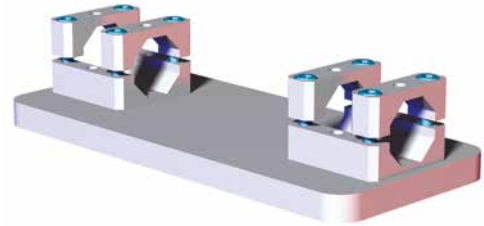
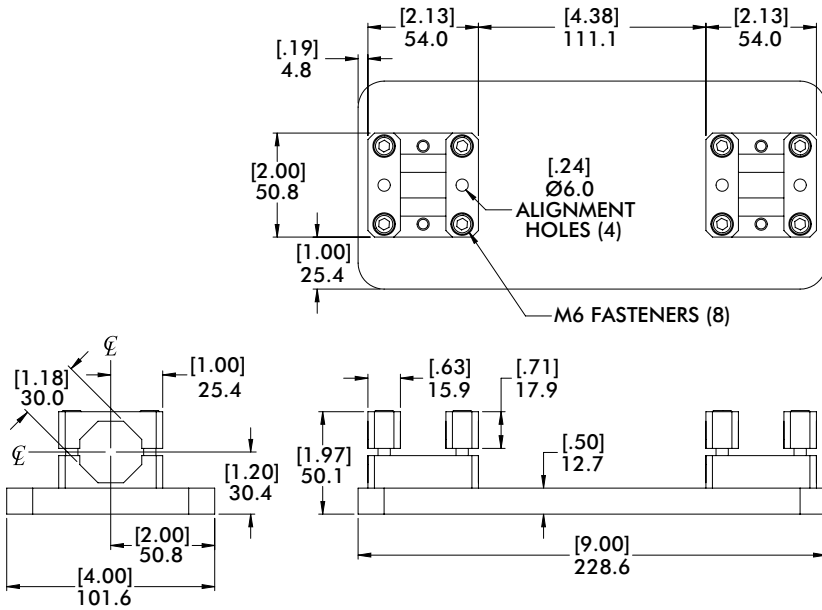


BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



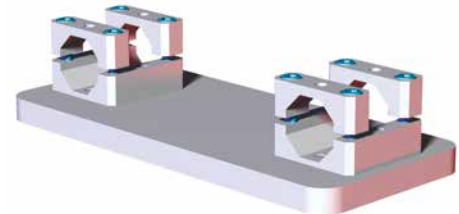
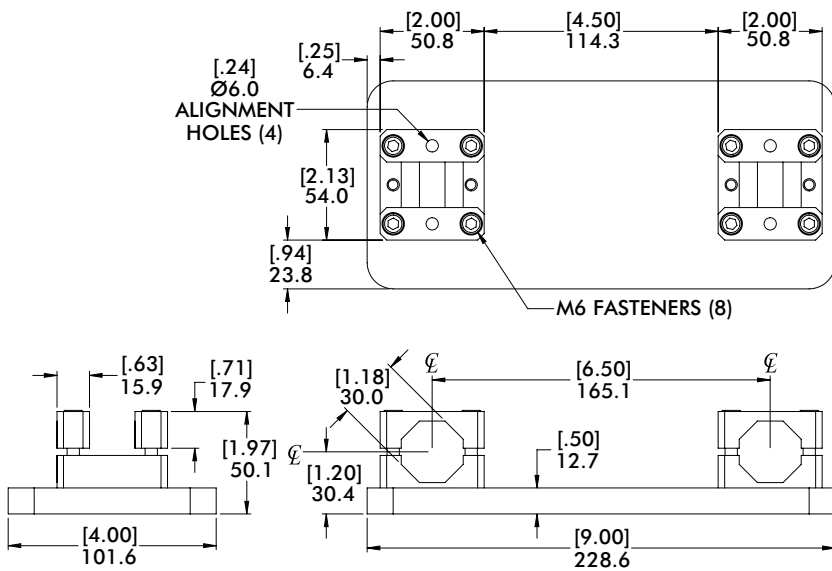
RMM-30B-SE Single Extrusion 60mm Robot Adaptor Mid Mount



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

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

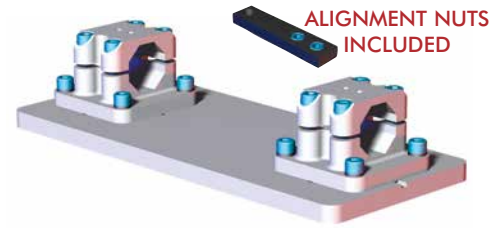
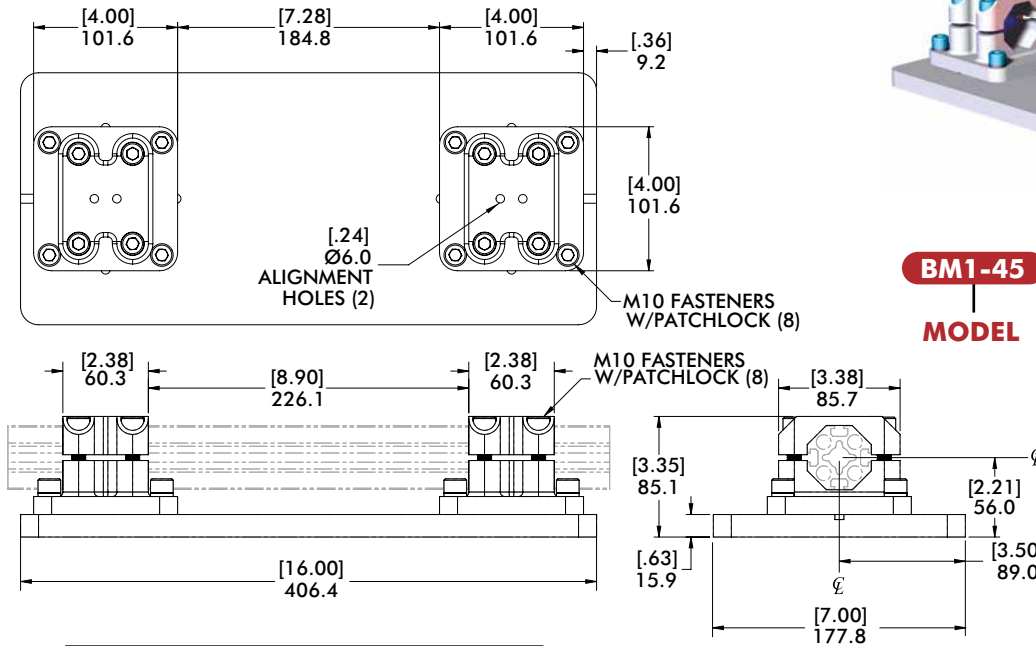
RMM-30B-DE Double Extrusion 30mm Robot Adaptor Mid Mount



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

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

BM1-45-SE Single Extrusion 45mm Mid Mount



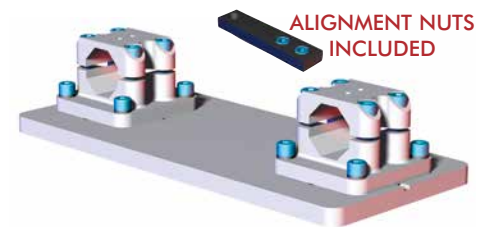
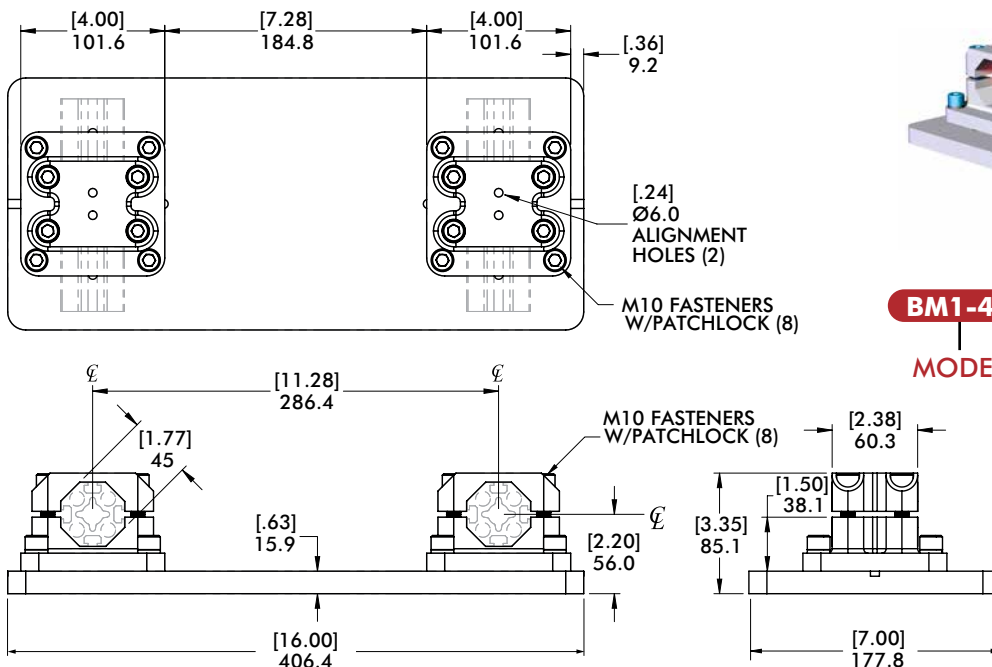
BM1-45 — **SE** — **RXX**
MODEL — **BOOM SETUP (SINGLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

