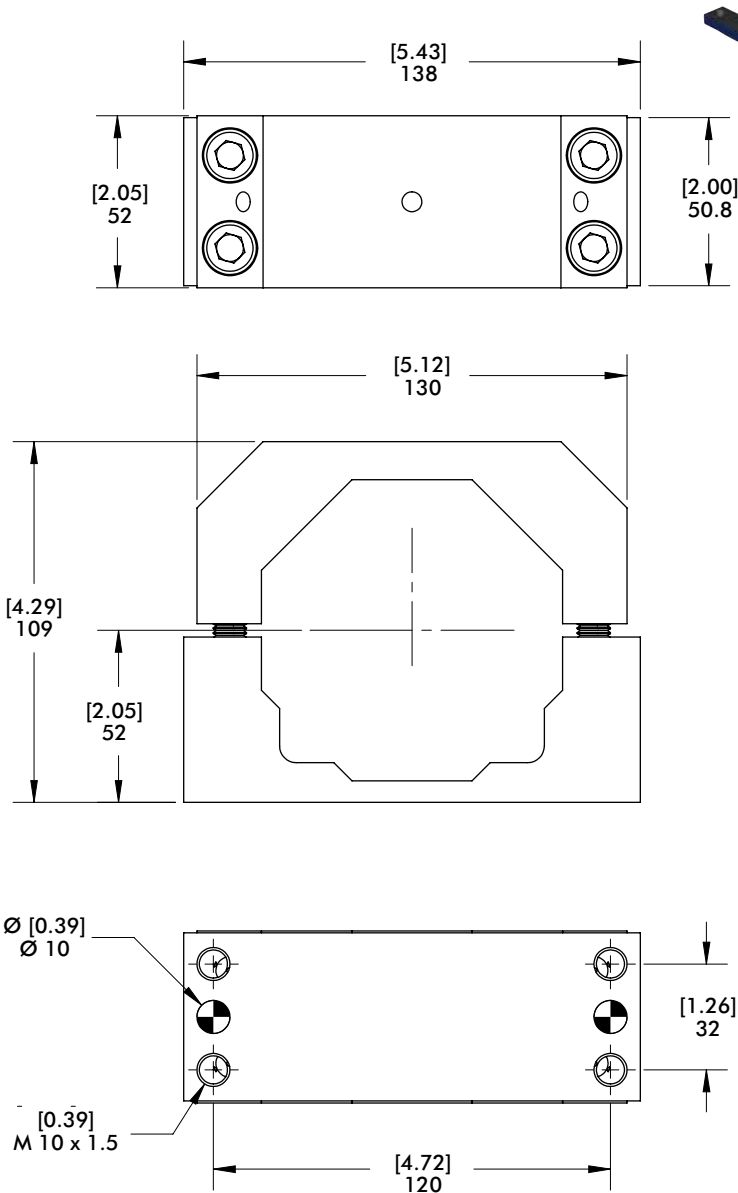
Features:

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

Specifications:

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

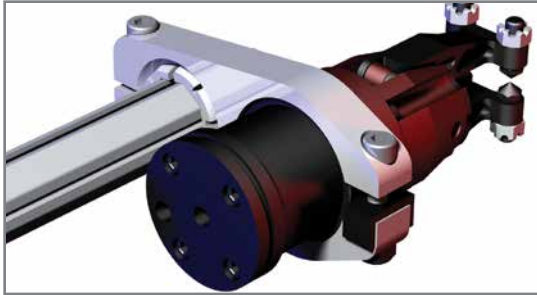
Material: Steel



ALIGNMENT NUT
INCLUDED



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



Specifications:

