BODYBUILDERTM END-EFFECTOR SYSTEM MARCH 2009





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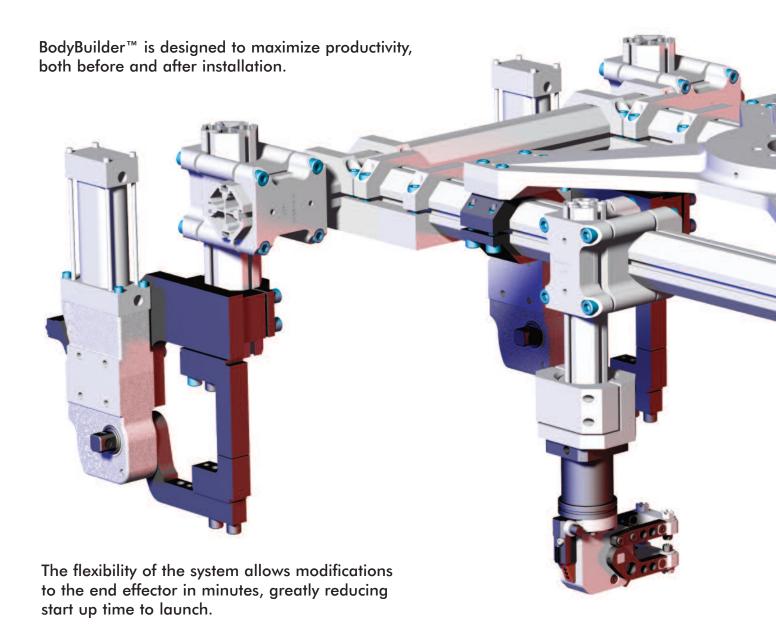






BodyBuilder™ Robotic End Effector System

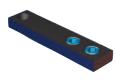
Features and Benefits



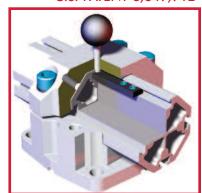
The patented BodyBuilder™ Alignment System allows the modular components to be replaced individually and easily returned to their original positions. (Please see page 56 for more information)

Body (1) Builder

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



U.S. PATENT 6,349,912

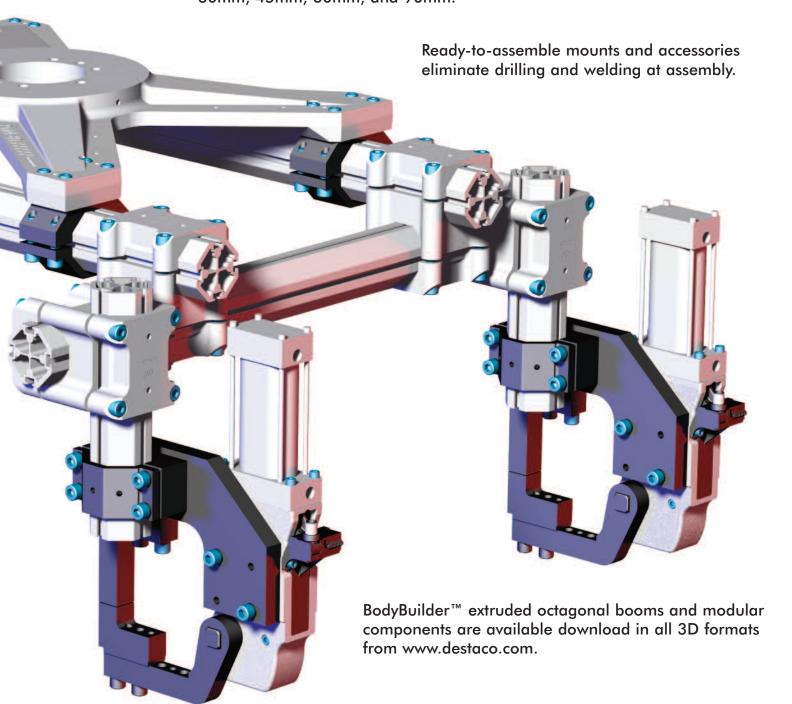




BodyBuilder™ Robotic End Effector System

Features and Benefits

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







BodyBuilder™ Robotic End Effector System

Table of Contents



BodyBuilder™ Extruded Aluminum Octagonal Booms	Page 6-10
Boom Lengths and Ordering Information	Page 6
30mm Boom Profile Dimensions and Specifications	Page 6
45, 60, and 90mm Boom Profile Dimensions and Specifications	Page 7
30, 45, 60, and 90mm Boom Deflection Charts	Page 8-9
Extrusion Accessory Mount	Page 10
60mm Octagonal Boom End Cap	Page 10



.Page 11-28
Page 11-12
Page 13-15
Page 16-19
Page 18-19
Page 20-22
Page 23
Page 24-26
Page 27
Page 28

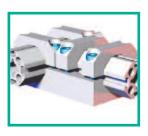


BodyBuilder™ Structure End Mount Assemblies	Page	29-32
90mm End Mount Assembly	!	Page 29
60mm BodyBuilder™ Bayonet		Page 30
Manual Quick Disconnect Housing		Page 31

Explaining the Patented Alignment System..... Page 32



BodyBuilder™ Transition Brackets and Blocks	.Page 33-41
30mm to 30mm Transition Bracket Assemblies	Page 33-34
45mm to 30/45mm Transition Bracket Assemblies	Page 35-36
60mm to 30/45/60mm Transition Bracket Assemblies	Page 37-39
90mm to 30/45/60/90mm Transition Bracket Assemblies	Page 40-43
30/45 mm Octagon to $25 mm$ Round Transition Block Assemblies .	Page 44
60mm Octagon to 25/40mm Round Transition Block Assemblies.	Page 45
30mm Octagon to .50"(in) Round Transition Bracket Assemblies .	Page 46



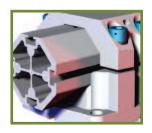
BodyBuilder™ Low-Profile Transition Brackets	Page 47-61
30mm to 30/45/60mm Octagon T-Clamp Bracket Assemblies	Page 47-49
45mm to 30/45/60mm Octagon T-Clamp Bracket Assemblies	Page 50-52
45mm Octagon to 25mm Round T-Clamp Bracket Assemblies	Page 53
60mm to 30/45/60mm Octagon T-Clamp Bracket Assemblies	Page 54-56
60mm Octagon to 25mm Round T-Clamp Bracket Assemblies	Page 57
25mm Round to 45/60mm Octagon T-Clamp Bracket Assemblies	Page 58-59
45° Angular Boom Clamp Brackets	Page 60-61





BodyBuilder™ Robotic End Effector System Table of Contents

BodyBuilder™ Accessory Brackets and MountsPage	e 62-70
30mm Mid Flange Mount	. Page 62
45mm Mid Flange Mount	. Page 63
60mm Mid Flange Mount	. Page 64
30mm End Flange Mount	. Page 65
60mm End Flange Mount	. Page 66
30mm Accessory Mounting Bracket	. Page 67
45mm Accessory Mounting Bracket	. Page 68
60mm Accessory Mounting Bracket	. Page 69
90mm Accessory Mounting Bracket	. Page 70



BodyBuilder™ Gripper Mounts	.Page 71-73
30mm 150 Series Parallel Gripper Mounts	
30mm 150 Series Rear Gripper Mounts	Page 72
45mm 150 Series Rear Gripper Mounts	Page 73



BodyBuilder™ Swivel Arm Mounts	Page 74-77
30mm Swivel Arm Mounts for Ø.50"(in) Apple Core Accessories .	Page 74
45mm Swivel Arm Mounts for Ø19mm [.75in] Apple Core Access	ories . Page 75
30mm Swivel Arm Mounts for Ø19mm [.75in] Apple Core Access	ories . Page 76
30mm Swivel Arm Mounts for Swivel Ball Mount Accessories	Page 77



BodyBuilder™ Swivel Arm Accessories	Page 78-81
30mm Bodybuilder to Ø19mm [.75in] Apple Core Swivel End Mo	ountPage 78
Part Present Proximity Switch Mount	Page 79
Rough Locator	Page 80
Ø19mm [.75in] Apple Core Bumper Mount	Page 81
Ø19mm [.75in] Apple Core Mini-Clamp Mount	Page 81



BodyBuilder™ Tooling Application Examples	
BodyBuilder™ Example Tooling Assemblies	. Page 82-83
BodyBuilder™ Customer Application Pictures	. Page 84-85



DE-STA-CO offers a complete system solution	
DE-STA-CO products commonly used with BodyBuilder™	Page 86-87





BodyBuilder™ Octagonal Aluminum Boom Structure 30, 45, 60, and 90mm Boom Lengths and Ordering Numbers

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

30mm Boom Profile Dimensions and Specifications

1.4 kg/m [0.9 lb/ft]

BodyBuilder



r™ 30mm Boom	[1.18] Ø8.4 30
	[.26] 6.5 [.48] 12.2 [1.18]



		12.2 [1.18] -	CAL
Model Number	Woight		



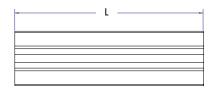


BodyBuilder™ Octagonal Aluminum Boom Structures 45, 60, and 90mm Boom Profile Dimensions and Specifications

BodyBuilder™ 45mm Boom



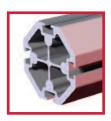
[.41] Ø10.4	[1.77] 45.0 [.22] 5.5
[.26] 6.5 [.47] 12.0	[.29] 7.5



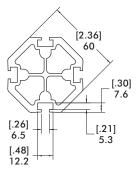
CAD

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

BodyBuilder™ 60mm Boom



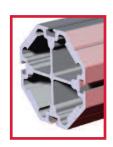




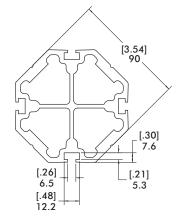


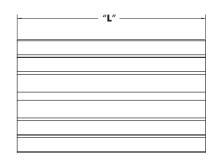


BodyBuilder™ 90mm Boom



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



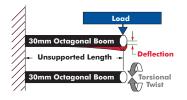




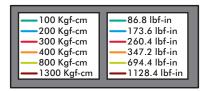




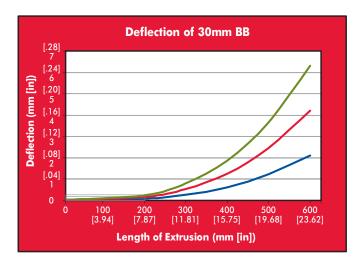
BodyBuilder™ Octagonal Aluminum Boom Structure 30mm Boom Deflection and Torsion Charts

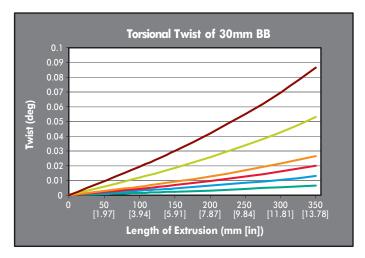




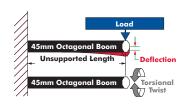


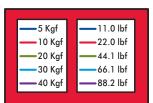


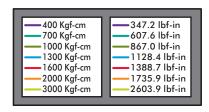




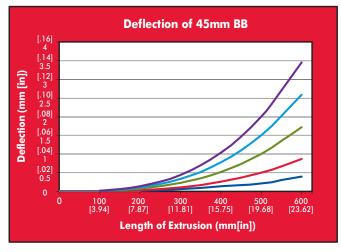
45mm Boom Deflection and Torsion Charts

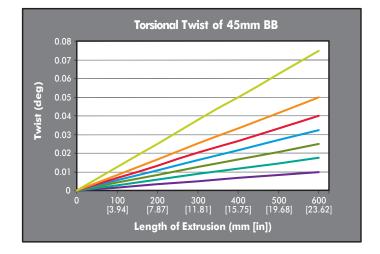








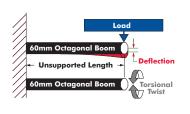


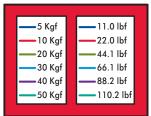


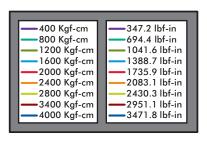


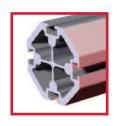


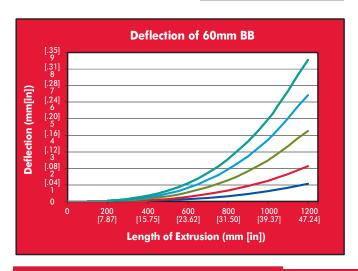
BodyBuilder™ Octagonal Aluminum Boom Structures 60mm Boom Deflection and Torsion Charts

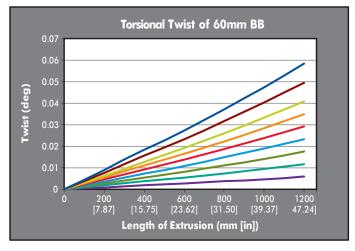




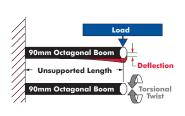




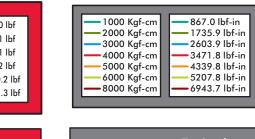


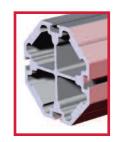


90mm Boom Deflection and Torsion Charts















BodyBuilder™ Octagonal Aluminum Boom Structure **ETP-35** Extrusion Accessory Mount

Features:

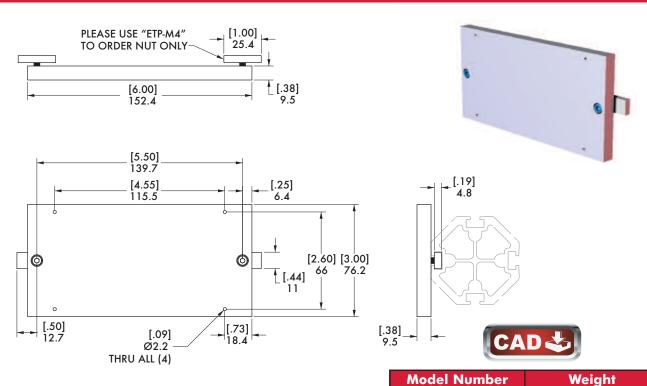
• Mount to 30, 45, 60, and 90 mm extrusion booms.