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

Weight
 5.05 kg [11.1 lb]

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

BM1-45-DE Double Extrusion 45mm Mid Mount



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

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

Weight
 5.05 kg [11.1 lb]

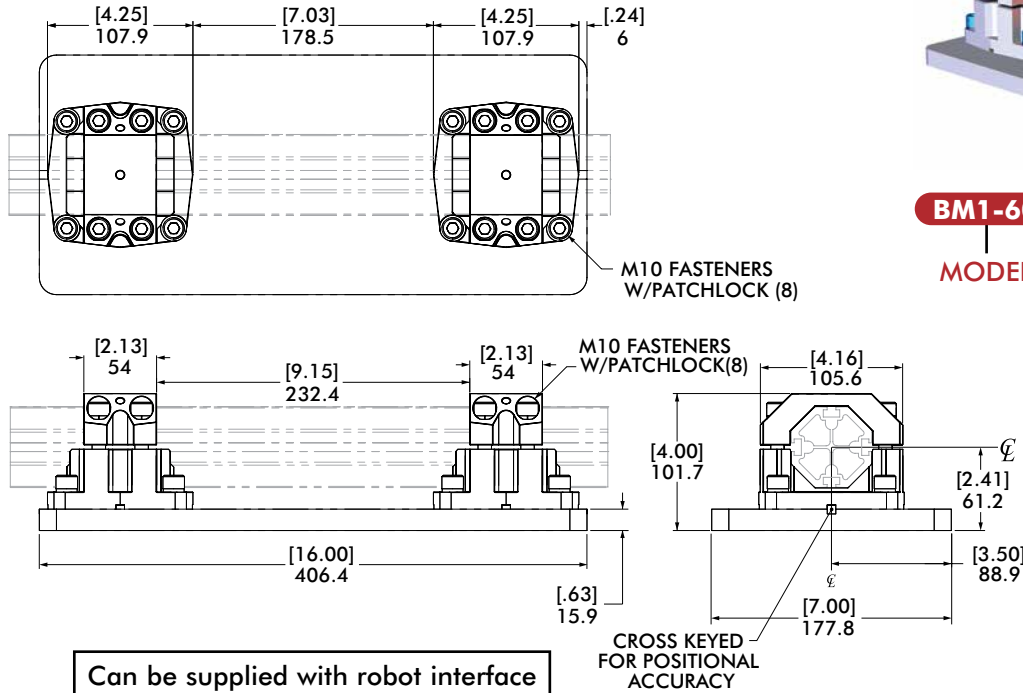
Can be supplied with robot interface hole patterns. (See pages 19-21).

BODYBUILDER™ MID MOUNT ASSEMBLIES

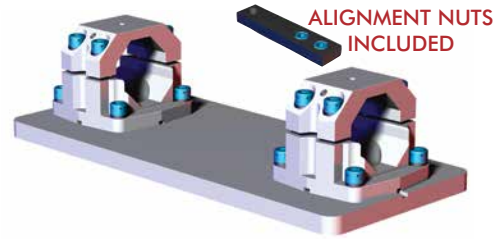
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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



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

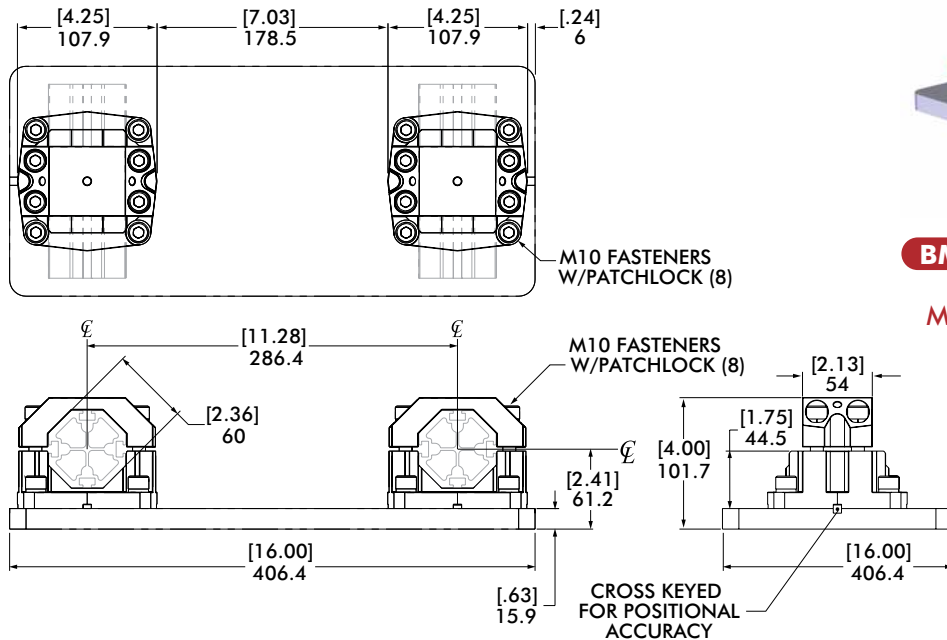


BM1-60 — **SE** — **RXX**
MODEL — **BOOM SETUP (SINGLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

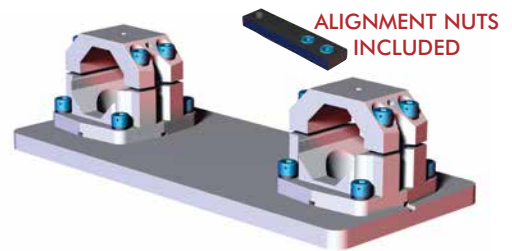
Specifications:
 Max. Static Product Load:
 675 Nm [500 ft-lb]
 Material: Aluminum

Weight
 5.2 kg [11.5 lb]

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



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

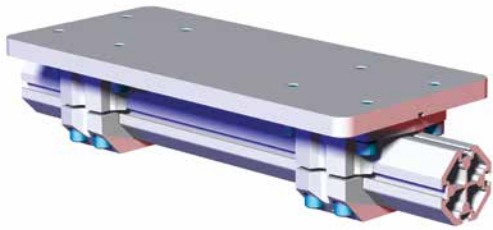


BM1-60 — **DE** — **RXX**
MODEL — **BOOM SETUP (DOUBLE)** — **ROBOT INTERFACE PATTERN (PAGE 19-21)**

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

Weight
 5.2 kg [11.5 lb]

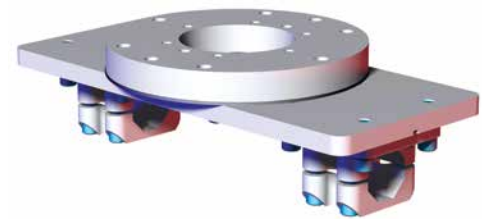
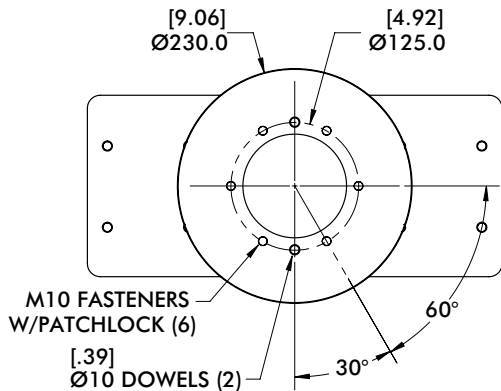
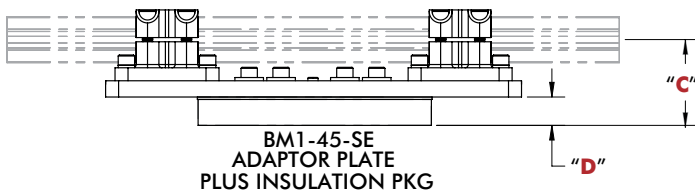
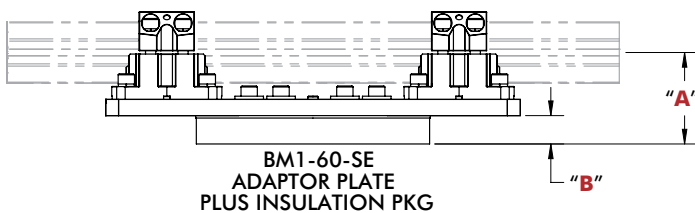
BM1-45/BM1-60 Mid Mount Assembly - Mount Plate



Specifications:
Material: Aluminum

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

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



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

MID MOUNT ASSEMBLY ADAPTER PLATE

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

BODYBUILDER™ MID MOUNT ASSEMBLIES



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Features:

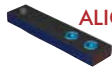
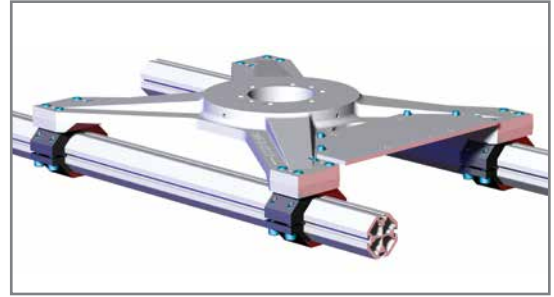
- Can be used as a direct robot interface.
- Provide robust clamping of each extrusion for maximum stability.
- Standard robot interface patterns provided. Plate can also be left blank.