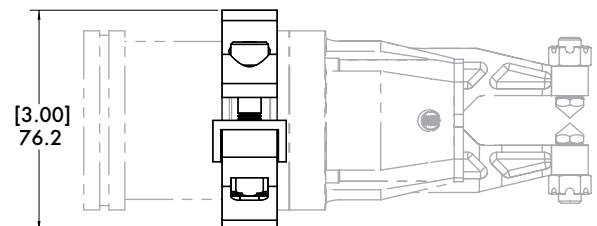
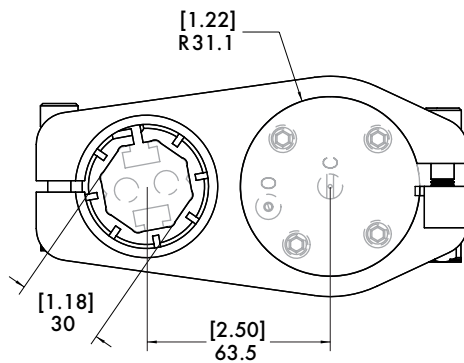
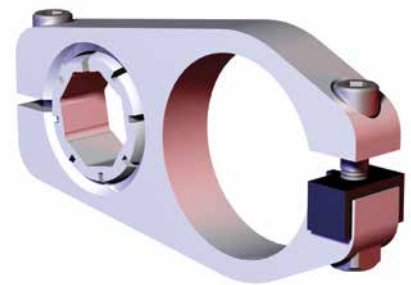
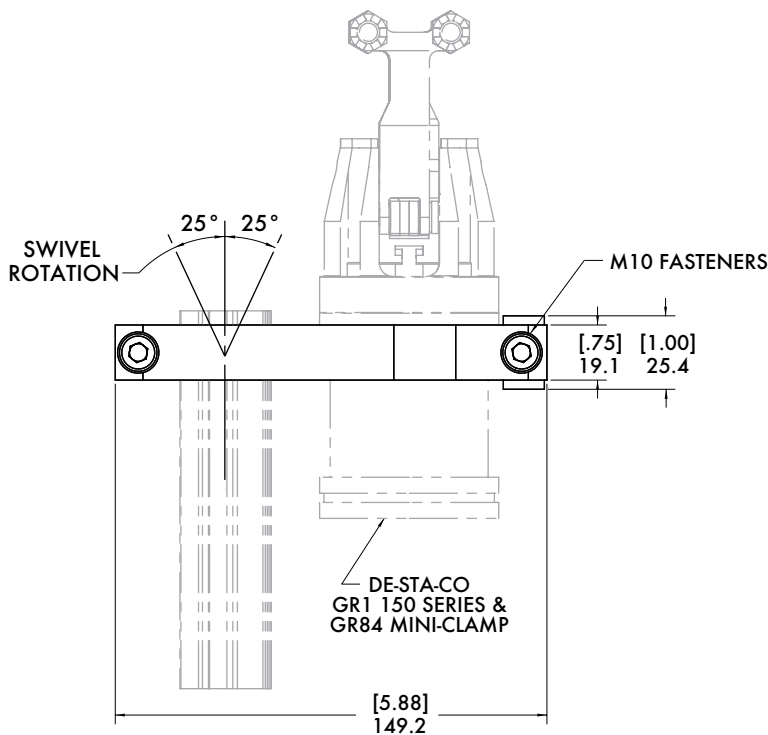
Max. Static Clamp Load:
271 Nm [200 ft-lb]

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:

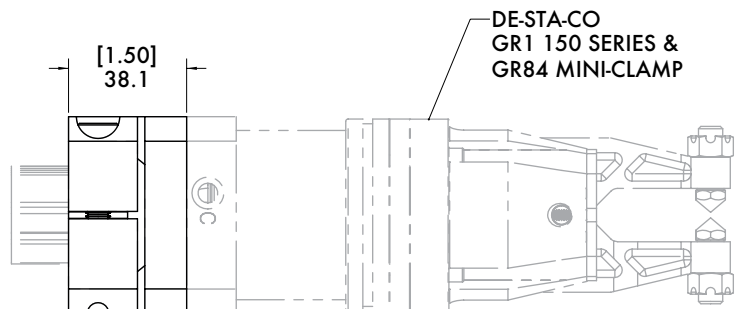
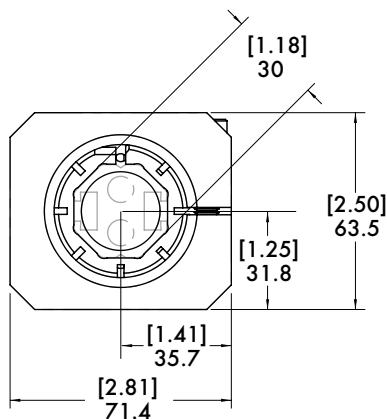
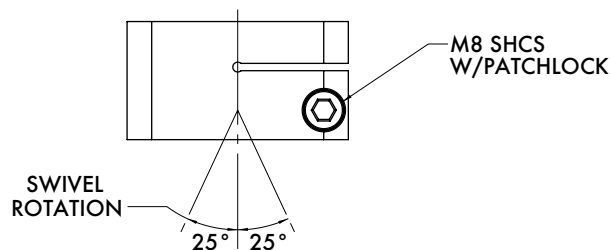
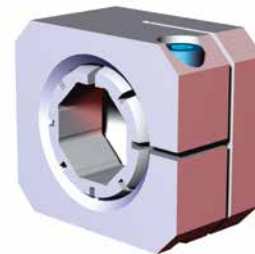
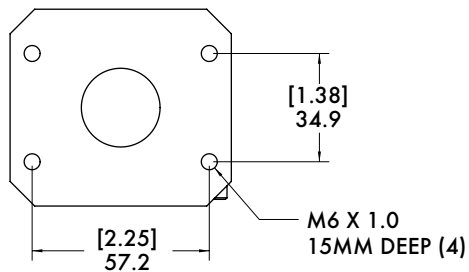
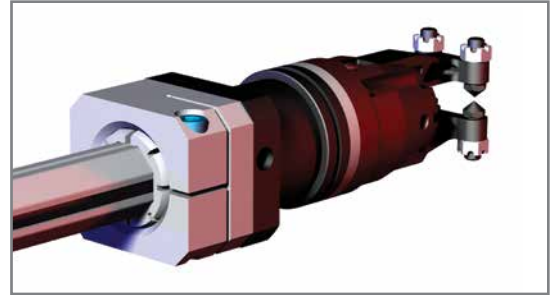
- Swivel ball allows for $\pm 25^\circ$ adjustment of swivel rotation.