Used to mount identification tag.

Specifications:

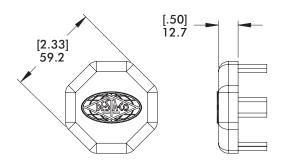
Material: Aluminum





EC-60 60mm Bodybuilder Octagonal Boom End Cap







.31 kg [.68 lb]

CPI-ETP-35

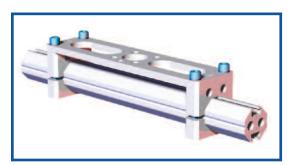


Model Number	Weight
CPI-EC-60B	.04 kg [.09 lb]





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



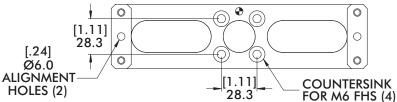
Specifications:

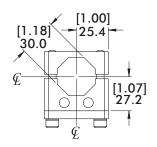
Max. Static Product Load: 102 N*m [75 ft-lb] Material: Aluminum

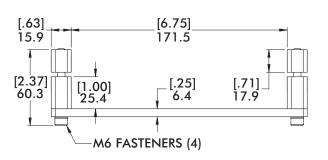
Features:

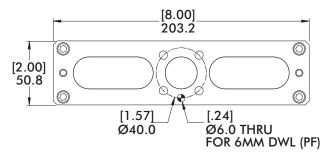
- Mounts a single 30mm extrusion boom inline with the two mounts.
- Can be mounted to robot interface with a 40mm bolt circle.











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





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

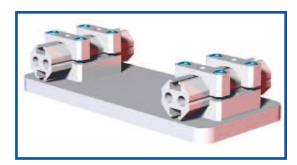
Features:

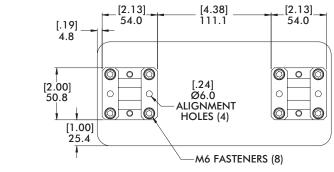
Mounts a single 60mm extrusion boom inline with the two mounts.

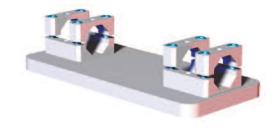
Plate can be machined or left blank. Material: Aluminum

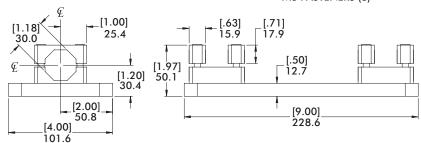
Specifications:

Max. Static Product Load: 102 N*m [75 ft-lb]



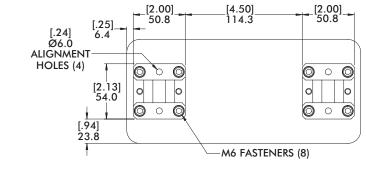


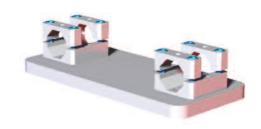


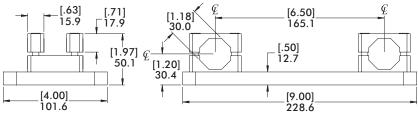


Model Number	Weight
CPI-RMM-30B-SE	1.05 kg [2.31 lb]

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









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



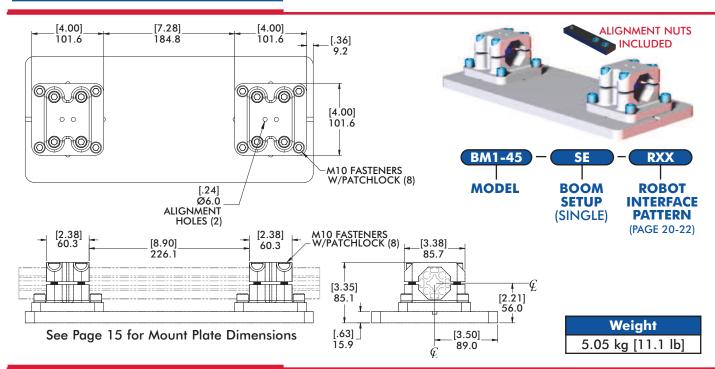
BM1-45-SE Single Extrusion 45mm Mid Mount

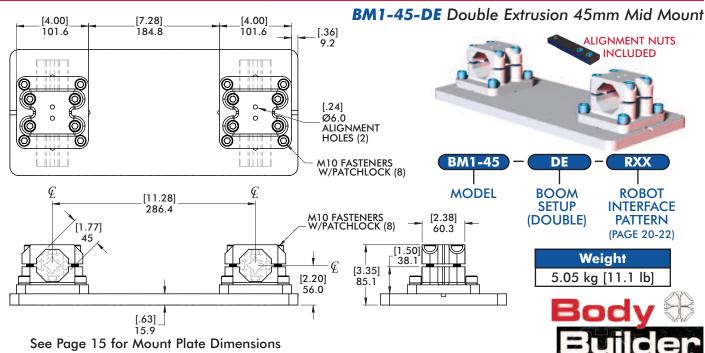
Specifications:

Max. Static Product Load: 350 N*m [475 ft-lb] Material: Aluminum

Features:

- Mounts a single 45mm extrusion boom inline with the two mounts.
- Plate can be machined or left blank.
- Can be supplied with robot interface hole patterns. (See pages 20-22).







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

Features:

• Mounts a single 60mm extrusion boom inline with the two mounts.

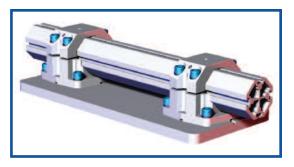
- Plate can be machined or left blank.
- Can be supplied with robot interface hole patterns. (See pages 20-22).

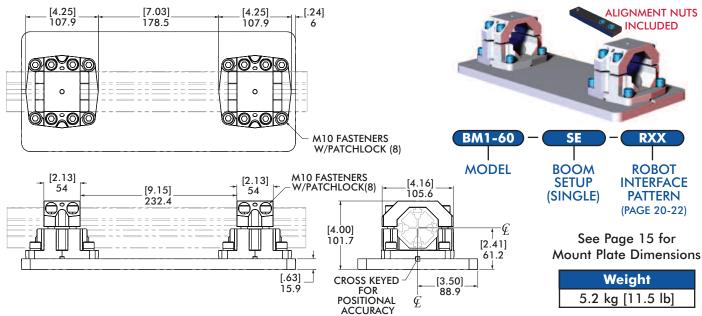
Specifications:

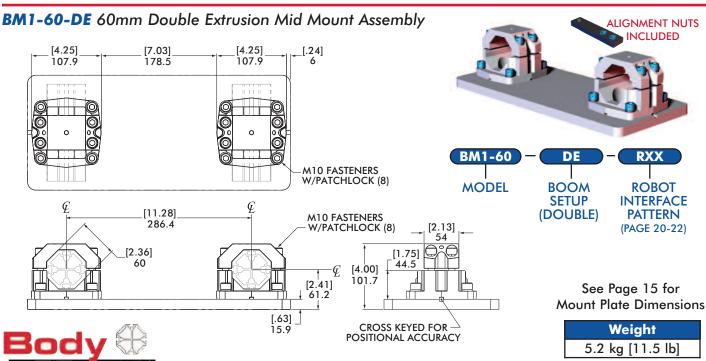
Max. Static Product Load: 675 N*m [500 ft-lb]

Material: Aluminum











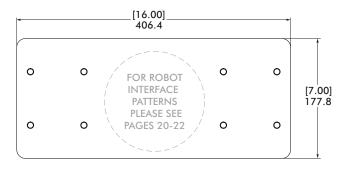
BM1-45/BM1-60 Mid Mount Assembly - Mount Plate



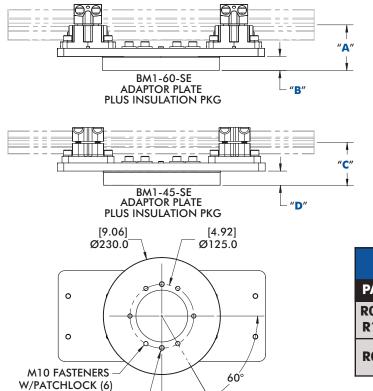
Specifications:Material: Aluminum

Features:

- · Can be machined or left blank.
- Can be supplied with robot interface hole patterns. (See pages 20-22).



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



30°



All mounting patterns on pages 20-22 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,	89.6	27.8	83.8	27.8
R11, R16	[3.53]	[1.09]	[3.30]	[1.09]
R07, R09	96.0	34.1	99.6	34.1
	[3.78]	[1.34]	[3.92]	[1.34]



[.39] Ø10 DOWELS (2)



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.

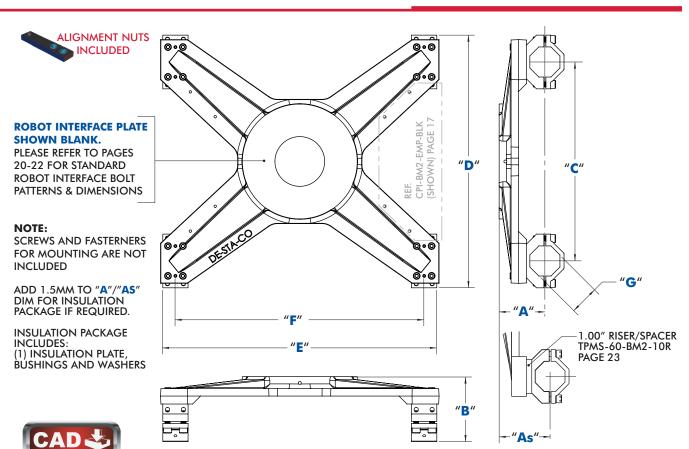
Specifications:

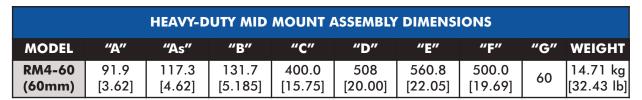
Max. Static Product Load: 453.6 kg [1000 lb]

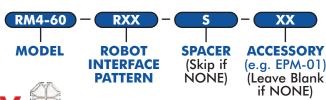
Material:

Mid Mount: Cast Aluminum Clamps: Steel













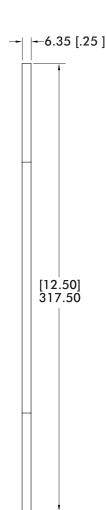
BM2-EPM Accessory Mount Plate

Specifications:Material: Aluminum

Features:

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





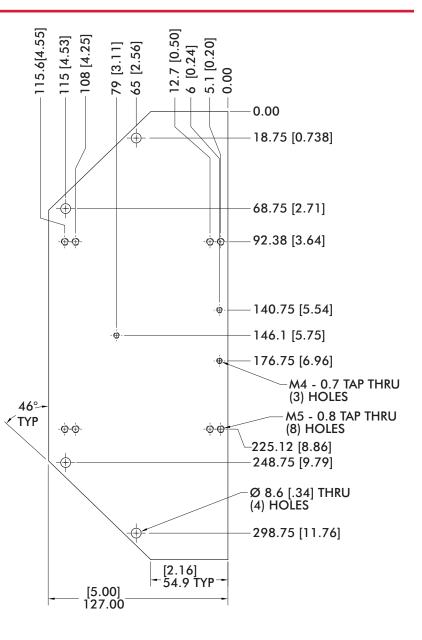


CAD

add designation "EPM-BLK" to order blank RM4-60-RXX-EPM-BLK

To order separately use Model Number

Model Number	Weight
CPI-BM2-EPM-xx	.63 kg [1.39 lb]







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.