Specifications:

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

Material:

Mid Mount:
Cast Aluminum
Clamps: Steel



ALIGNMENT NUTS INCLUDED

ROBOT INTERFACE PLATE SHOWN BLANK.

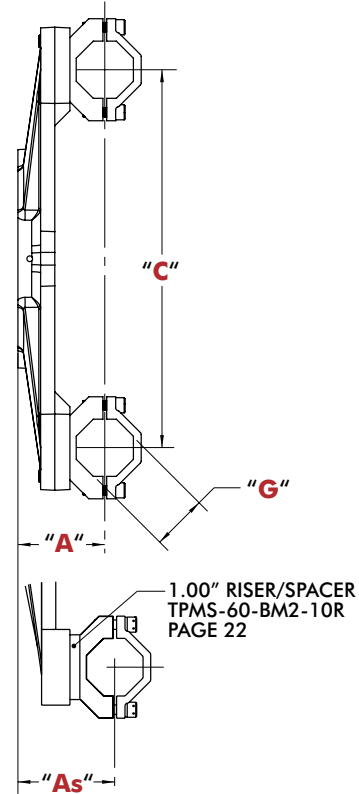
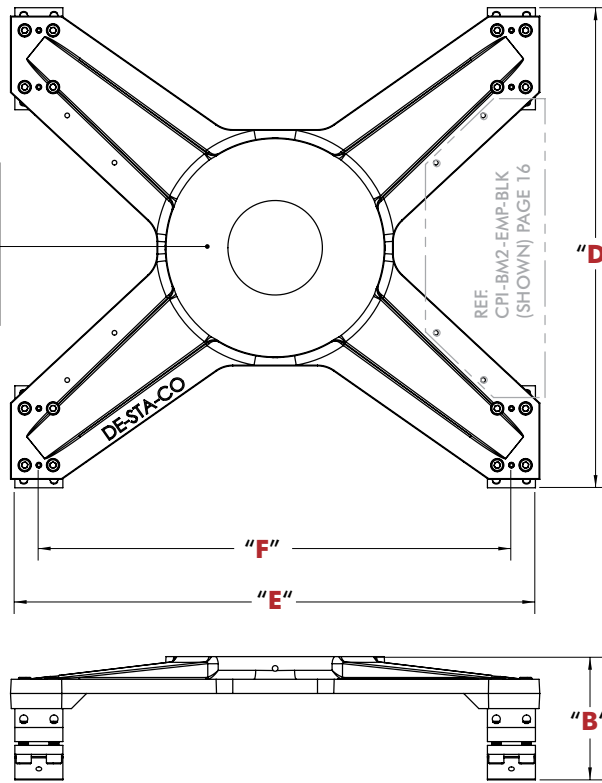
PLEASE REFER TO PAGES 20-22 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

NOTE:

SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

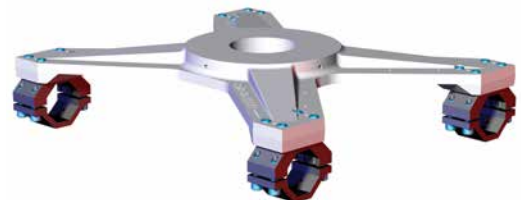
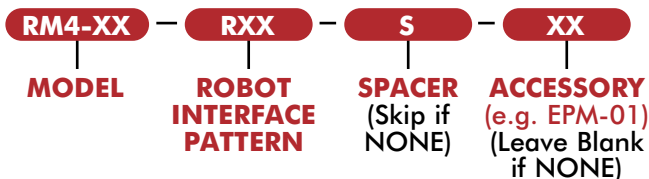
ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

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

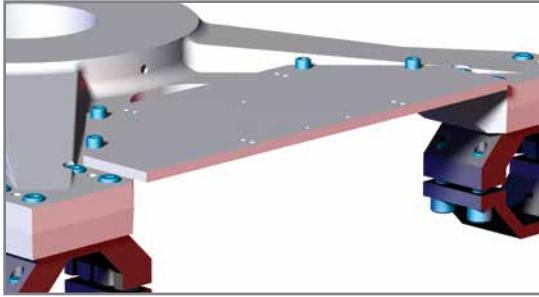


HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

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]



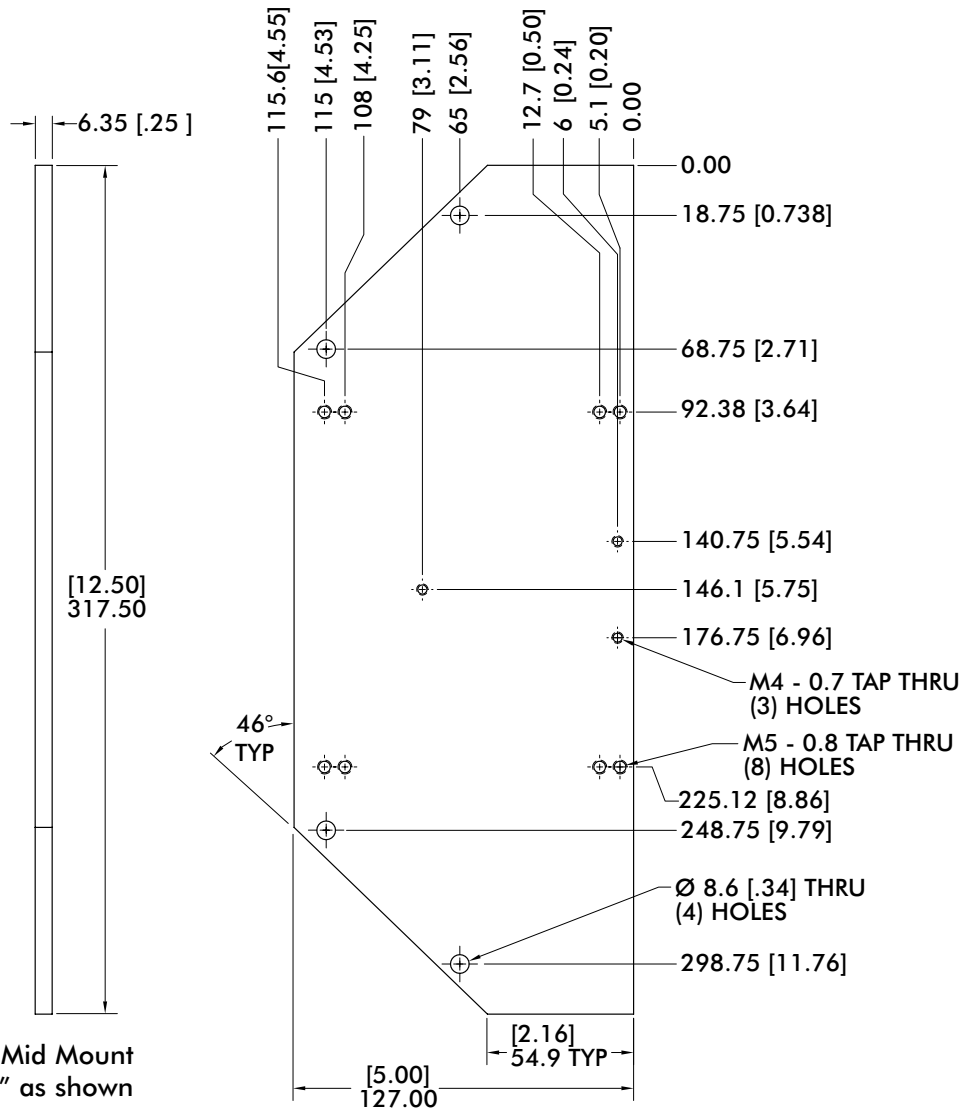
BM2-EPM Accessory Mount Plate



Specifications:
Material: Aluminum

Features:

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



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

To order separately use Model Number

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

BODYBUILDER™ STRUCTURE MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

Features:

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

Specifications:

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

Material:

Mid Mount:
Cast Aluminum
Clamps: Steel



ROBOT INTERFACE PLATE SHOWN BLANK.