Specifications:

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

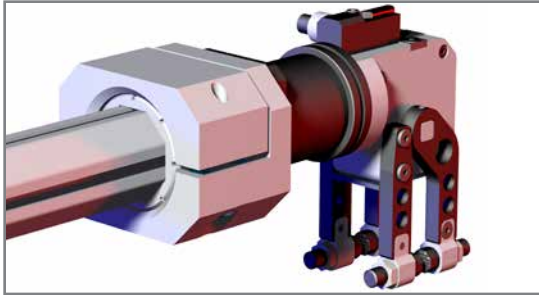
Material:

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:

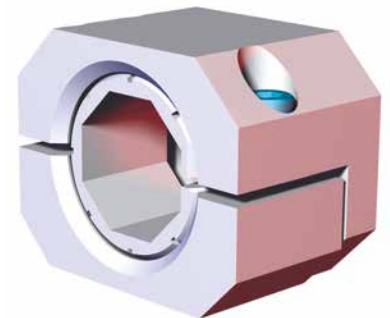
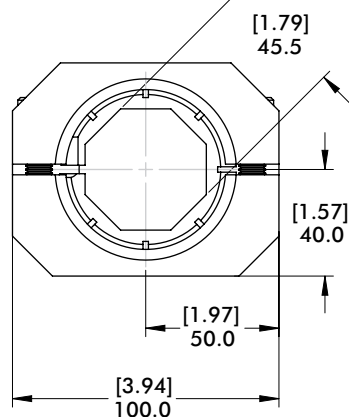
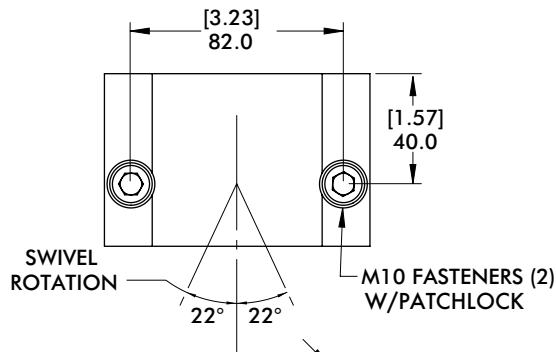
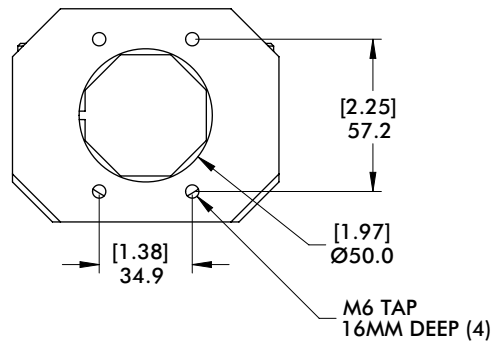
Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material:

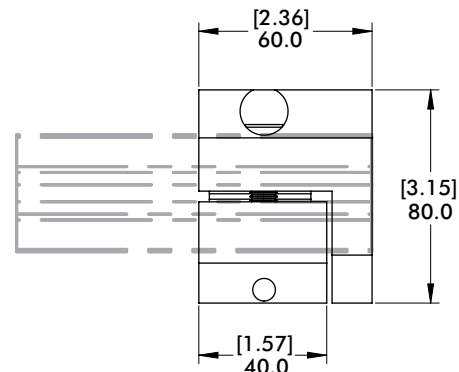
Housing:
Machined Aluminum
Swivel: Steel

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™ Octagonal Tooling | Dimensions | Technical Specifications



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.