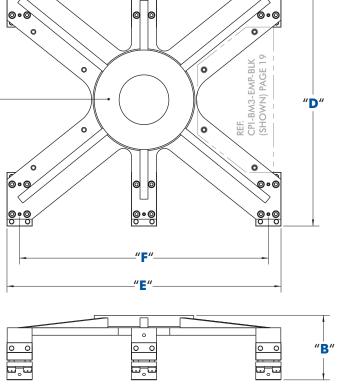
PLEASE REFER TO PAGES 20-22 FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS

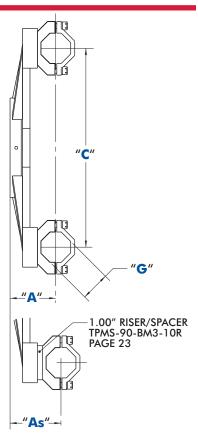
NOTES:

SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

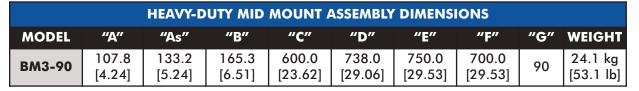
ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

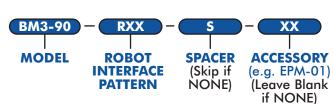
INSULATION PACKAGE INCLUDES: (1) INSULATION PLATE, BUSHINGS AND WASHERS









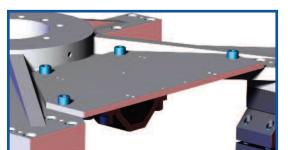








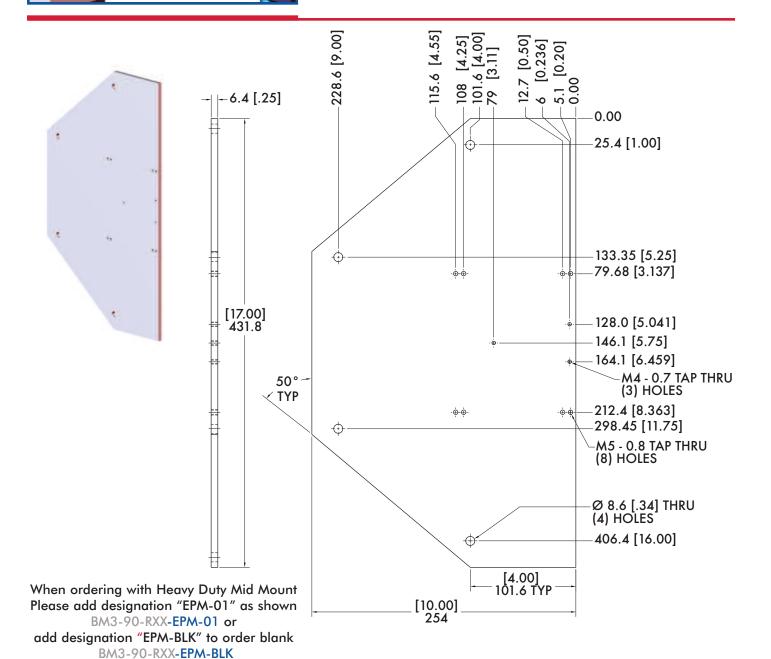
BM3-EPM Accessory Mount Plate



Specifications:Material: Aluminum

Features:

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



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

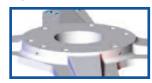
To order separately use Model Number

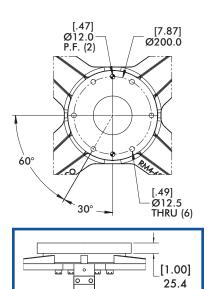




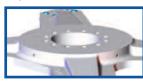
Robot Interface Bolt Patterns

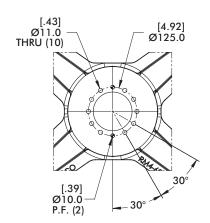
R01 (Ø200mm Bolt Circle)





R02 (Ø125mm Bolt Circle)

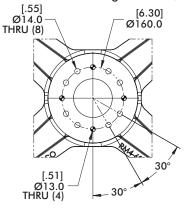




R03 (Ø160mm Bolt Circle)

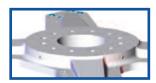


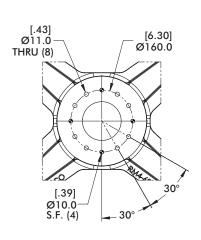
Add 1.5mm to Height Dim "A"/"AS"



R04 (Ø160mm Bolt Circle)

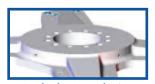
BM3-90 Adapter



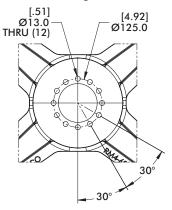




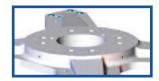
R05 (Ø125mm Bolt Circle)

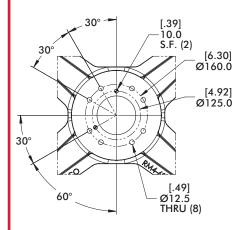


Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R06 (Ø125/160mm Bolt Circle)

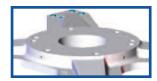


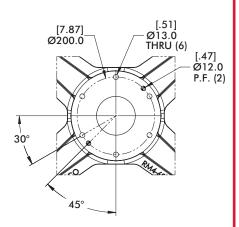


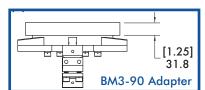


Robot Interface Bolt Patterns

R07 (Ø200mm Bolt Circle)



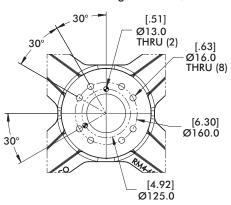




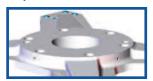
R08 (Ø125/160mm Bolt Circle)



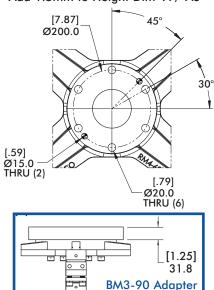
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



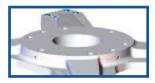
R09 (Ø200mm Bolt Circle)

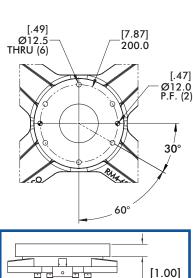


Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R10 (Ø200mm Bolt Circle)





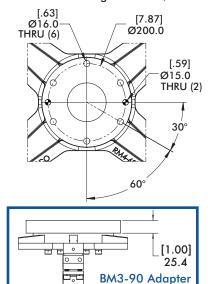
25.4

BM3-90 Adapter

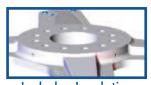
R11 (Ø200mm Bolt Circle)



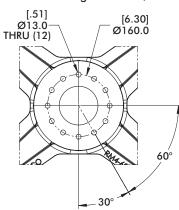
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



R12 (Ø160mm Bolt Circle)



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





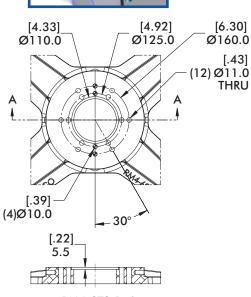
Subject to Technical Modifications Without Notice



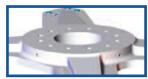
Robot Interface Bolt Patterns

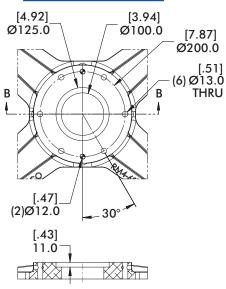
R13 (Ø125/160mm Bolt Circle) (Ø110mm Pilot, 5.5mm Deep)



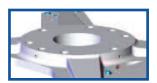


R14 (Ø200mm Bolt Circle) (Ø125mm Pilot, 11mm Deep)

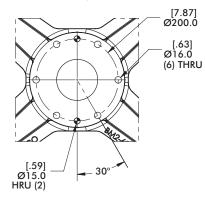


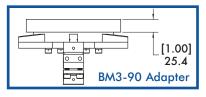


R16 (Ø200mm Bolt Circle)

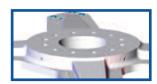


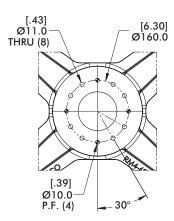
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"





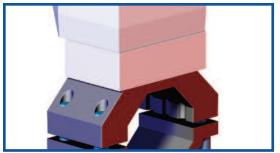
R17 (Ø160mm Bolt Circle)







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

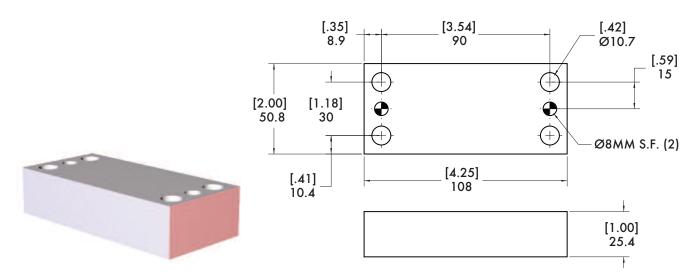
To order Riser separately use Model Number.

<u>-</u>	
Model Number	Weight
TPMS-60-BM2-10R	.26 kg [.56 lb]

[.38] [2.36] [.35]9.7 Ø8.8 60 [.59] 15 [2.00] [1.18]50.8 30 Ø6MM S.F. (2) [3.13] [.41] 79.4 10.4 [1.00]25.4

Specifications: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
TPMS-90-BM3-10R	.34 kg [.76 lb]

Specifications:Material: Aluminum





HTW 6" SQ. Pedestal Hold Table Weldment

Features:

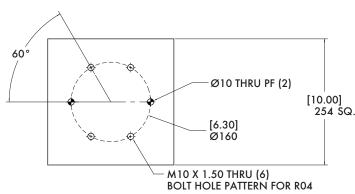
 Pedestal Hold Table Weldment when used in conjunction with Mid Mount assemblies serves as a pedestal base for a robust parts nest.

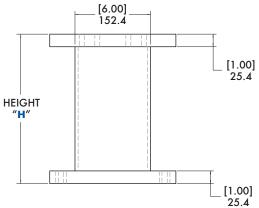
Specifications:

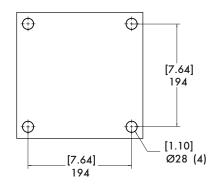
Material: Steel













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] 35.16 kg
350	CPI-HTW-350	[77.50lb]
		36.56 kg
400	CPI-HTW-400	[80.60lb]
	451 1151/ 454	37.97 kg
450	CPI-HTW-450	[83.70lb]
500	CDL LITW 500	39.37 kg
500	CPI-HTW-500	[86.81lb]
550	CPI-HTW-550	40.78 kg
330	C11-111W-550	[89.91lb]
600	CPI-HTW-600	42.19 kg
		[93.01lb]
650	CPI-HTW-650	43.59 kg
		[96.11lb] 45.00 kg
700	CPI-HTW-700	[99.21lb]
		46.41 kg
750	CPI-HTW-750	[102.31lb]
200	CDI LITIM COO	47.81 kg
800	CPI-HTW-800	[105.41lb]
850	CPI-HTW-850	49.22 kg
850	CF1-H1W-030	[108.51lb]
900	CPI-HTW-900	50.62 kg
700	700 CFI-FITW-900	[111.61lb]





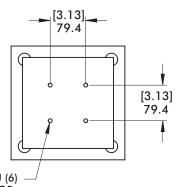
HTW-4 4" SQ. Pedestal Hold Table Weldment



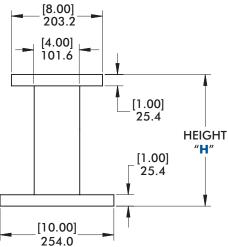
Specifications: Material: Steel

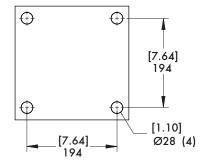
Features:

• 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



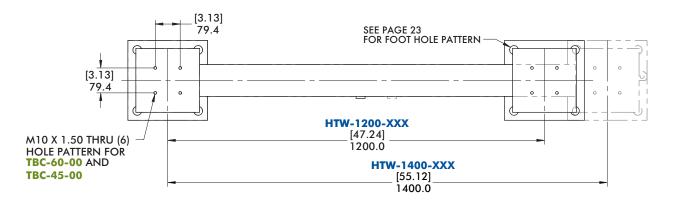


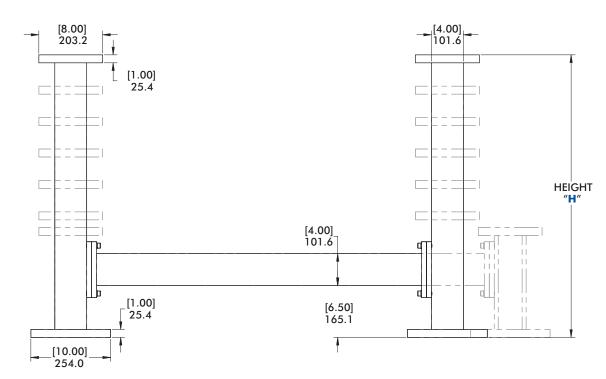


CPI-HTW-"H"-4 HOLD TABLE WELDMENT		
"H"	Model Number	WEIGHT
250	CPI-HTW-250-4	24.02 kg [52.97lb]
300	CPI-HTW-300-4	24.93 kg [54.96lb]
350	CPI-HTW-350-4	25.83 kg [56.95lb]
400	CPI-HTW-400-4	26.73 kg [58.94lb]
450	CPI-HTW-450-4	27.63 kg [60.93lb]
500	CPI-HTW-500-4	28.54 kg [62.92lb]
550	CPI-HTW-550-4	29.44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



HTW-1200/1400 Pass-Thru Hold Table Weldment







CPI-	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

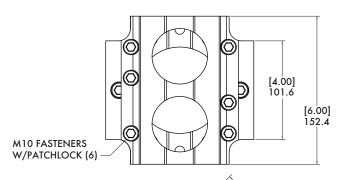


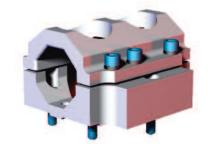
Specifications:

Max. Static Product Load: 746 N*m [550 ft-lb]] Material: Aluminum

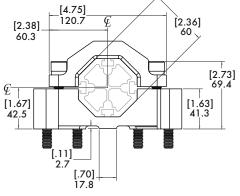
Features:

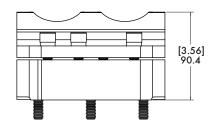
Can be used as direct robot interface.

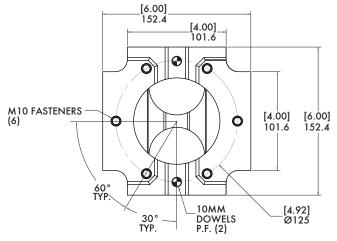




Fasteners included, Dowels not included













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

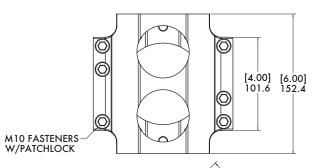
Features:

• Can be used as direct robot interface.