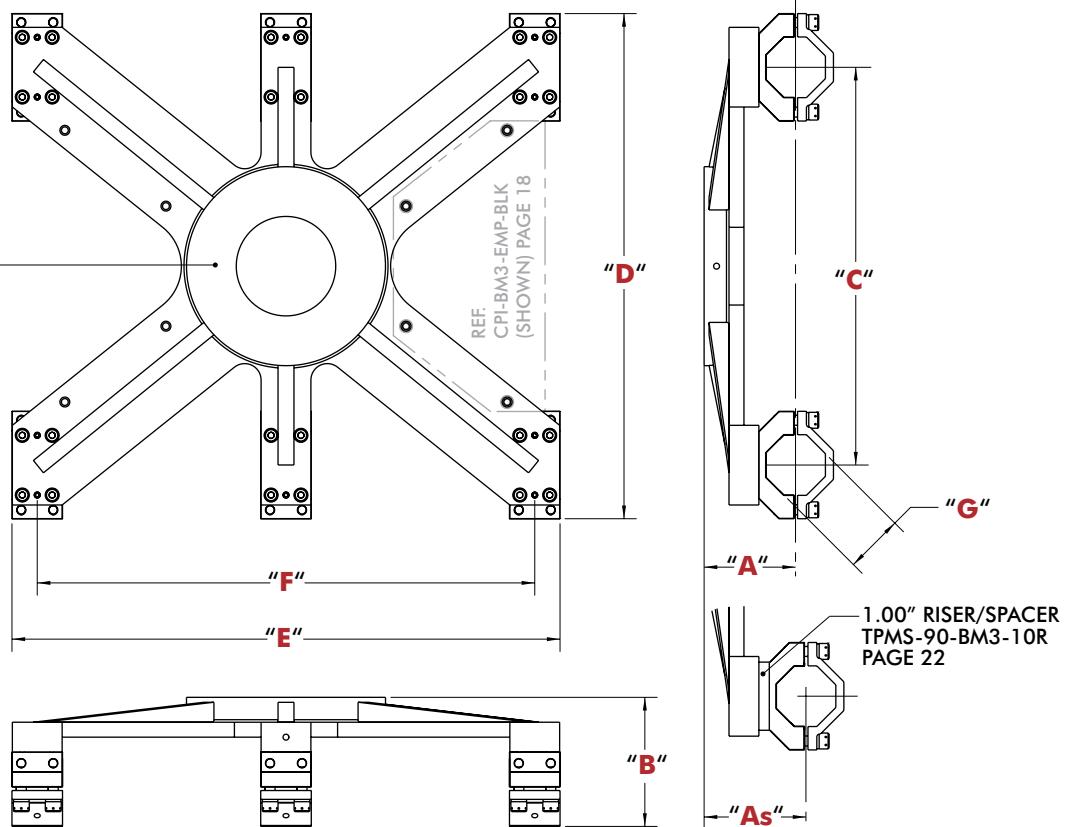
PLEASE REFER TO PAGES 19-21 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

NOTES:

SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

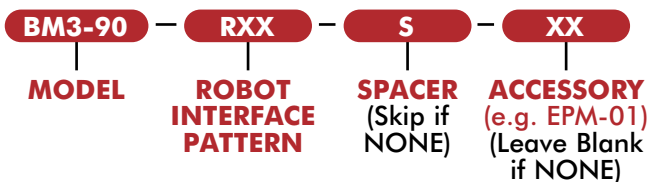
ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

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



HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

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

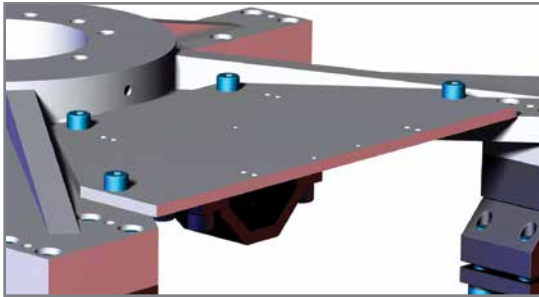




BODYBUILDER™ MID MOUNT ACCESSORY PLATE

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

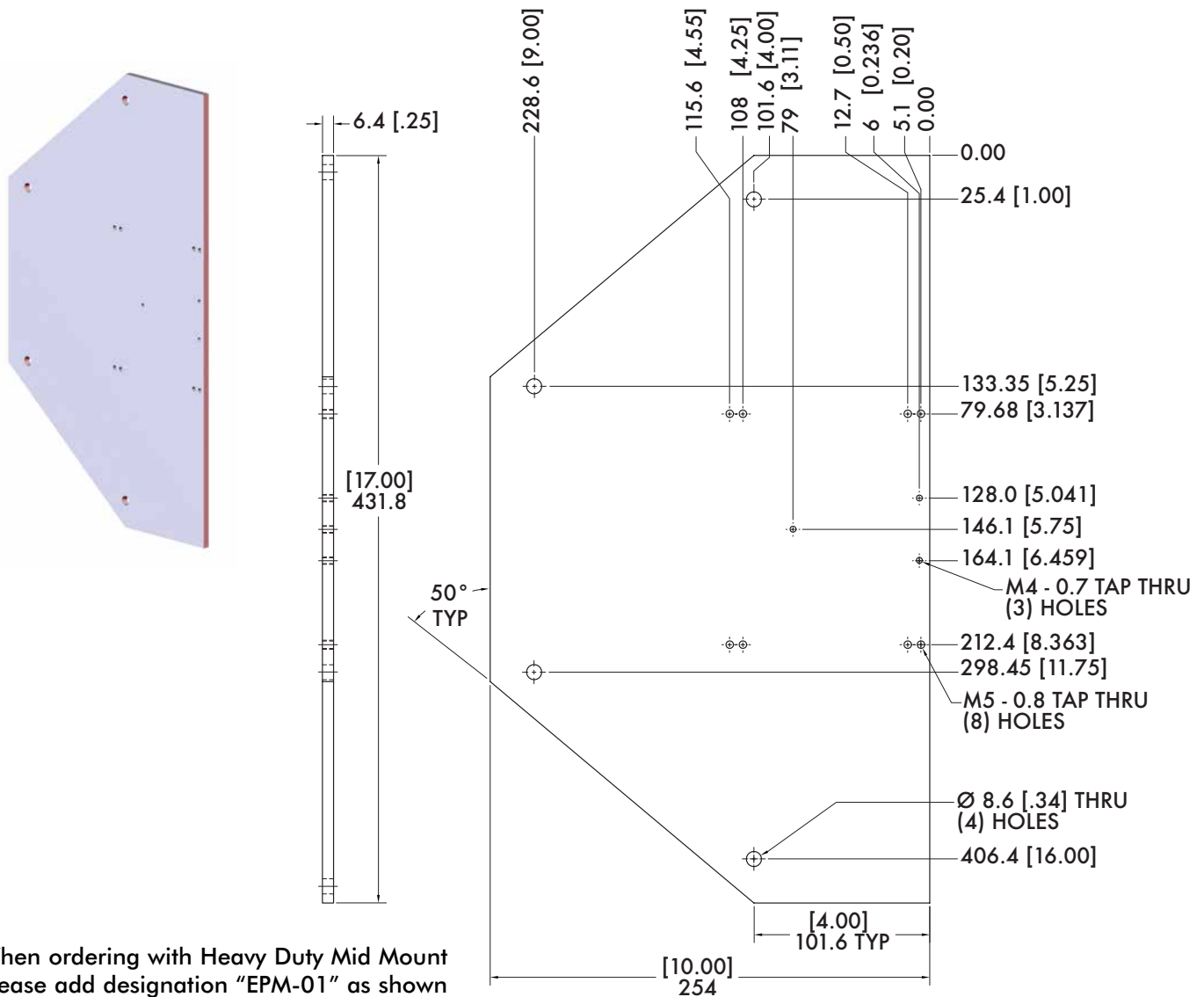
BM3-EPM Accessory Mount Plate



Specifications:
Material: Aluminum

Features:

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



When ordering with Heavy Duty Mid Mount Please add designation "EPM-01" as shown

BM3-90-RXX-EPM-01 or

add designation "EPM-BLK" to order blank

BM3-90-RXX-EPM-BLK

To order separately use Model Number

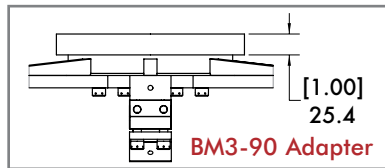
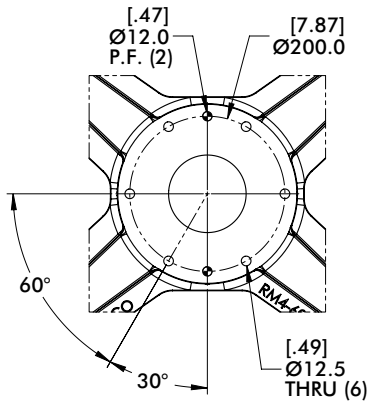
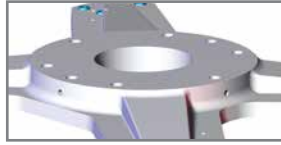
Model Number	Weight
CPI-BM3-EPM-xx	1.54 kg [3.39 lb]