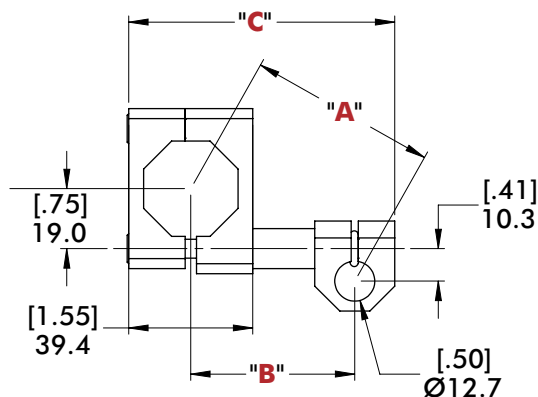
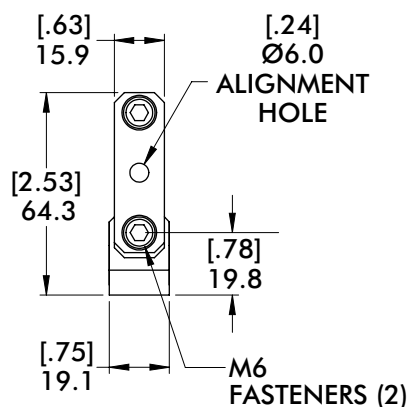
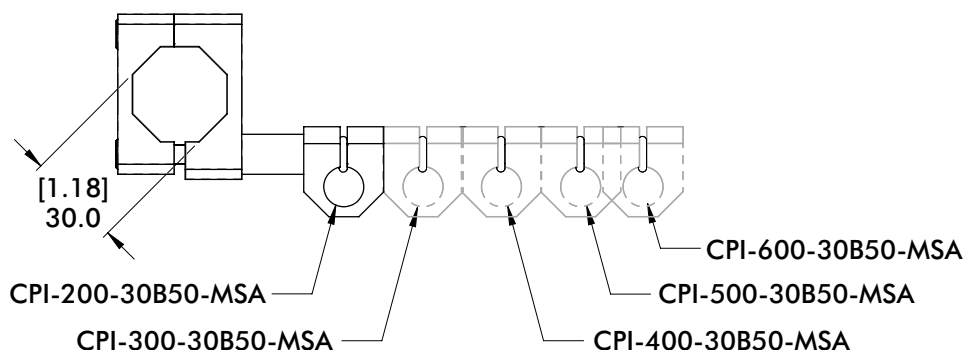
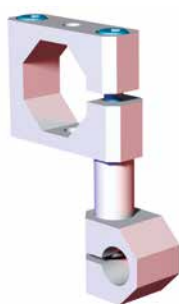
Specifications:

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

Material:

Body:
Cast Aluminum

Insert:
Machined Aluminum



CPI- <u> L </u> -30B50-MSA SWIVEL ARM				
" <u>L</u> "	"A"	"B"	"C"	Weight
200	59.8	52.1	84.5	.10 kg
	[2.35]	[2.05]	[3.33]	[.22 lb]
300	82.6	77.2	109.6	.11 kg
	[3.25]	[3.04]	[4.32]	[.24 lb]
400	106.2	102.1	134.5	.12 kg
	[4.18]	[4.02]	[5.30]	[.26 lb]
500	130.6	127.3	159.7	.13 kg
	[5.14]	[5.01]	[6.29]	[.29 lb]
600	150.0	147.1	179.5	.14 kg
	[5.90]	[5.79]	[7.07]	[1.72 lb]

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



Specifications:

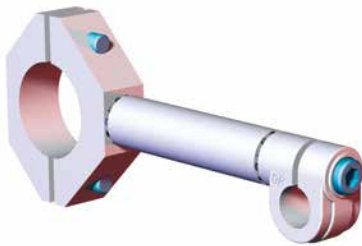
Max. Static Clamp Load:
271 Nm [200 ft-lb]

Material:

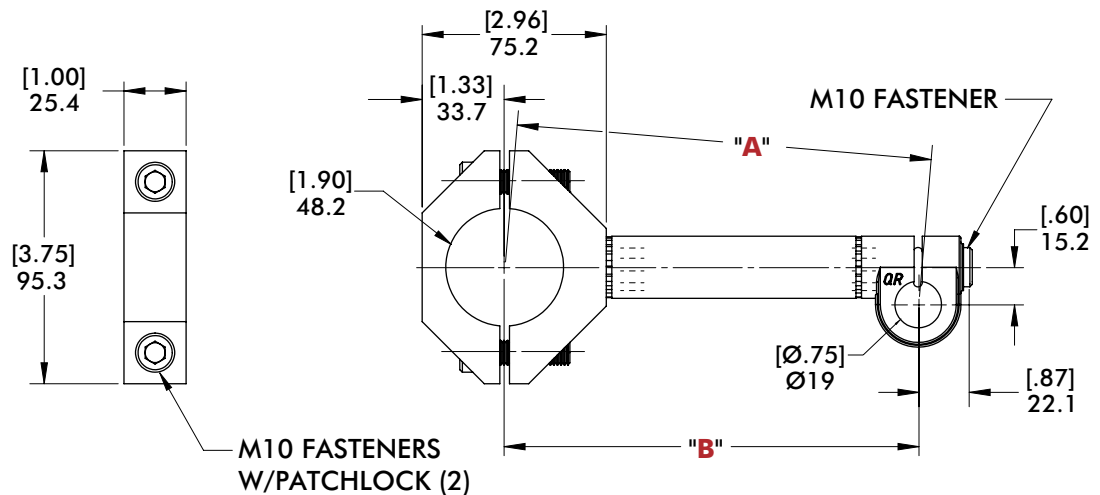
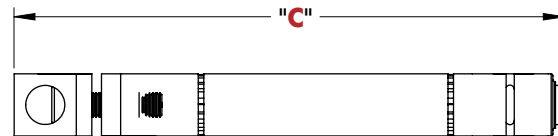
Body:
Cast Aluminum
Insert:
Machined Aluminum