Specifications:

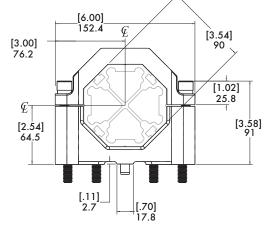
Max. Static Product Load: 1355 N*m [1000 ft-lb] Material: Aluminum

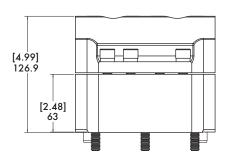


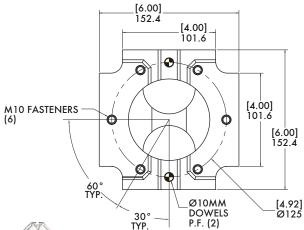




Fasteners and Dowels Included







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



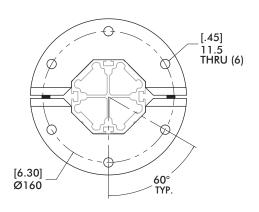
BodyBuilder™ Structure End Mount Assemblies CL-90B-160F 90mm End Mount

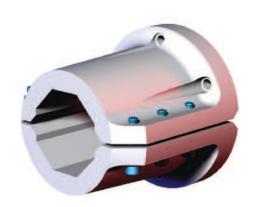


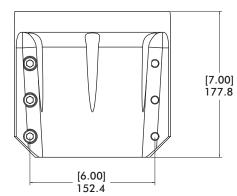
Specifications:
Max. Static Clamp Load:
746 N*m [550 ft-lb]
Material: Aluminum

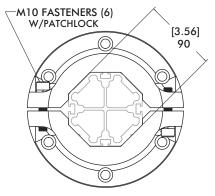
Features:

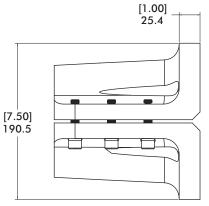
• Can be used as direct robot interface.













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





BodyBuilder™ Structure End Mount Assemblies 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 N*m [550 ft-lb] Material:

Body: Aluminum

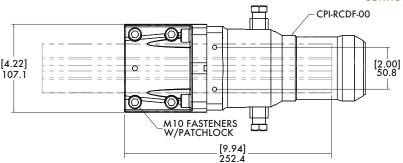
Pins: Steel

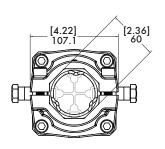


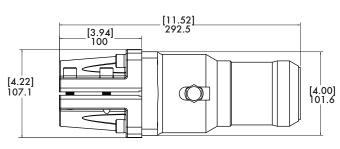
Used in conjunction with Quick Disconnect Housing to provide an efficient method for changing tools manually.

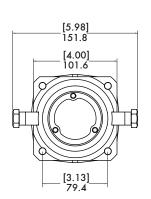


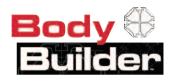
Optional 4-port air and electric connections available.











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



BodyBuilder™ Structure End Mount Assemblies RDN-25-6 Manual Quick Disconnect Housing



Specifications: Max. Static Product Load: 746 N*m [550 ft-lb]

Material:

Body: Aluminum Knuckles: Brass

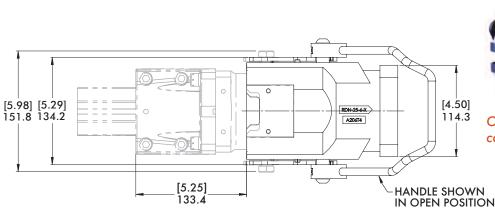
Handle and Hooks: Steel

Inserts: Urethane

Features:

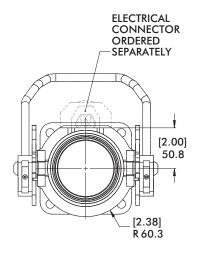
- Actuation of handle allows quick and accurate installation by pulling the bayonet into a fixed position within the housing.
- · The internal rings eliminate vibration and seat the bayonet into a clamped position.
- Hardened steel retainer slots reduce wear and extend product life.

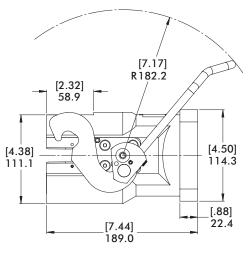
Used in conjunction with 60 mm BodyBuilder™ Bayonet to provide an efficient method for changing tools manually.

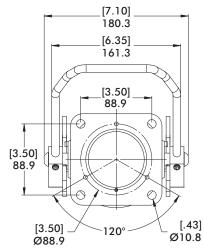




Optional 4-port air and electric connections available.









Model Number	Weight
CPI-RDN-25-6	4.00 kg [8.90 lb]





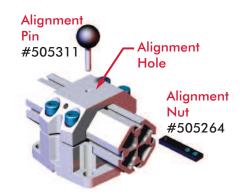
BodyBuilder™ Alignment System

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 $^{\text{TM}}$ boom until the alignment holes are visually aligned. Insert the alignment pin to secure bracket mount in place, and tighten the fasteners.



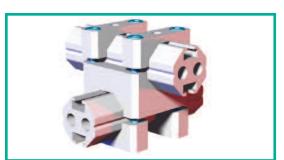
Remove the alignment pin and continue tightening the fasteners to specified torque values.



U.S. PATENT 6,349,912



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

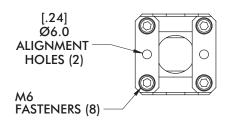


Specifications:

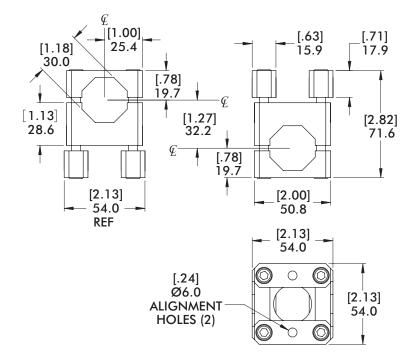
Max. Static Clamp Load: 102 N*m [75 ft-lb] Material: Aluminum

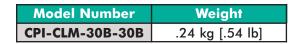
Features:

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













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

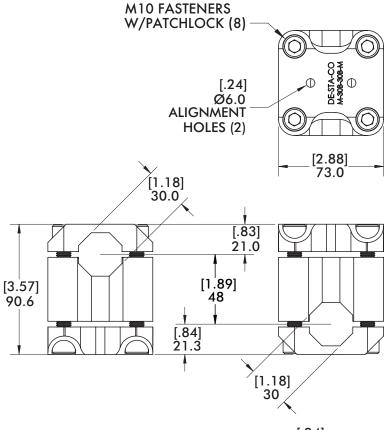
Features:

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

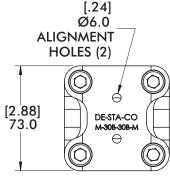
Specifications:

Max.Static Clamp Load: 30mm: 271 N*m [200 ft-lb] Material: Aluminum











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





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



Max. Static Clamp Load: 30mm: 271 N*m [200 ft-lb]

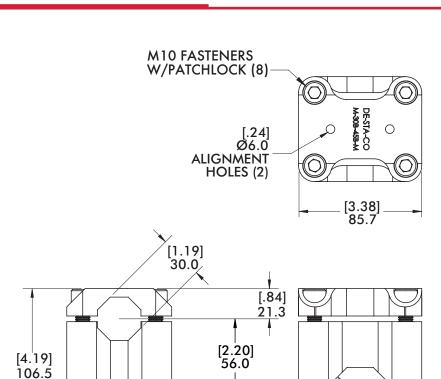
Material: Aluminum

Features:

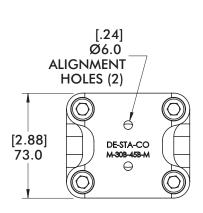
- Connects 30mm and 45mm 45mm: 475 N*m [350 ft-lb] extrusions perpendicular to each other.
 - · Lightweight, high-strength

aluminum design.





[1.14] 29.0



[1.77]45.0



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



ALIGNMENT NUTS INCLUDED



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

Features:

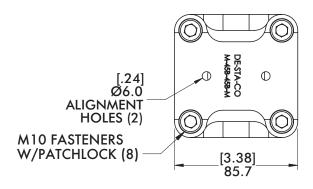
- Connects (2) 45mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design

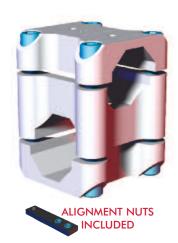
Specifications:

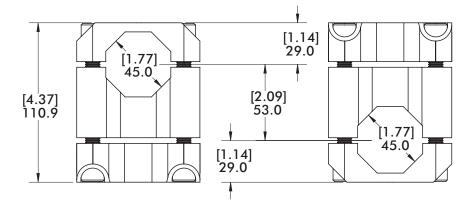
Max. Static Clamp Load: 45mm: 475 N*m [350 ft-lb]

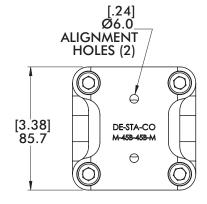
Material: Aluminum













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





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



Specifications:

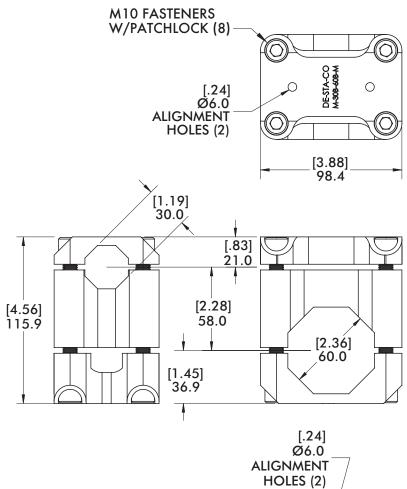
Max. Static Clamp Load: 30mm: 271 N*m [200 ft-lb]

Material: Aluminum

Features:

- Connects 30mm and 60mm 60mm: 746 N*m [550 ft-lb] extrusions perpendicular to each other.
 - · Lightweight, high-strength

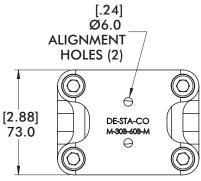
aluminum design.







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







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

Features:

• Connects 45mm and 60mm extrusions perpendicular to each other.

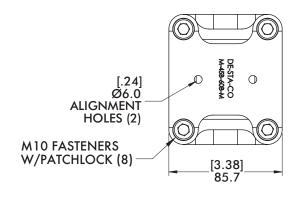
• Lightweight, high-strength aluminum design.

Specifications:

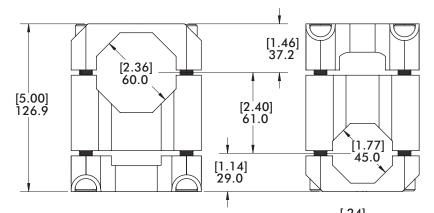
Max. Static Clamp Load:

60mm: 746 N*m [550 ft-lb] 45mm: 475 N*m [350 ft-lb] Material: Aluminum

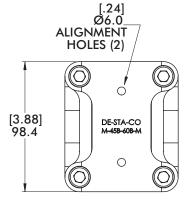














Model Number	Weight
M-45B-60B-M	1.23 kg [2.70 lb]





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

Specifications:

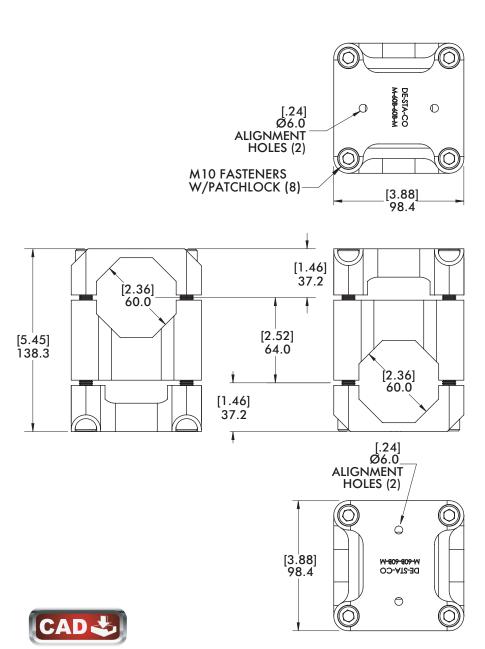
Max. Static Clamp Load: 60mm: 746 N*m [550 ft-lb]] perpendicular to each other.

Material: Aluminum

Features:

- Connects (2) 60mm extrusions
- Lightweight, high-strength aluminum design







ALIGNMENT NUTS INCLUDED





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

Features:

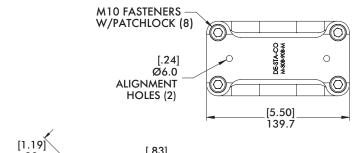
- Connects 30 and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

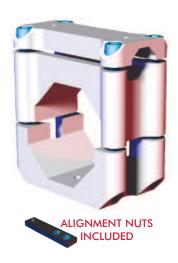
Specifications:

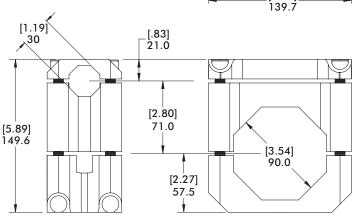
Max. Static Clamp Load: 30mm: 271 N*m [200 ft-lb] 90mm: 746 N*m [550 ft-lb]

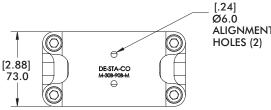
Material: Aluminum















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





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



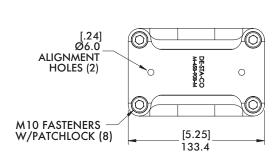
Max. Static Clamp Load: 45mm: 475 N*m [350 ft-lb] perpendicular to each other. 90mm: 746 N*m [550 ft-lb]

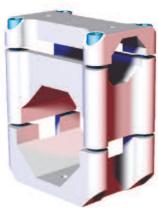
Material: Aluminum

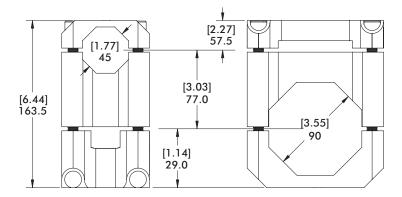
Features:

- Connects 45 and 90mm extrusions
- Lightweight, high-strength

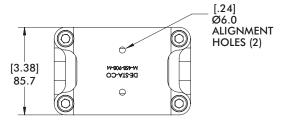
aluminum design.