BODYBUILDER™ MID MOUNT BOLT PATTERNS

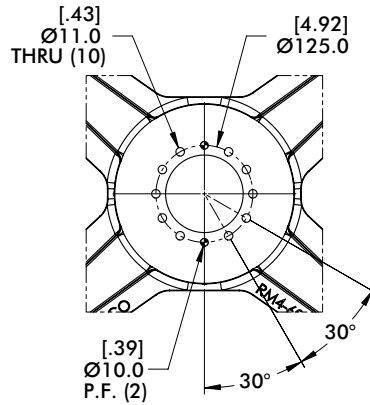
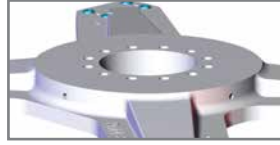
BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns



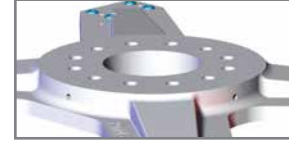
R01 (Ø200mm Bolt Circle)



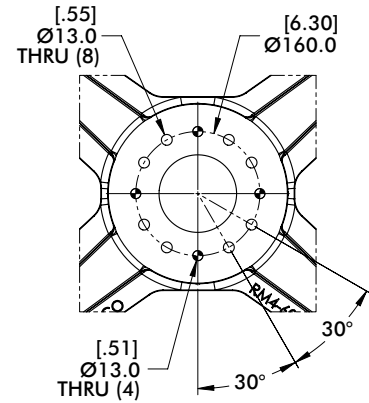
R02 (Ø125mm Bolt Circle)



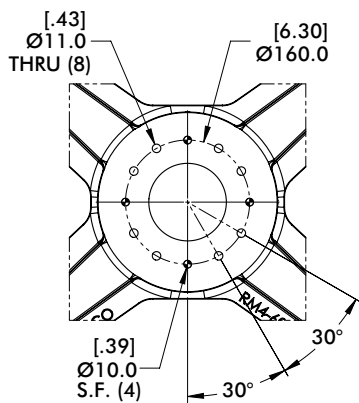
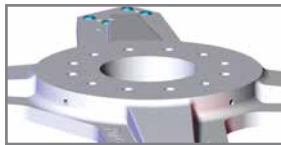
R03 (Ø160mm Bolt Circle)



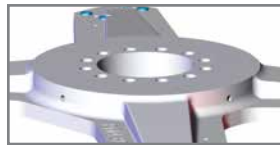
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



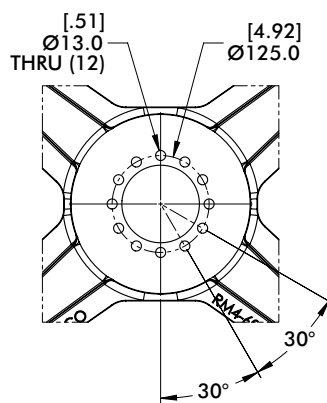
R04 (Ø160mm Bolt Circle)



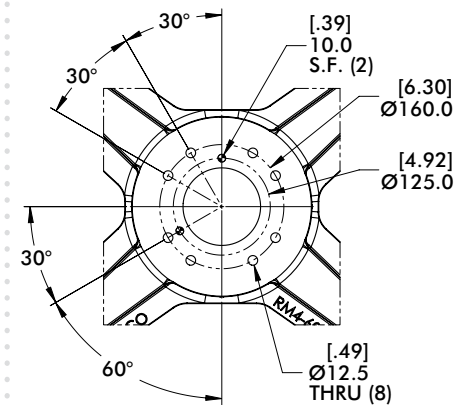
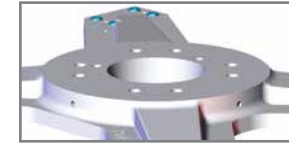
R05 (Ø125mm Bolt Circle)



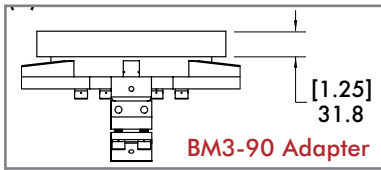
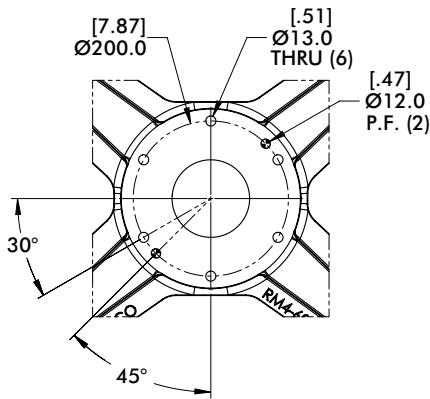
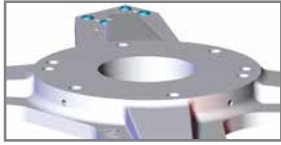
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



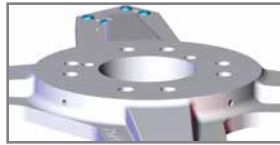
R06 (Ø125/160mm Bolt Circle)



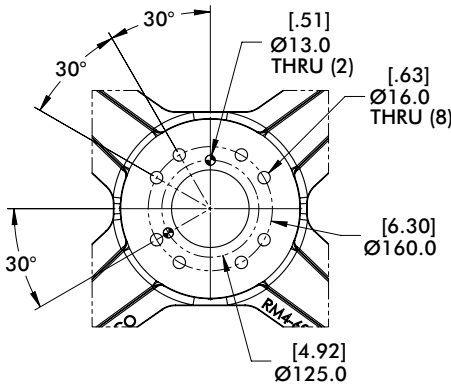
R07 (Ø200mm Bolt Circle)



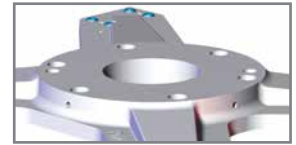
R08 (Ø125/160mm Bolt Circle)



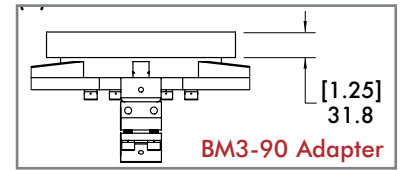
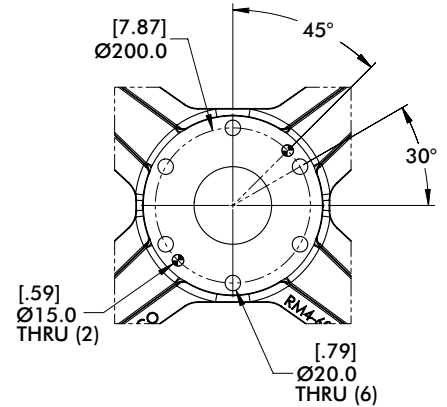
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



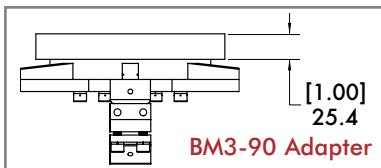
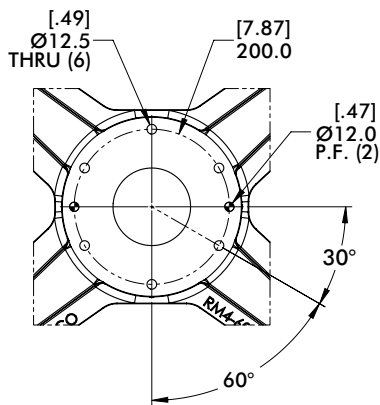
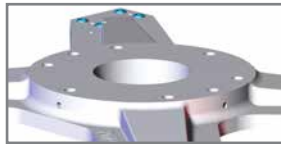
R09 (Ø200mm Bolt Circle)



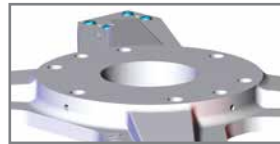
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



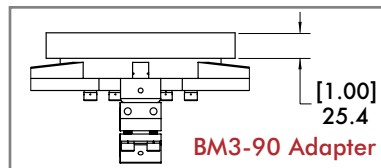
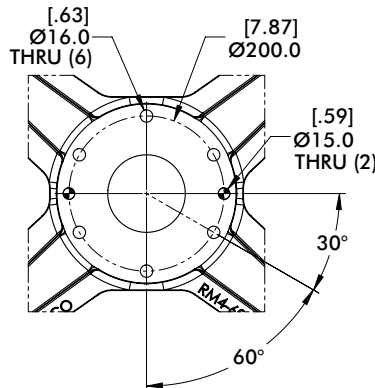
R10 (Ø200mm Bolt Circle)



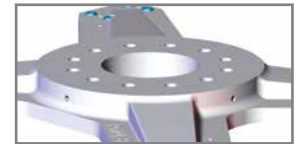
R11 (Ø200mm Bolt Circle)



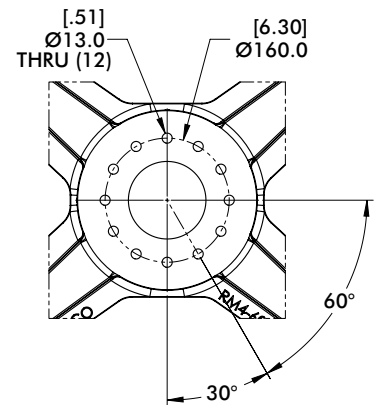
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R12 (Ø160mm Bolt Circle)