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:

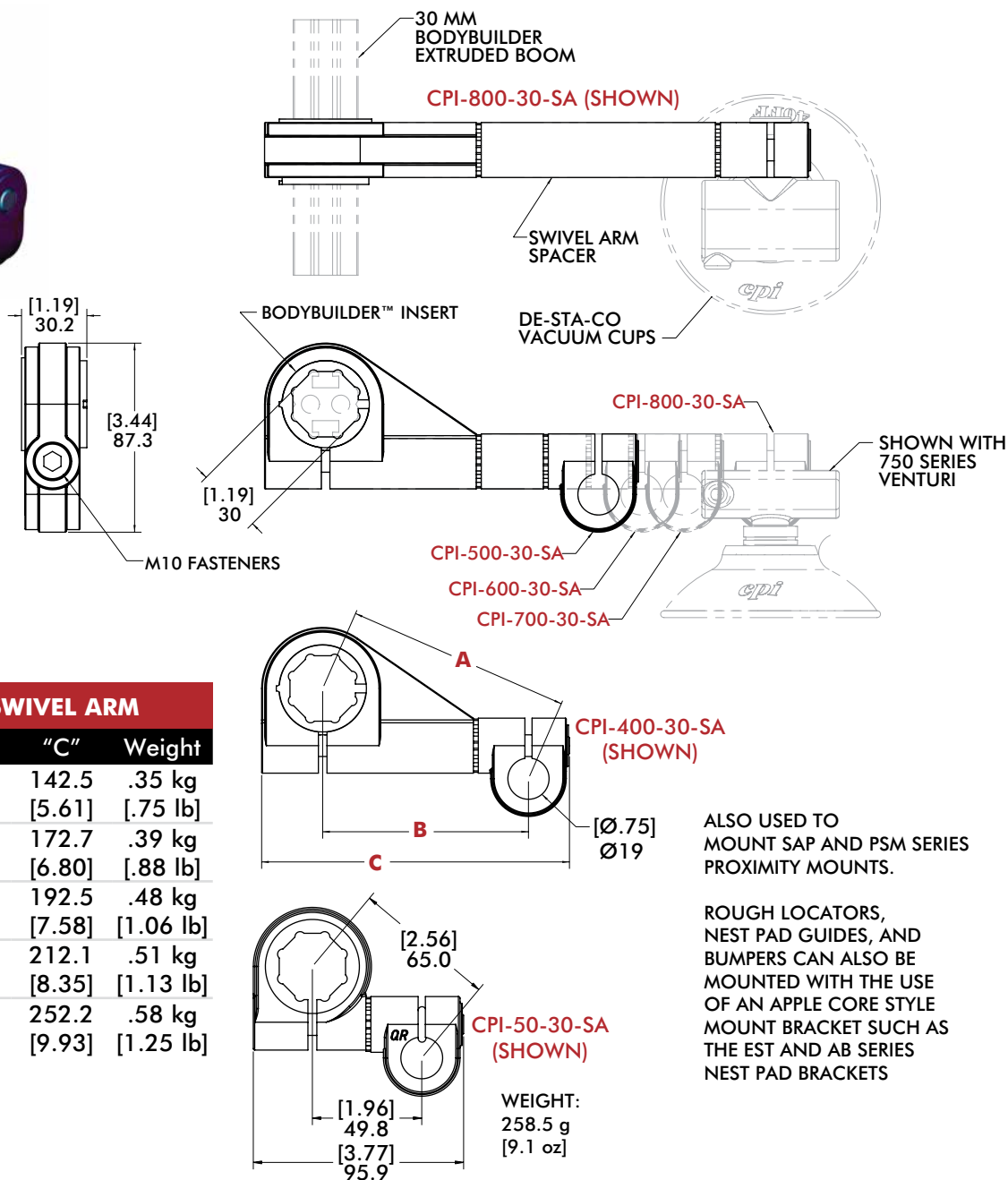
Cast Aluminum

Insert:

Machined Aluminum



CPI-400-30-SA SHOWN



ALSO USED TO MOUNT SAP AND PSM SERIES PROXIMITY MOUNTS.