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





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

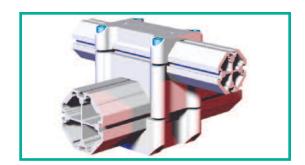
Features:

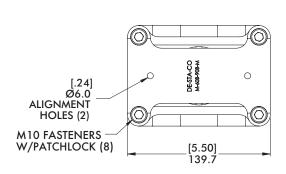
Connects 60mm and 90mm extrusions perpendicular to each other.

Lightweight, high-strength aluminum design.

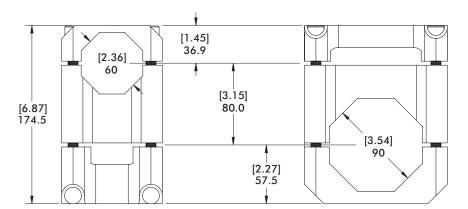
Specifications:

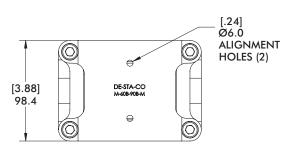
Maximum Clamp Load: 60mm and 90mm: 746 N*m [550 ft-lb] Material: Aluminum













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



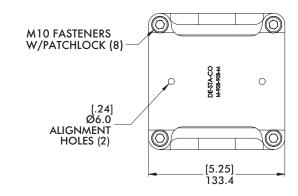
90B-90B 90mm to 90mm Transition Bracket Assembly

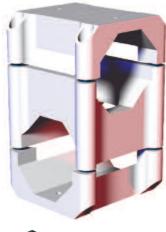


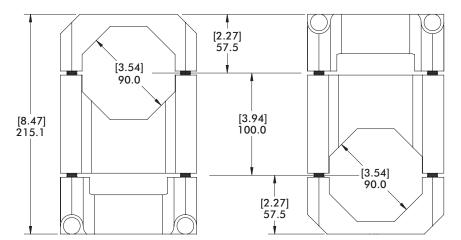
Specifications:

Max. Static Clamp Load: 746 N*m [550 ft-lb] Material: Aluminum

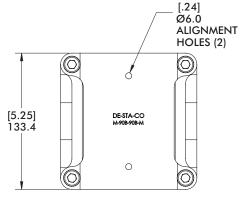
- Connects (2) 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.













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





Octagon to Round Transition Block Assembly

Features:

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

Specifications:

Material: Aluminum

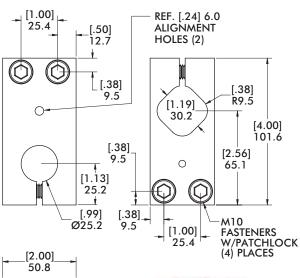


30B-25M 30mm Octagon to 25mm Round

[1.75] 44.5

Specifications:

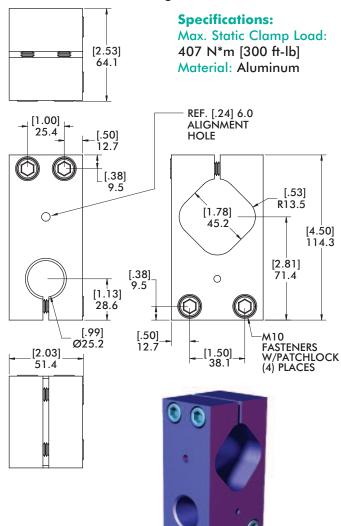
Max. Static Clamp Load: 407 N*m [300 ft-lb] Material: Aluminum





Model Number	Weight
M-30B-25M-M	.50 kg [1.10 lb]

45B-25M 45mm Octagon to 25mm Round



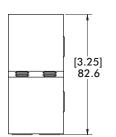
Model Number	Weight
M-45B-25M-M	.70 kg [1.54 lb]





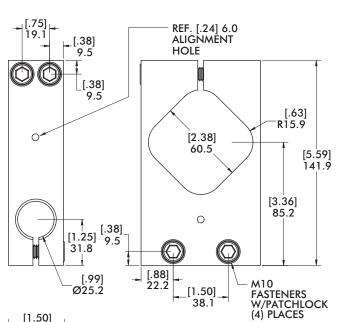
Octagon to Round Transition Block Assembly

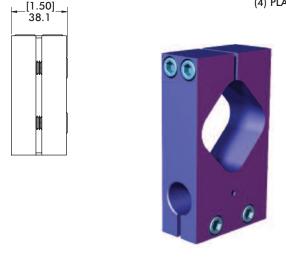
60B-25M 60mm Octagon to 25mm Round



Specifications:

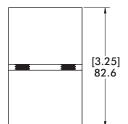
Max. Static Clamp Load: 407 N*m [300 ft-lb] Material: Aluminum





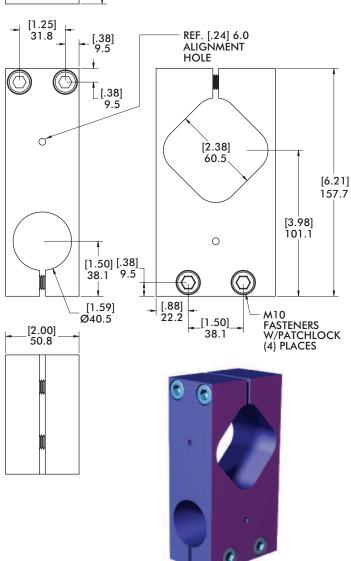
Model Number	Weight
M-60B-25M-M	.78 kg [1.72 lb]

60B-40M 60mm Octagon to 40mm Round



Specifications:

Max. Static Clamp Load: 813 N*m [600 ft-lb] Material: Aluminum



Model Number	Weight
M-60B-40M-M	1.10 kg [2.43 lb]



1-888-DESTACO



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

Features:

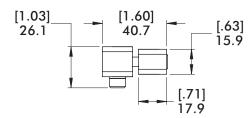
- Connects BodyBuilder™ extrusion and round tubing perpendicular to each other.
- Lightweight, high-strength aluminum design.

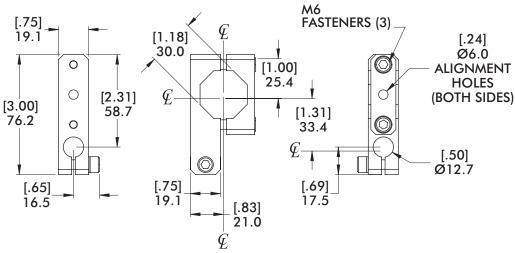
Specifications:

Max. Static Clamp Load: 102 N*m [75 ft-lb] Material: Aluminum









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



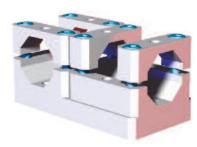
TCAM-30B-30B 30mm to 30mm Octagon (Micro) T-Clamp Bracket Assembly

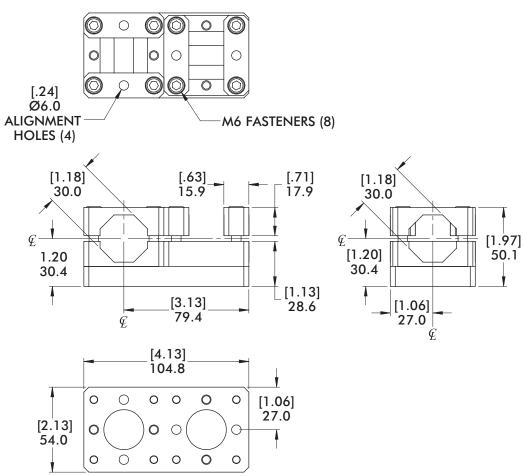


Specifications:

Max. Static Clamp Load: 102 N*m [75 ft-lb] Material: Aluminum

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











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

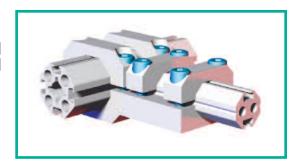
Features:

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

Specifications:

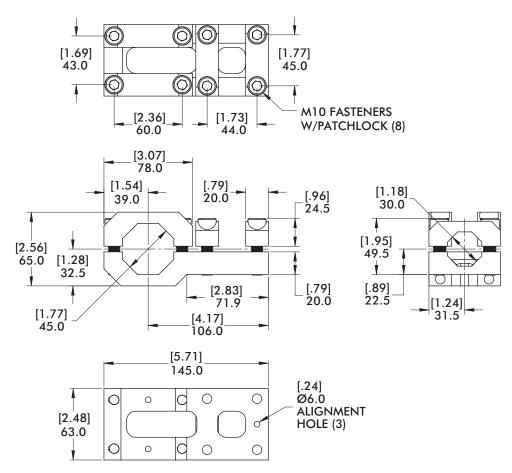
45mm: 475 N*m [350 ft-lb] 30mm: 271 N*m [200 ft-lb]

Material: Aluminum











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



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



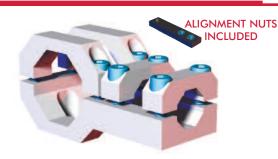
Specifications:

Max. Static Clamp Load:

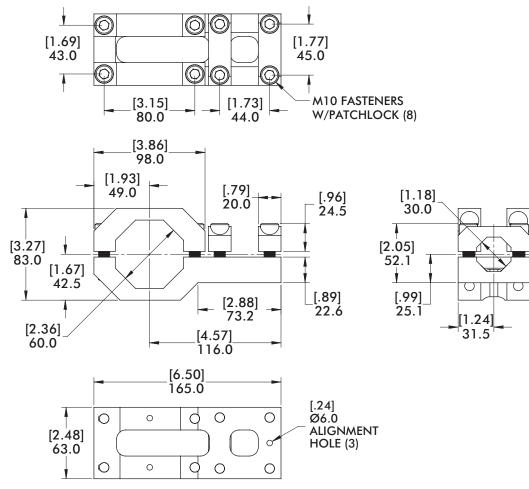
30mm: 271 N*m [200 ft-lb]

Material: Aluminum

- Connects 30mm and 60mm octagon 60mm: 746 N*m [550 ft-lb] extrusion perpendicular on the same plane.
 - Lightweight, high-strength aluminum design.







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





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

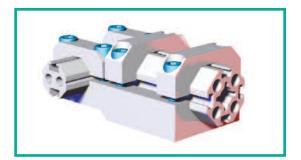
Features:

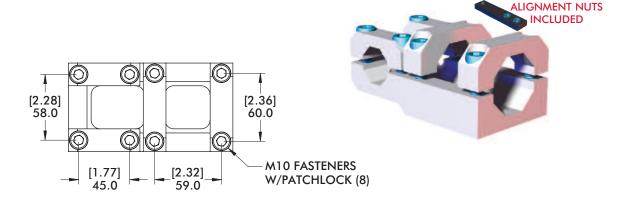
- Connects 45mm and 30mm octagon Max. Static Clamp Load: extrusion perpendicular on the same
- Lightweight, high-strength aluminum design.

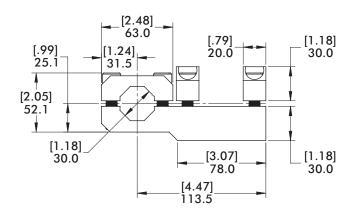
Specifications:

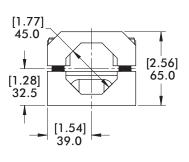
45mm: 475 N*m [350 ft-lb] 30mm: 271 N*m [200 ft-lb]

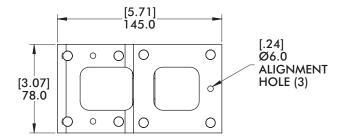
Material: Aluminum









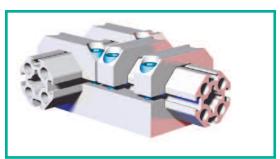




Model Number	Weight
CPI-TCA-45B-30B	.91 kg [2.02 lb]



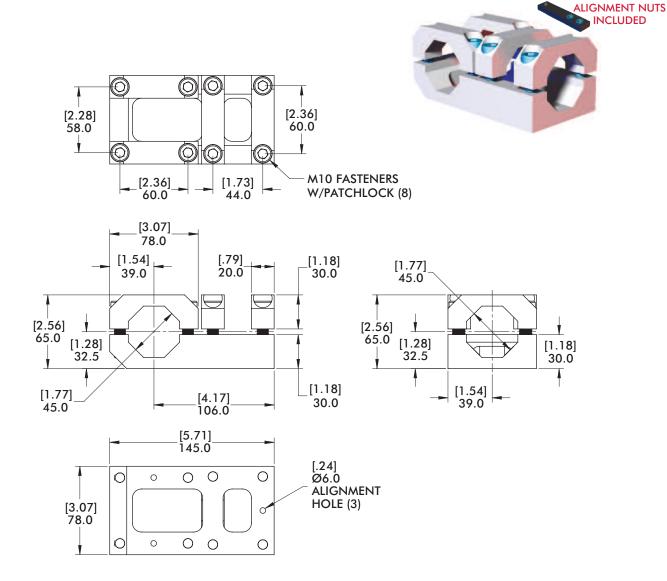
TCA-45B-45B 45mm to 45mm Octagon T-Clamp Bracket Assembly



Specifications:

Max. Static Clamp Load: 45mm: 475 N*m [350 ft-lb] Material: Aluminum

- 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]





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

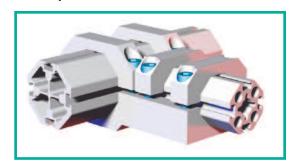
Features:

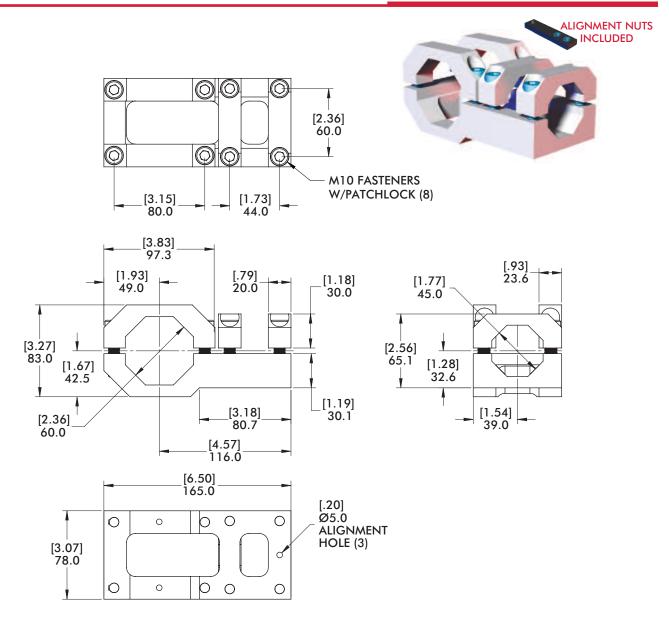
- Connects 45mm and 60mm octagon Max. Static Clamp Load: extrusion perpendicular on the same
- Lightweight, high-strength aluminum design.