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

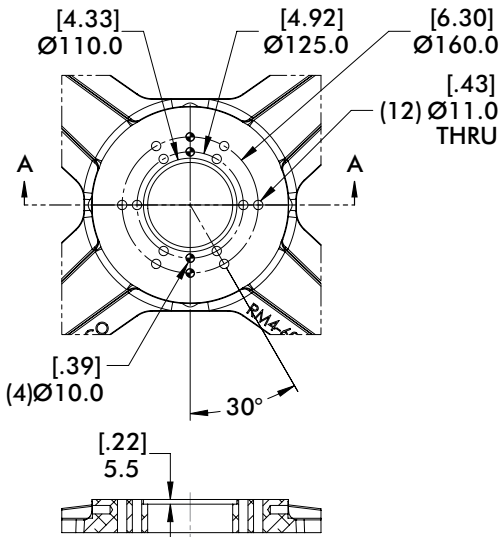
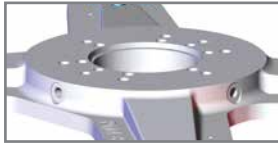


BODYBUILDER™ MID MOUNT BOLT PATTERNS

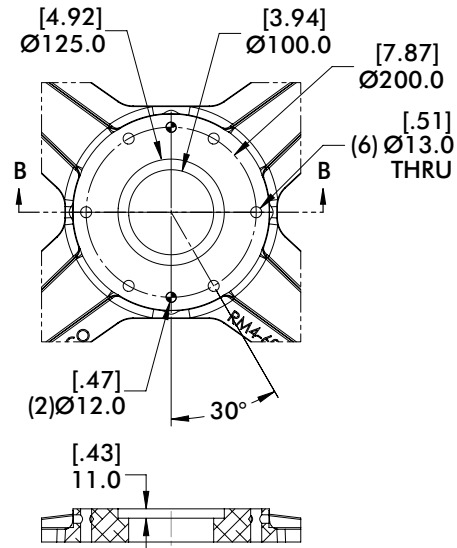
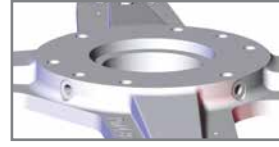


BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns

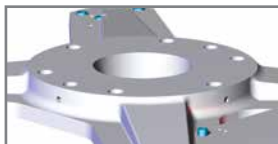
**R13 (Ø125/160mm Bolt Circle)
(Ø110mm Pilot, 5.5mm Deep)**



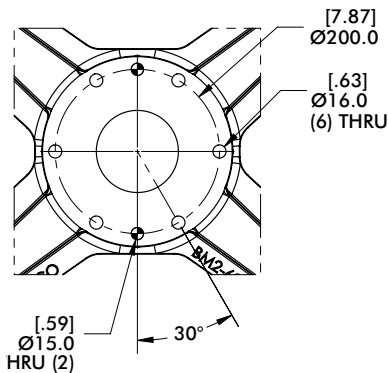
**R14 (Ø200mm Bolt Circle)
(Ø125mm Pilot, 11mm Deep)**



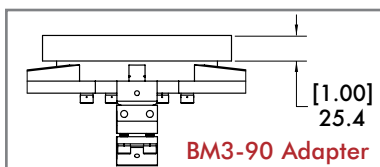
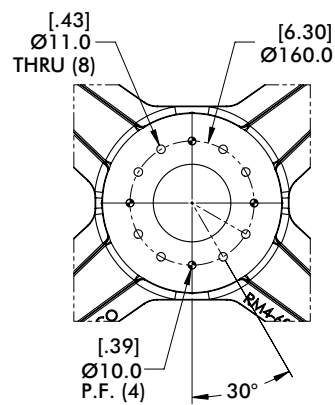
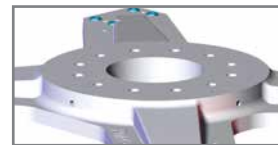
R16 (Ø200mm Bolt Circle)



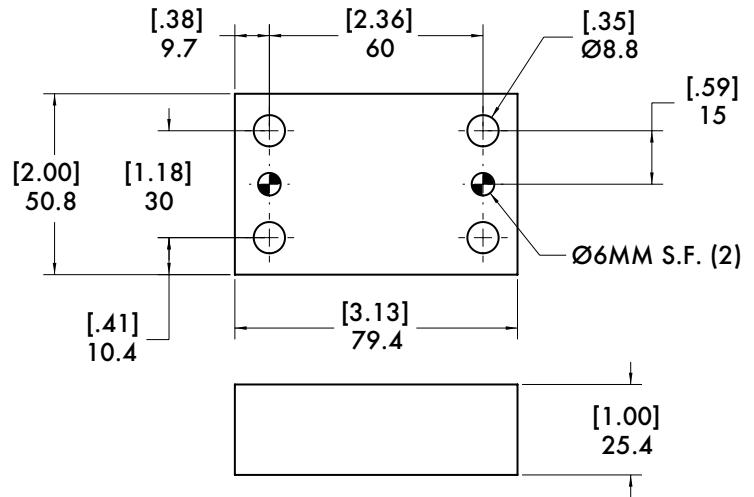
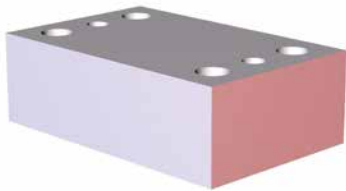
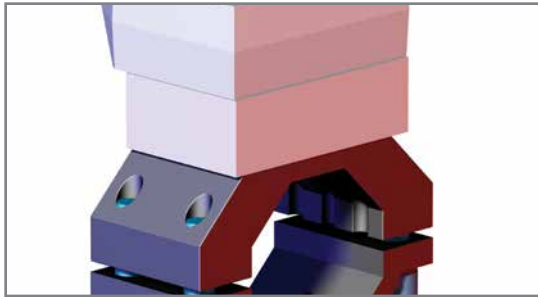
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R17 (Ø160mm Bolt Circle)



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



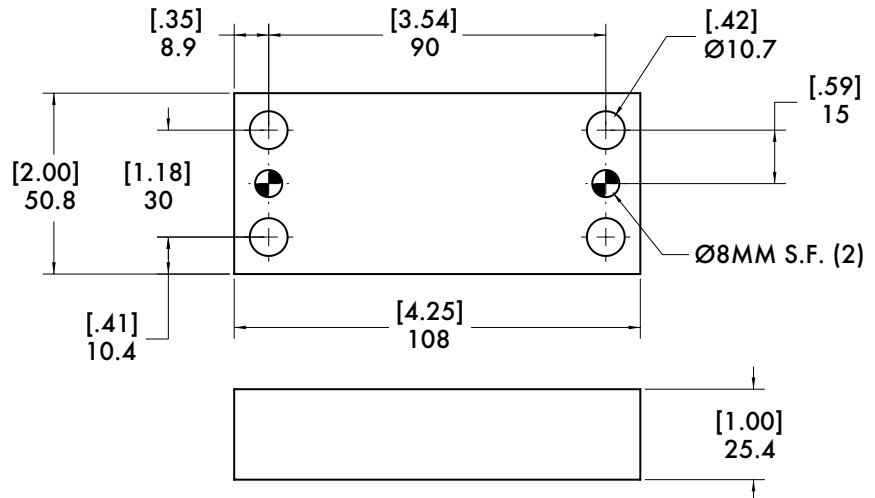
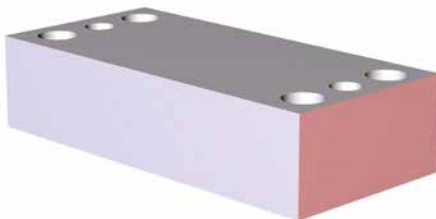
When ordering with Heavy Duty Mid Mount add designation (S) as shown:

RM4-60-RXX-S

To order Riser separately use Model Number.

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

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



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

BM3-90-RXX-S

To order Riser separately use Model Number.