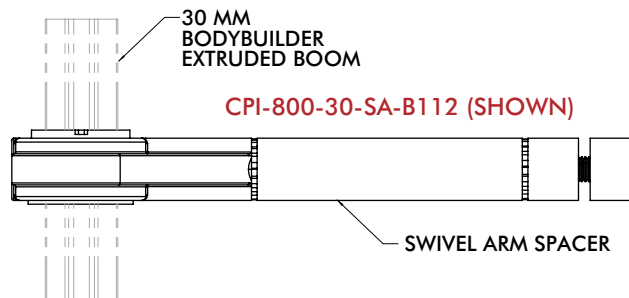
ROUGH LOCATORS, NEST PAD GUIDES, AND BUMPERS CAN ALSO BE MOUNTED WITH THE USE OF AN APPLE CORE STYLE MOUNT BRACKET SUCH AS THE EST AND AB SERIES NEST PAD BRACKETS

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]

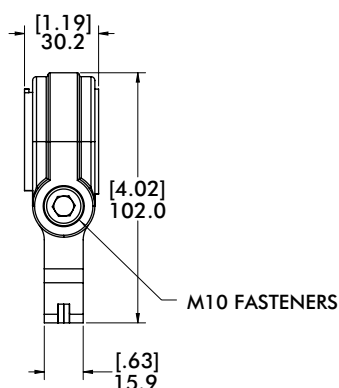
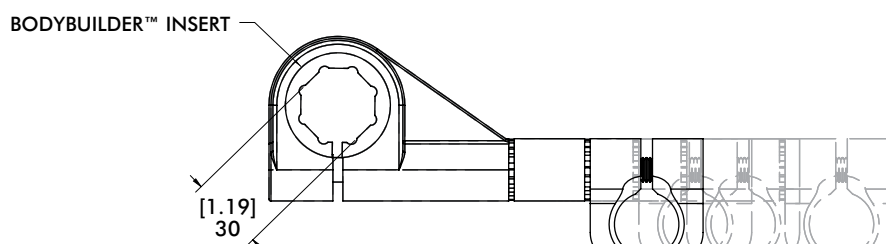
30-SA-B112 30mm Swivel Arms for Swivel Ball Mount Accessories



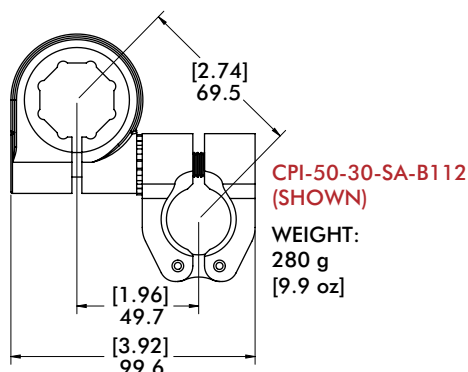
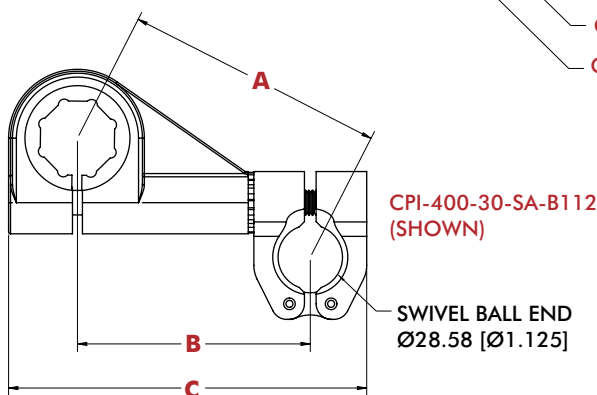
CPI-500-30-SA-B112 (SHOWN)



CPI-800-30-SA-B112 (SHOWN)



CPI-500-30-SA-B112 CPI-800-30-SA-B112
CPI-700-30-SA-B112
CPI-600-30-SA-B112



CPI-50-30-SA-B112 (SHOWN)
WEIGHT:
280 g
[9.9 oz]

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



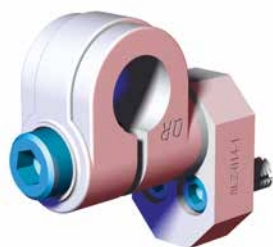
BC19 30mm Bodybuilder to Ø19mm [.75 in] Apple Core Swivel End Mount

Features:

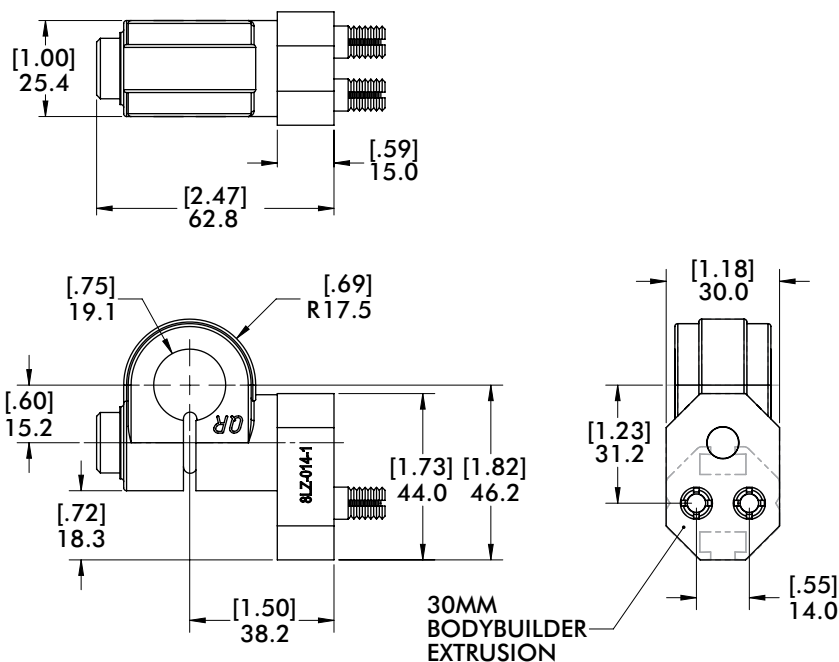
- Mounts to BodyBuilder™ 30mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustment along (2) axis.