Specifications:

60mm: 746 N*m [550 ft-lb] 45mm: 475 N*m [350 ft-lb]

Material: Aluminum



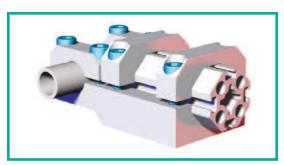




Model Number	Weight
CPI-TCA-45B-60B	1.21 kg [2.67lb]



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

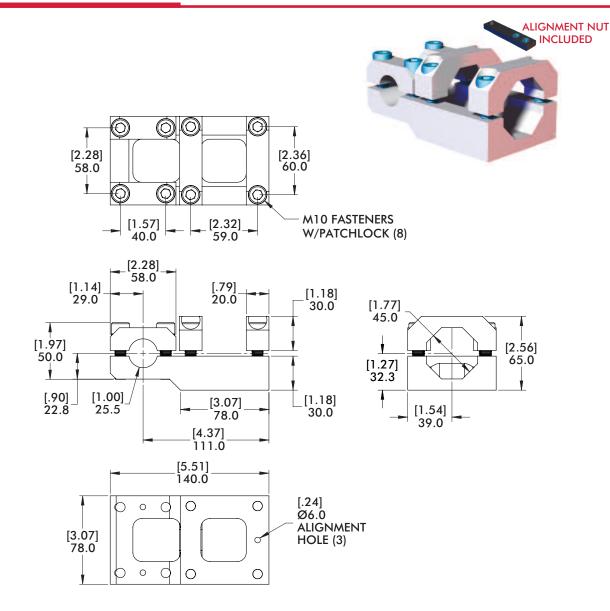


Specifications:

Max. Static Clamp Load: 45mm: 475 N*m [350 ft-lb] 25mm: 271 N*m [200 ft-lb]

Material: Aluminum

- 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]





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

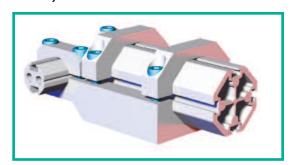
Features:

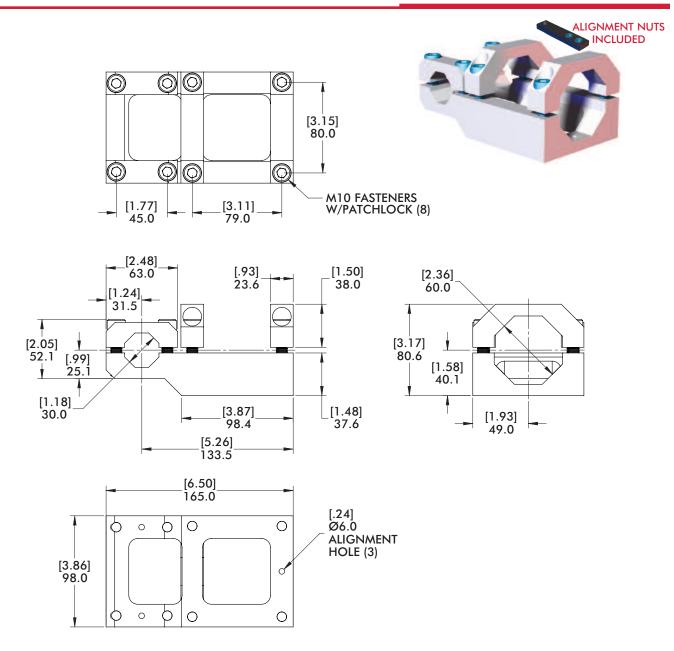
- Connects 60mm and 30mm octagon Max. Static Clamp Load: extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

60mm: 746 N*m [550 ft-lb]

30mm: 271 N*m [200 ft-lb] Material: Aluminum



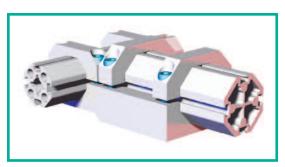




Model Number	Weight
CPI-TCA-60B-30B	1.32 kg [2.91 lb]



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

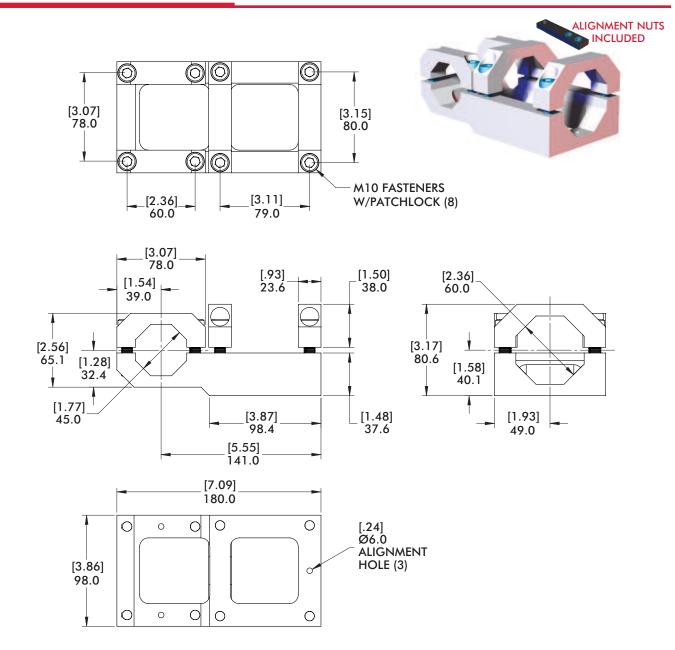


Specifications:

Max. Static Clamp Load: 45mm: 475 N*m [350 ft-lb]

Material: Aluminum

- Connects 60mm and 45mm octagon 60mm: 746 N*m [550 ft-lb] extrusion perpendicular on the same plane.
 - Lightweight, high-strength aluminum design.



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





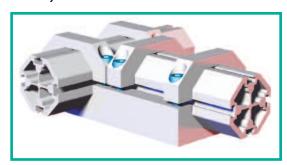
TCA-60B-60B 60mm to 60mm octagon T-Clamp Bracket Assembly

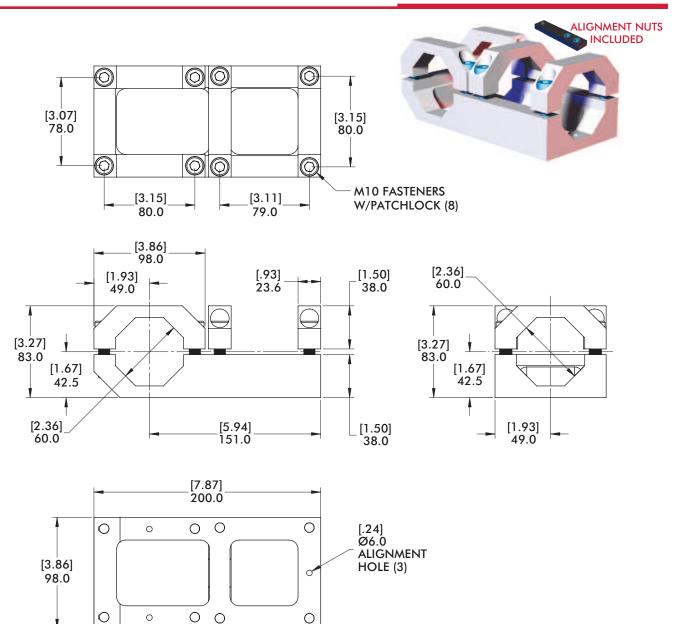
Features:

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

Specifications:

Max. Static Clamp Load: 60mm: 746 N*m [550 ft-lb] Material: Aluminum



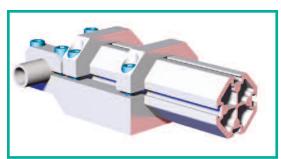




Model Number	Weight
CPI-TCA-60B-60B	1.77 kg [3.90 lb]



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



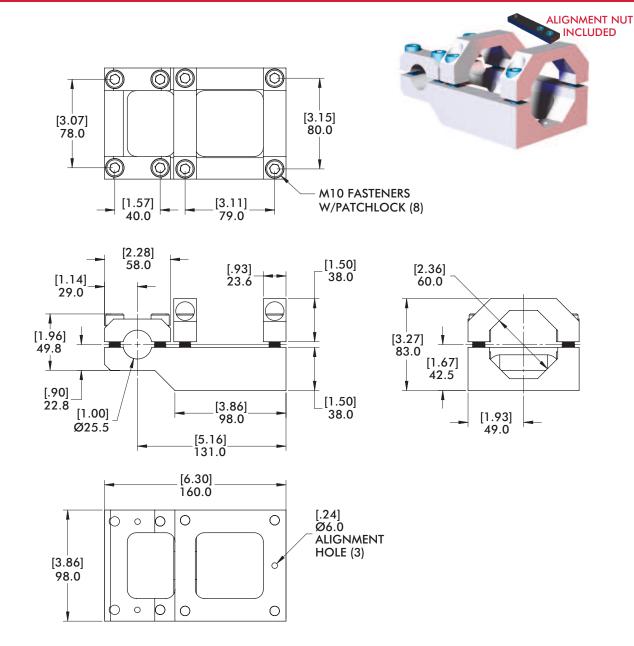
Specifications:

Max. Static Clamp Load:

30mm: 271 N*m [200 ft-lb]

Material: Aluminum

- Connects 60mm octagon and 25mm 60mm: 746 N*m [550 ft-lb] round perpendicular on the same plane.
 - Lightweight, high-strength aluminum design.









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

Features:

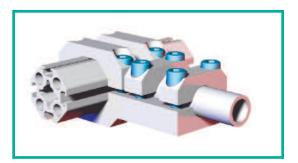
- Connects 25mm round and 45mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

Max. Static Clamp Load:

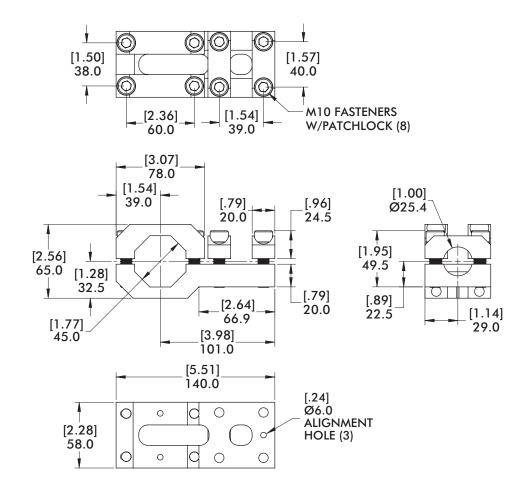
45mm: 475 N*m [350 ft-lb] 25mm: 271 N*m [200 ft-lb]

Material: Aluminum











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



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

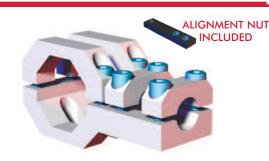


Specifications:

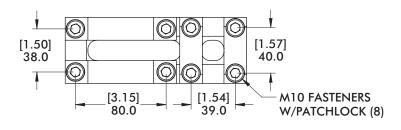
Max. Static Clamp Load: 60mm: 746 N*m [550 ft-lb] 25mm: 271 N*m [200 ft-lb]

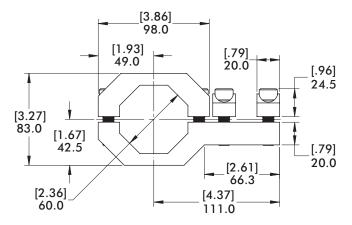
Material: Aluminum

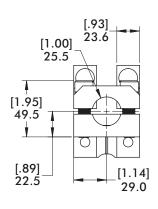
- Connects 25mm round and 60mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

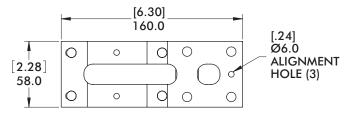












Model Number	Weight
CPI-TCA-25M-60B	.85 kg [1.87 lb]





45° Angular Boom Clamp Brackets

Features:

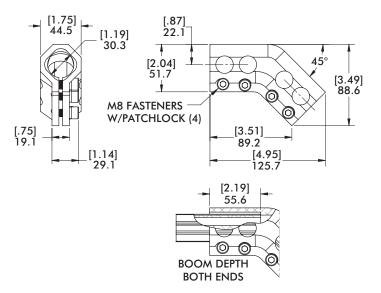
Mounts (2) Bodybuilder extrusion booms inline at a 45° angle.