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

BODYBUILDER™ HOLD TABLE



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

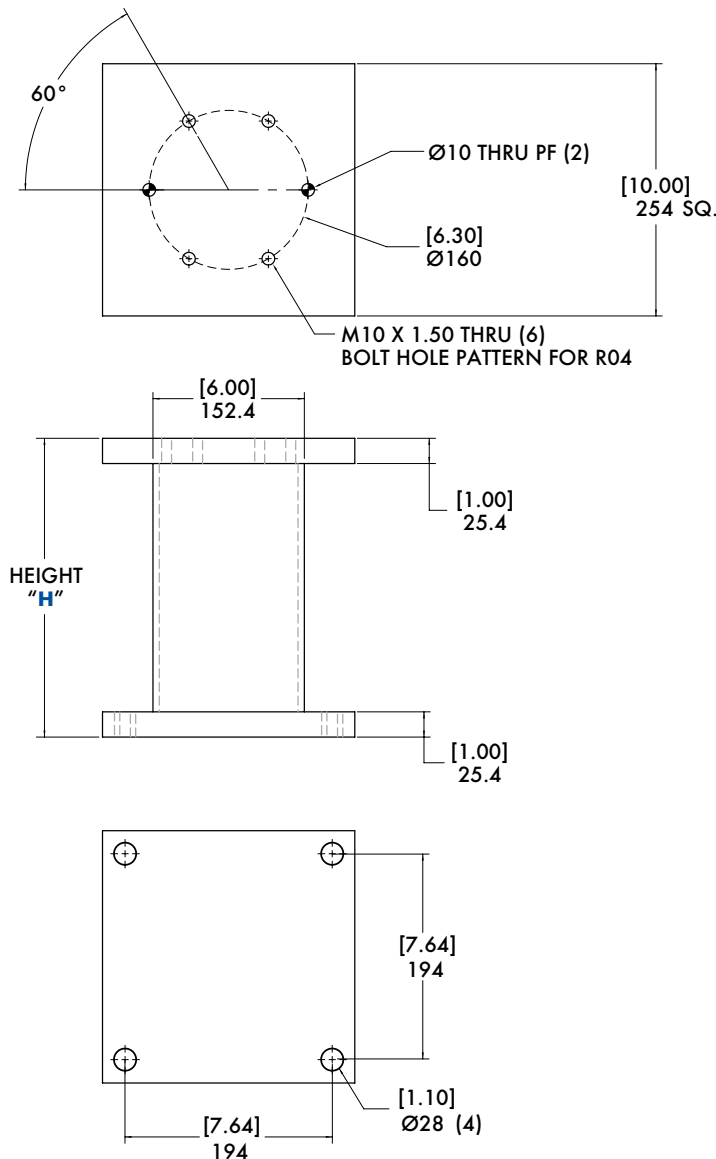
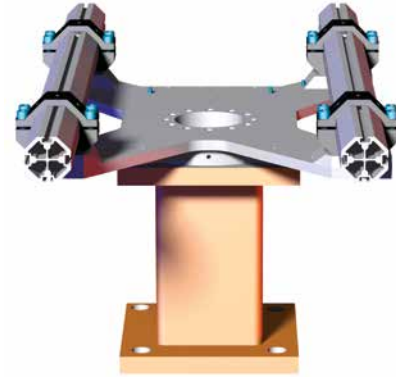
HTW 6" SQ. Pedestal Hold Table Weldment

Features:

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

Specifications:

Material: Steel



CPI-HTW-"H" HOLD TABLE WELDMENT

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

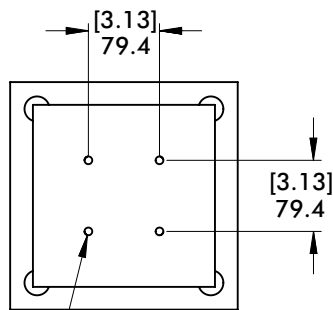


HTW-4 4" SQ. Pedestal Hold Table Weldment

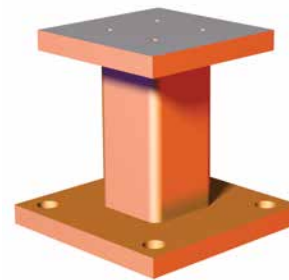
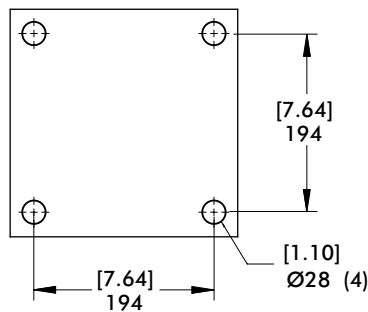
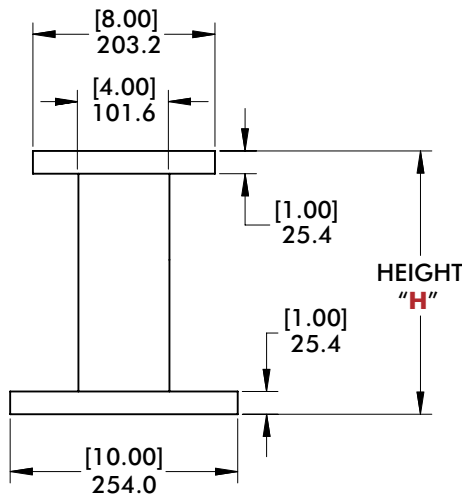
Specifications:
Material: Steel

Features:

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



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



CPI-HTW-“H”-4 HOLD TABLE WELDMENT

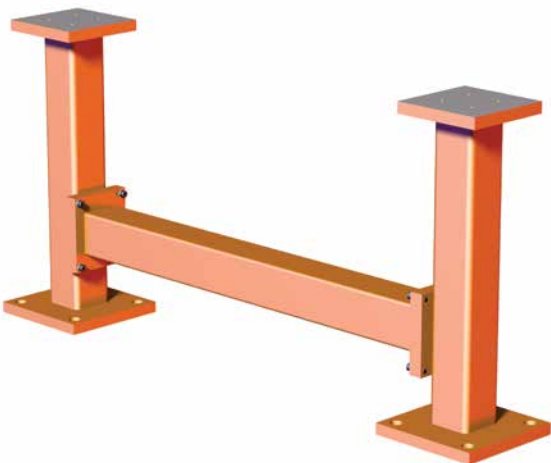
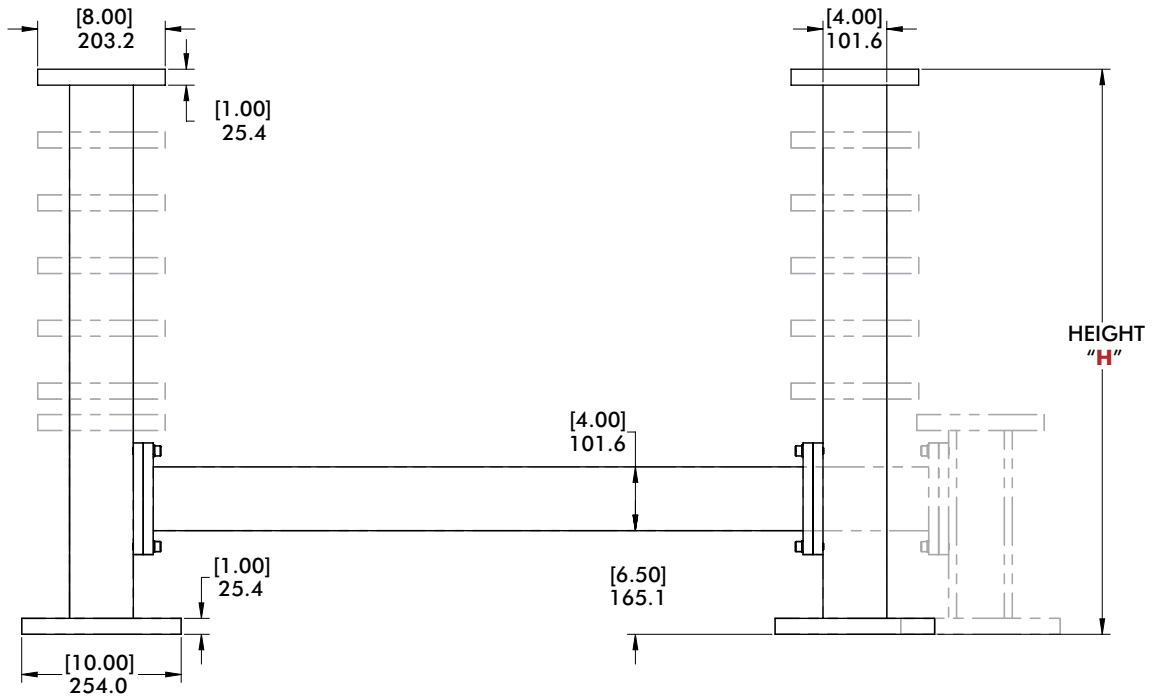
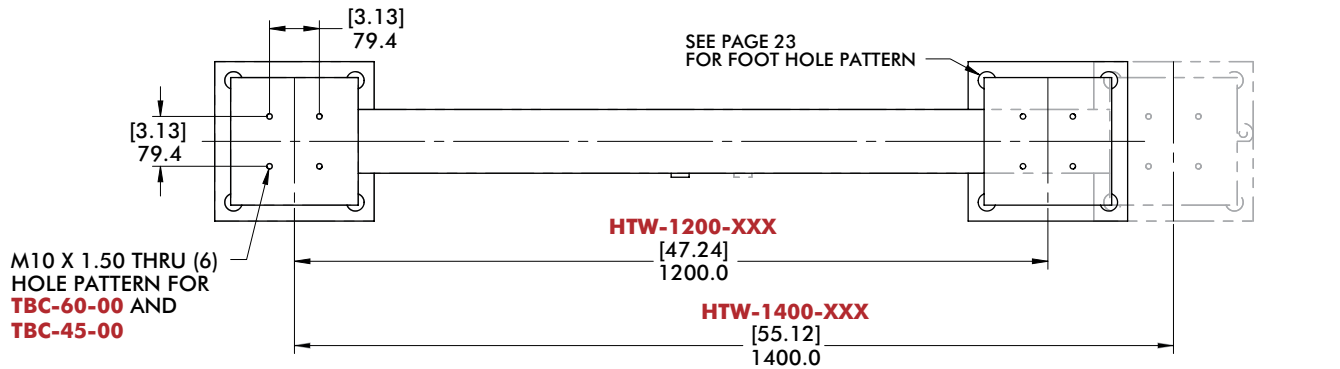
“H”	Model Number	Weight
250	CPI-HTW-250-4	24.02 kg [52.97lb]
300	CPI-HTW-300-4	24.93 kg [54.96lb]
350	CPI-HTW-350-4	25.83 kg [56.95lb]
400	CPI-HTW-400-4	26.73 kg [58.94lb]
450	CPI-HTW-450-4	27.63 kg [60.93lb]
500	CPI-HTW-500-4	28.54 kg [62.92lb]
550	CPI-HTW-550-4	29.44 kg [63.82lb]
600	CPI-HTW-600-4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