Specifications:

Material:
Aluminum



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



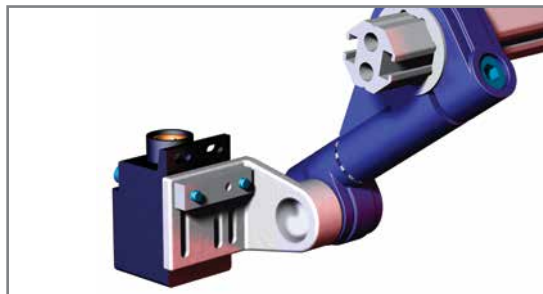
Model Number

CPI-BC-19

Weight

.13 kg [.28 lb]

AB-750-SL Part Present Proximity Switch Mount



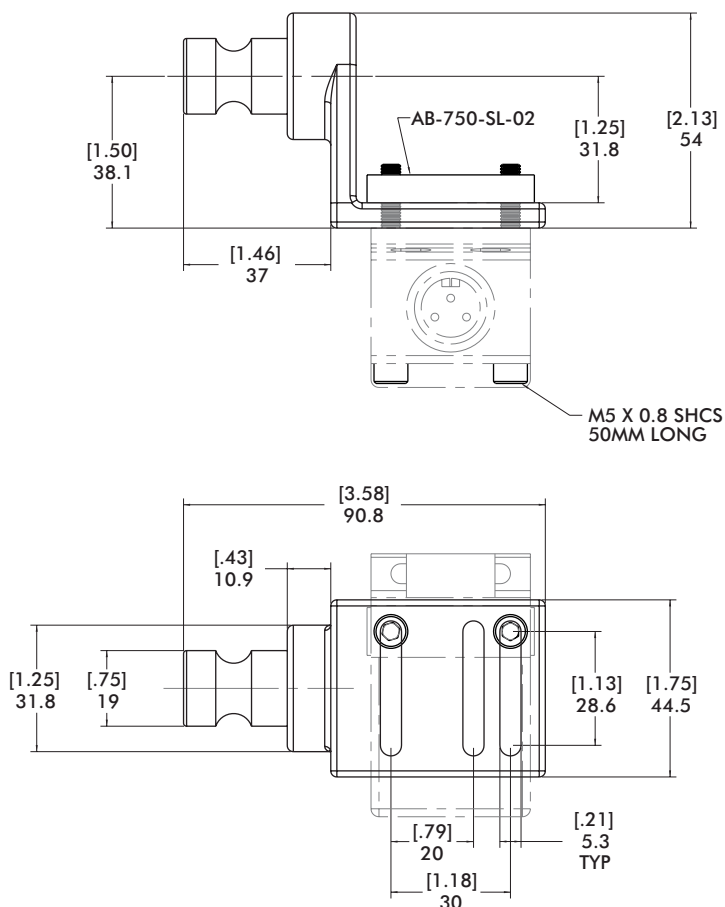
Specifications:

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

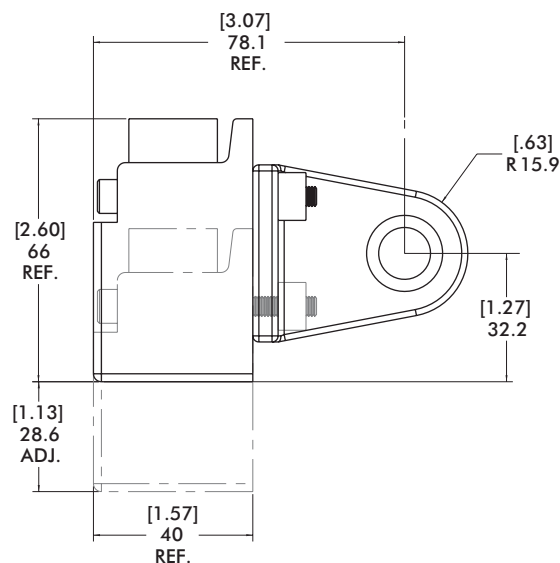
Material:
Aluminum

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
CPI-AB-750-SL

Weight
.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.