Specifications:

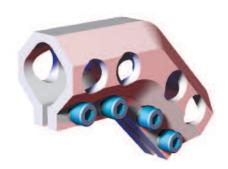
Material: Aluminum



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



Specifications: Max. Static Clamp Load: 271N*m [200 ft-lb]

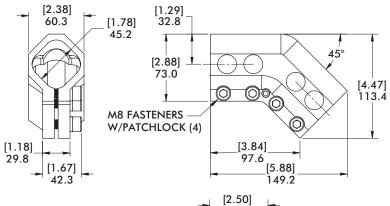


Model Number	Weight
CPI-DC-3030B-45	.30 kg [.66 lb]

Max. Static Clamp Load:

475 N*m [350 ft-lb]

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



Specifications:

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





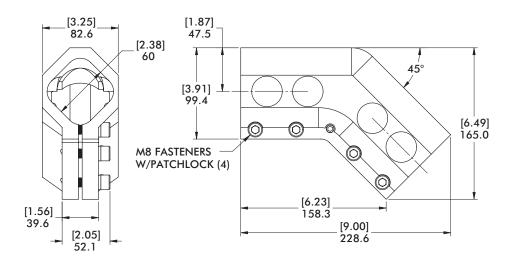
DC-6060B-45 60mm to 60mm 45° Angular Boom Clamp Brackets

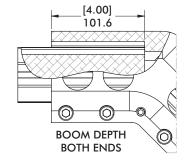


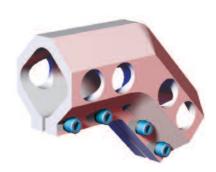
Specifications:
Max. Static Clamp Load:
746 N*m [550 ft-lb]
Material: Aluminum

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™ Accessory Brackets and Mounts CLM-30B-152F-90 30mm Mid Flange Clamp Mount

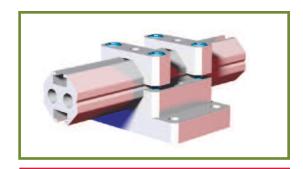
Features:

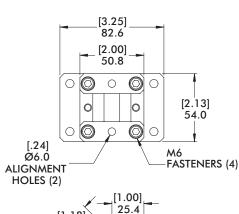
- · Mounts 30mm extrusion parallel to the mounting surface.
- Can be used as robot interface when quick-change connector is not required.

Specifications:

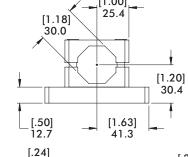
Max. Static Clamp Load: 102 N*m [75 ft-lb]

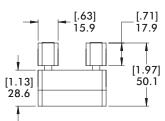
Material: Cast Aluminum

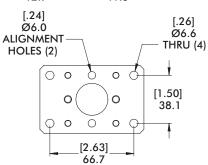












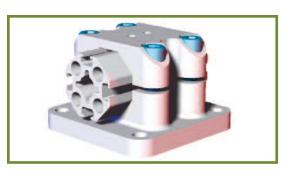


Model Number	Weight
CPI-CLM-30B-152F-90	0.28 kg [.61 lb]



BodyBuilder™ Accessory Brackets and Mounts

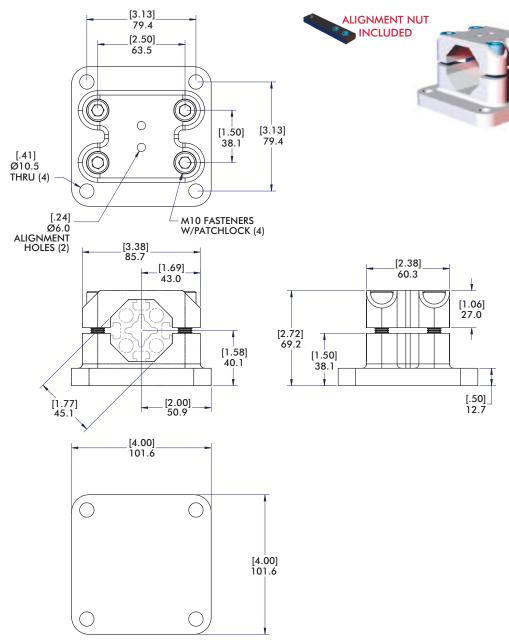
TBC-45 45mm Mid Flange Clamp Mount

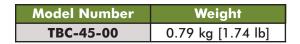


Specifications:

Max. Static Clamp Load: 475 N*m [350 ft-lb] Material: Aluminum

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









BodyBuilder™ Accessory Brackets and Mounts TBC-60 60mm Mid Flange Clamp Mount

Features:

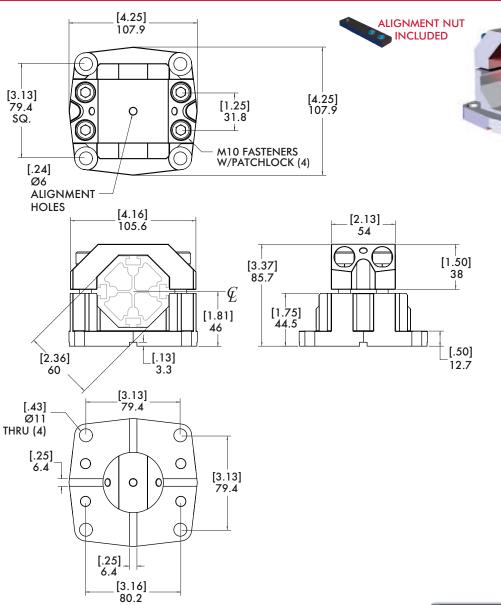
- Mounts 60mm extrusion parallel to the mounting surface.
- Can be used to mount to robot with an interface plate.
- Cross-key design provides added strength for high-torque applications when used in conjunction with a slot and key mechanism.

Specifications:

Max. Static Clamp Load: 746 N*m [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]





BodyBuilder™ Accessory Brackets and Mounts CLM-30B-20F 30mm End Flange Clamp Mount

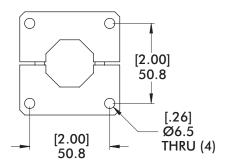


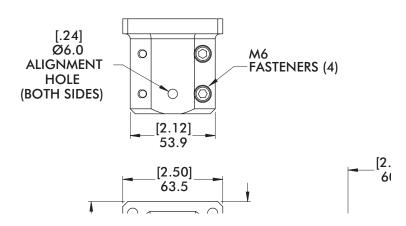
Specifications:

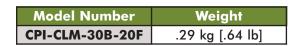
Max. Static Clamp Load: 102 N*m [75 ft-lb] Material: Aluminum

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













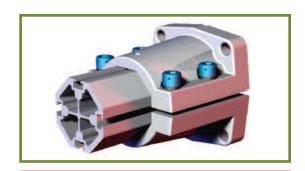
BodyBuilder™ Accessory Brackets and Mounts BECC-60 60mm End Flange Clamp Mount

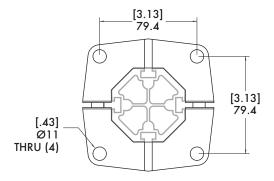
Features:

- 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.

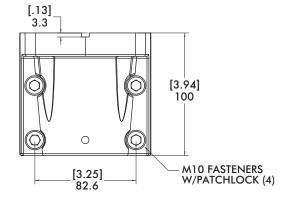
Specifications:

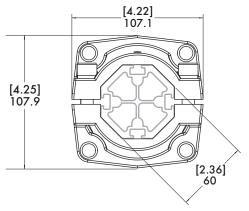
Max. Static Clamp Load: 746 N*m [550 ft-lb] Material: Cast Aluminum

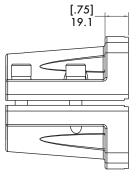














Cross Key sold separately: (2) x 540-25388

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





$\textbf{BodyBuilder}^{\text{\tiny{TM}}} \ \textbf{Accessory} \ \textbf{Brackets} \ \textbf{and} \ \textbf{Mounts}$

TPM-30 30mm Accessory Mounting Bracket

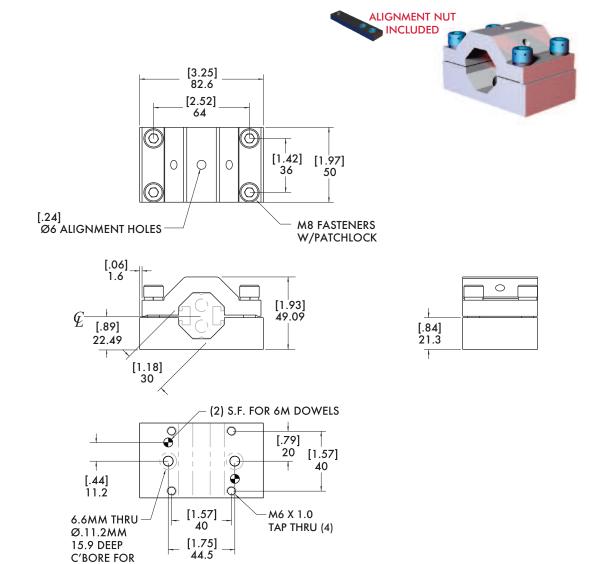


Specifications:

Max. Static Clamp Load: 271 N*m [200 ft-lb] Material: Aluminum

Features:

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





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

M6 SHCS FARSIDE (2)





BodyBuilder[™] Accessory Brackets and Mounts TPM(S)-45 45mm Accessory Mounting Bracket

Features:

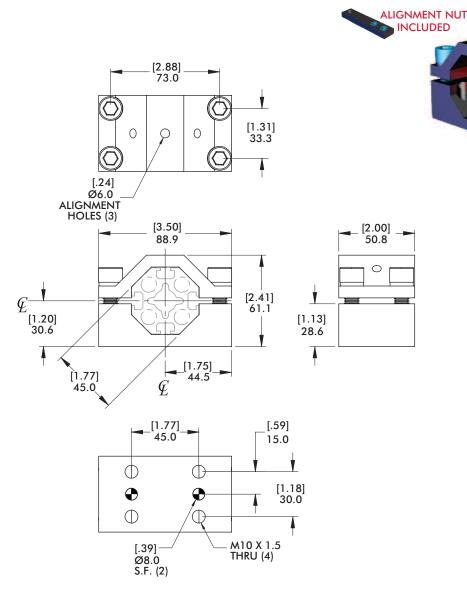
- Provides a secure attachment point for clamps and pin locators.
- Standard NAAMS mounting patterns.

Specifications:

Max. Static Clamp Load: 475 N*m [350 ft-lb] Material:

TPMS-45: Steel TPM-45: Aluminum













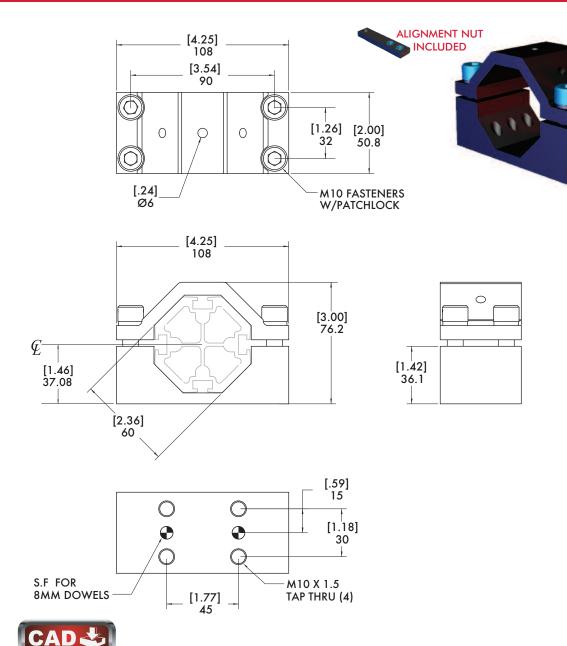
BodyBuilder™ Accessory Brackets and Mounts **TPMS-60 60mm Accessory Mounting Bracket*.**

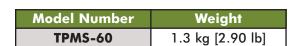


Specifications:

Max. Static Clamp Load: 746 N*m [550 ft-lb] Material: Steel

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









BodyBuilder™ Accessory Brackets and Mounts TPMS-90 90mm Accessory Mounting Bracket.

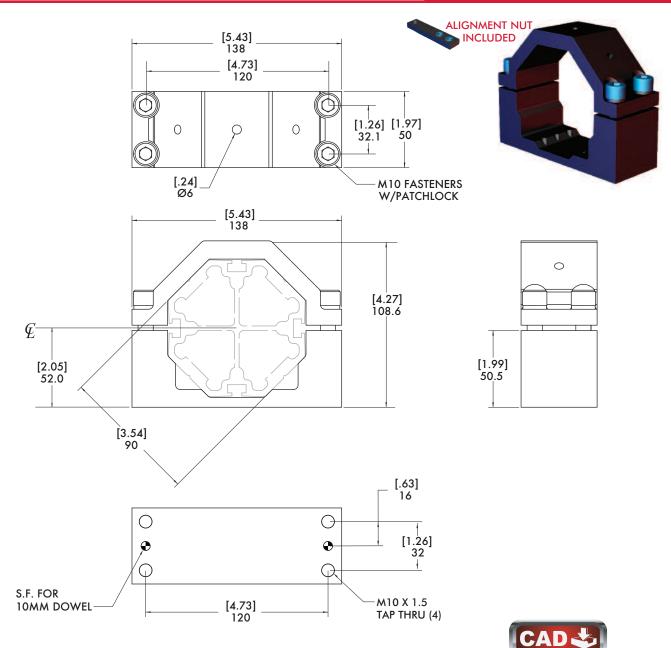
Features:

 Provides a secure attachment point for clamps and pin locators.