BODYBUILDER™ HOLD TABLE

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



HTW-1200/1400 Pass-Thru Hold Table Weldment



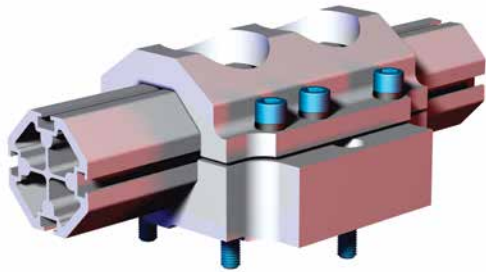
CPI-"MODEL"- "H" PASS THROUGH TABLE WELDMENT				
" H "	"Model"	Weight	"Model"	Weight
350	HTW-1200	84.62 kg [186.55lb]	HTW-1400	88.39 kg [194.87lb]
400	HTW-1200	86.42 kg [190.53lb]	HTW-1400	90.02 kg [198.85lb]
500	HTW-1200	90.04 kg [198.50lb]	HTW-1400	93.81 kg [206.82lb]
600	HTW-1200	93.65 kg [206.46lb]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



BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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



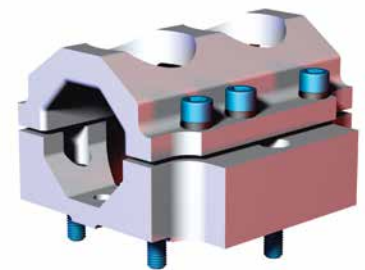
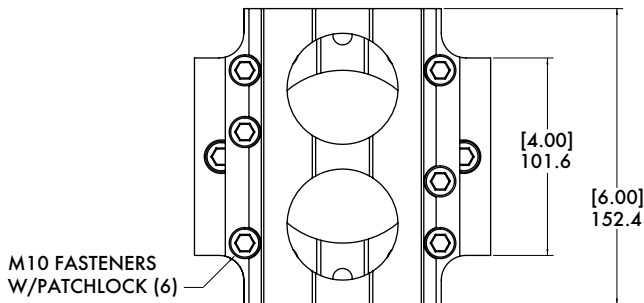
Specifications:

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

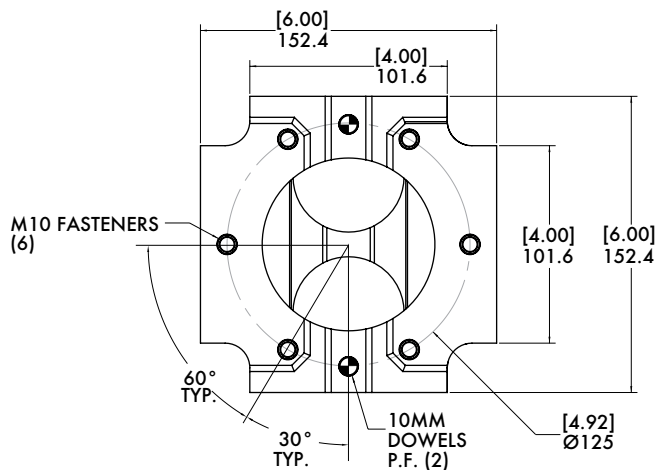
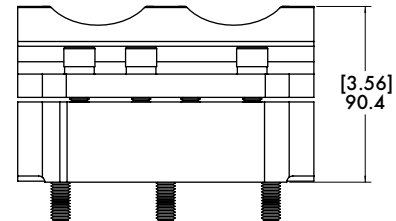
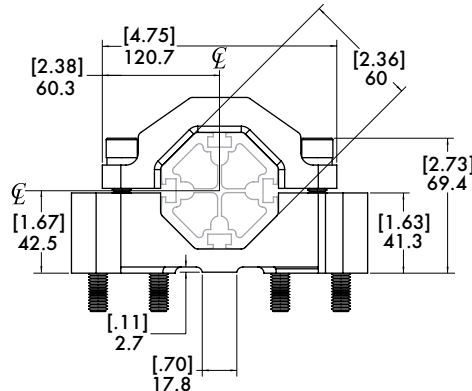
Material: Aluminum

Features:

- Can be used as direct robot interface.



Fasteners included, Dowels not included



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

BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



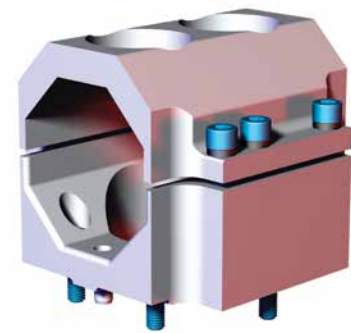
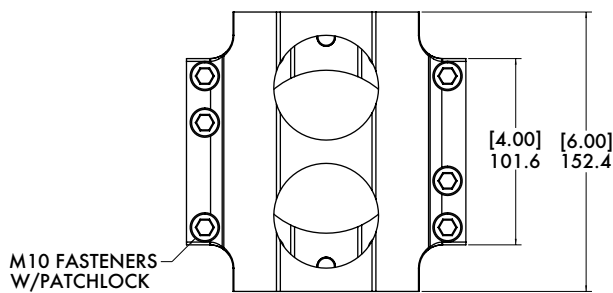
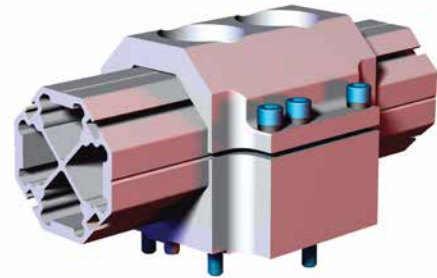
ATI-151-90HD-90BB 90mm Mid Mount

Features:

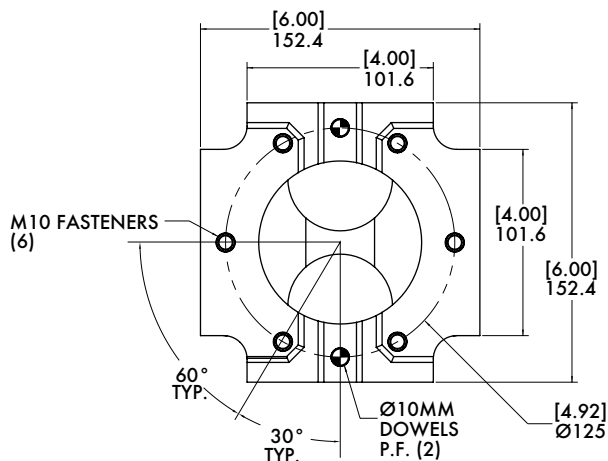
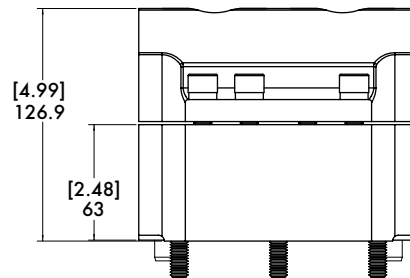
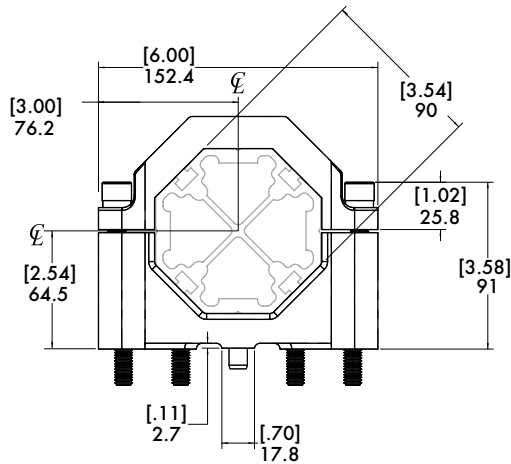
- Can be used as direct robot interface.

Specifications:

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



Fasteners and Dowels Included



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