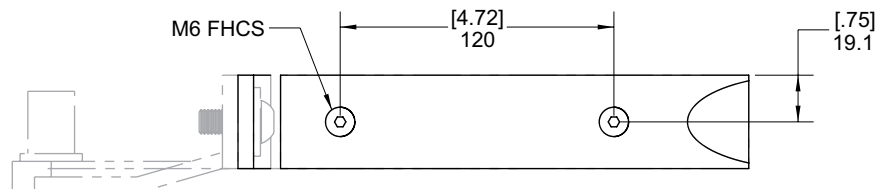
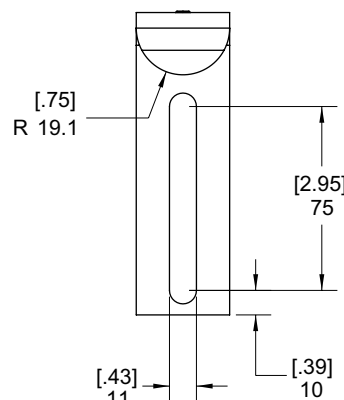
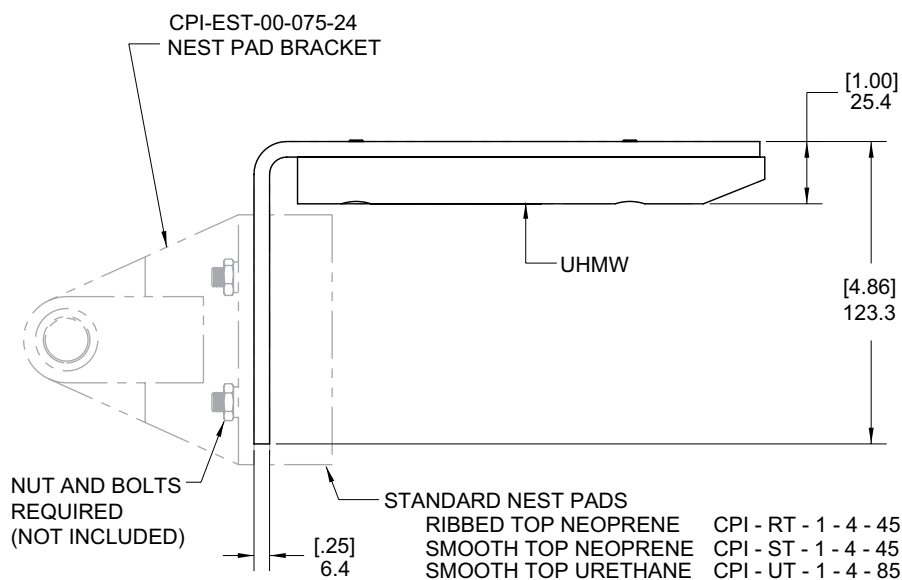
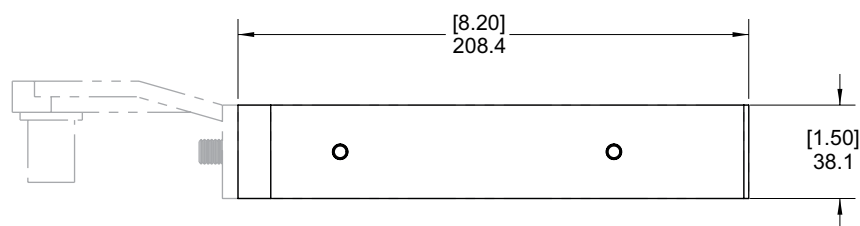
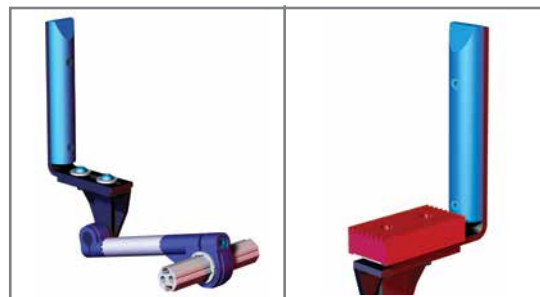
Specifications:

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

Material:

Bracket: Steel

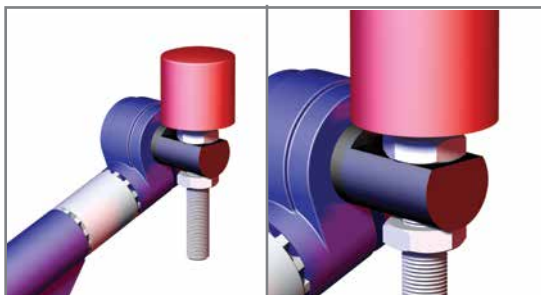
Wear Surface: UHMW



Model Number
CPI-NPG-15RL-400

Weight
0.86 kg [1.90 lb]

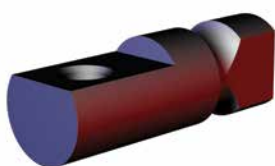
SAP-BM10 Ø19mm [.75 in] Apple Core Nest Bumper Mount



Specifications:

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

Material:
Steel



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