Specifications:

Max. Static Clamp Load: 746 N*m [550 ft-lb] Material: Steel







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



BodyBuilder™ Gripper Mounts

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

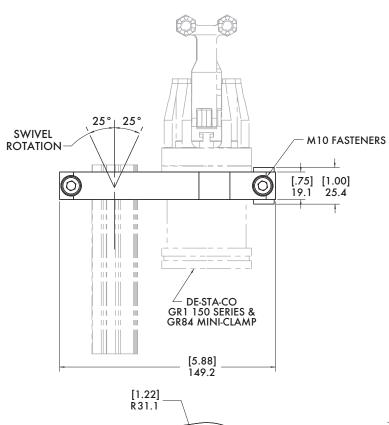


Specifications:

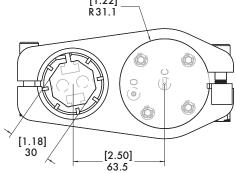
Max. Static Clamp Load: 271 N*m [200 ft-lb] Material:

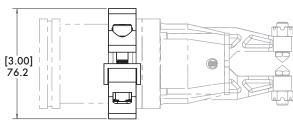
Body: Aluminum Swivel Ball: Steel

- Removable grip mount lock allows gripper to be adjusted while continuing to holding it in place.
- Swivel ball allows for ±25° adjustment of swivel rotation.











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





BodyBuilder™ Gripper Mounts

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

Features:

• Swivel ball allows for ±25° adjustment of swivel rotation.

Specifications:

Max. Static Clamp Load: 271 N*m [200 ft-lb]

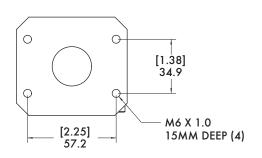
Material:

Housing:

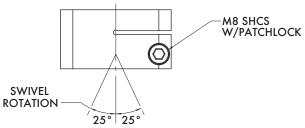
Machined Aluminum

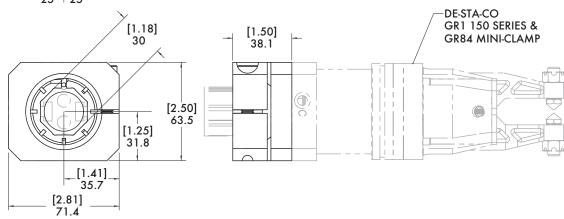
Swivel: Steel

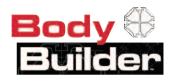














Model Number	Weight
CPI-RJM-150-30BBS	.33 kg [.74 lb]



BodyBuilder™ Gripper Mounts

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



Specifications:

Max. Static Clamp Load: 475 N*m [350 ft-lb]

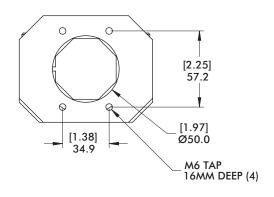
Material: Housing:

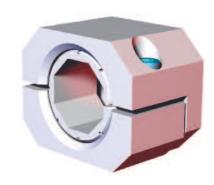
Machined Aluminum

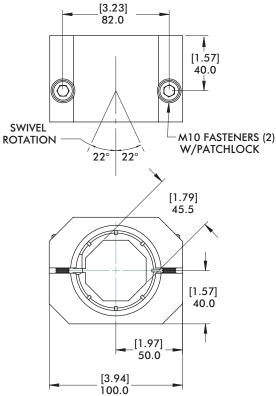
Swivel: Steel

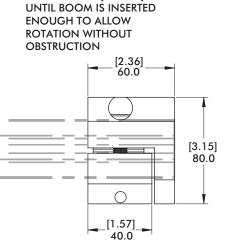
Features:

 Swivel ball allows for ±22° 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

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





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

Features:

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

Specifications:

Max. Static Clamp Load: 102 N*m [75 ft-lb]

Material:

Body:

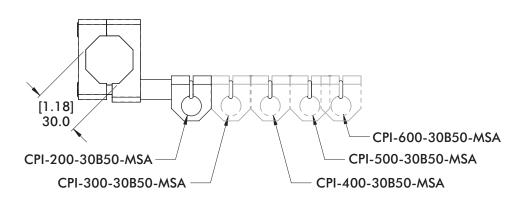
Cast Aluminum

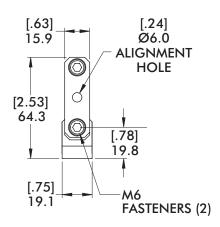
Insert:

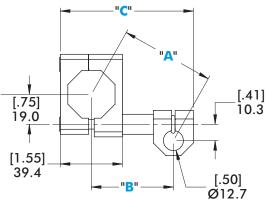
Machined Aluminum











CPI-	CPI- <u>L</u> -30B50-MSA SWIVEL ARM				
<u>"L"</u>	"A"	"B"	"C"	WEIGHT	
200	59.8	52.1	84.5	.10 kg	
200	[2.35]	[2.05]	[3.33]	[.22 lb]	
300	82.6	77.2	109.6	.11 kg	
300	[3.25]	[3.04]	[4.32]	[.24 lb]	
400	106.2	102.1	134.5	.12 kg	
700	[4.18]	[4.02]	[5.30]	[.26 lb]	
500	130.6	127.3	159.7	.13 kg	
300	[5.14]	[5.01]	[6.29]	[.29 lb]	
600	150.0	147.1	179.5	.14 kg	
500	[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 N*m [200 ft-lb] Material:

Body:

Cast Aluminum Insert:

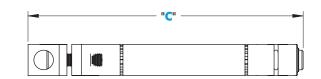
Machined Aluminum

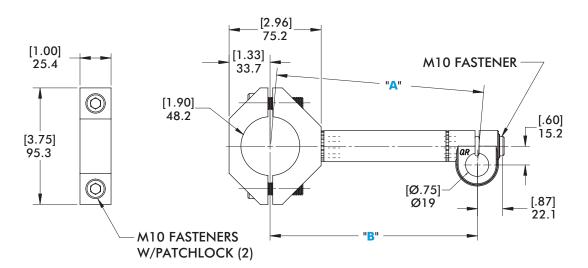
Features:

- 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	118.8	140.9	.48 kg
130	[4.72]	[4.68]	[5.56]	[1.06 lb]
180	169.8	169.1	224.9	.54 kg
100	[6.68]	[66.6]	[8.89]	[1.20 lb]
230	219.7	219.1	275.0	.61 kg
230	[8.65]	[8.63]	[10.83]	[1.34 lb]
280	269.6	269.2	325.0	.67 kg
200	[10.61]	[10.60]	[12.80]	[1.47 lb]





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 N*m [200 ft-lb]

Material:

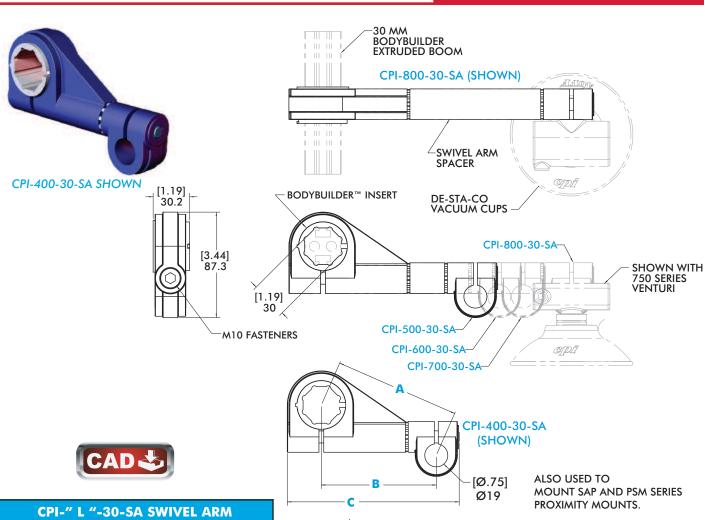
Body:

Cast Aluminum

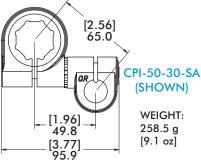
Insert:

Machined Aluminum





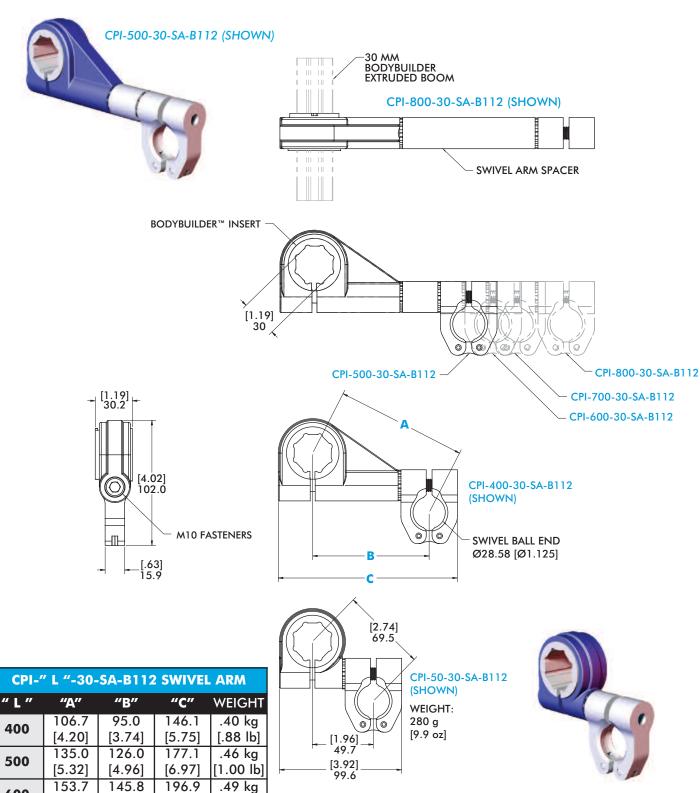
CPI-" L "-30-SA SWIVEL ARM				
" L "	"A"	"B"	"C"	WEIGHT
400	103.8	95.1	142.5	.35 kg
700	[4.09]	[3.74]	[5.61]	[.75 lb]
500	132.8	126.0	172.7	.39 kg
300	[5.26]	[4.96]	[6.80]	[.88 lb]
600	151.7	146.0	192.5	.48 kg
800	[5.97]	[5.75]	[7.58]	[1.06 lb]
700	170.6	165.4	212.1	.51 kg
700	[6.72]	[6.51]	[8.35]	[1.13 lb]
800	209.7	205.5	252.2	.58 kg
800	[8.26]	[8.09]	[9.93]	[1.25 lb]



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



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



600

700

800

[6.05]

172.3

[6.78]

211.1

[8.31]

[5.74]

165.4

[6.51]

205.5

[8.09]

[7.75]

216.5

[8.52]

256.6

[10.10]

[1.06 lb]

.53 kg

[1.19 lb]

.60 kg

[1.31 lb]



BodyBuilder™ Swivel Arm Accessories

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

Features:

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

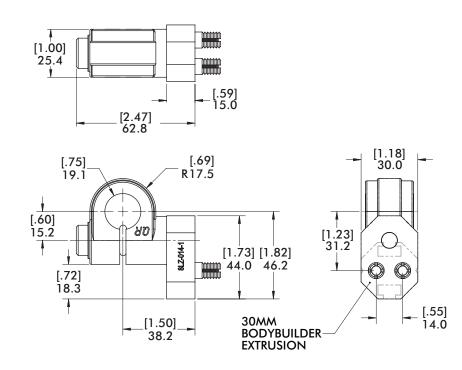
Specifications: Material:

Aluminum





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





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



BodyBuilder™ Swivel Arm Accessories

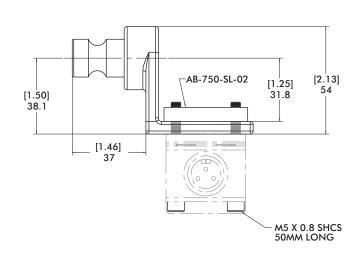
AB-750-SL Part Present Proximity Switch Mount



Specifications:
Max. Static Clamp Load:
271 N*m [200 ft-lb]
Material:
Aluminum

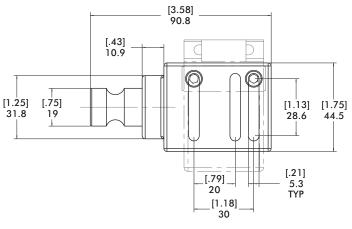
Features:

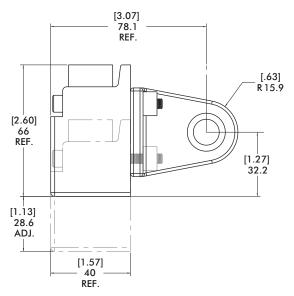
- Mounts a 40mm square proximity sensor to the BodyBuilder™ 30mm Swivel Arm (CPI-"L"-30-SA).
- Mount allows for 360 degrees of radial adjustment along one axis.
- Slots allows 28.6mm [1.13 in] of linear adjustment for fine tuning during final setup.





FASTENERS AND NUT INCLUDED







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





BodyBuilder[™] Swivel Arm Accessories NPG-15RL-400 Rough Locator

Features:

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

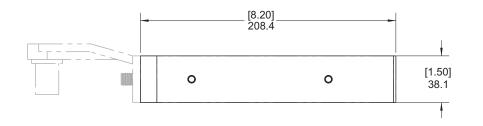
Specifications:

Max. Static Clamp Load: 271 N*m [200 ft-lb] Material:

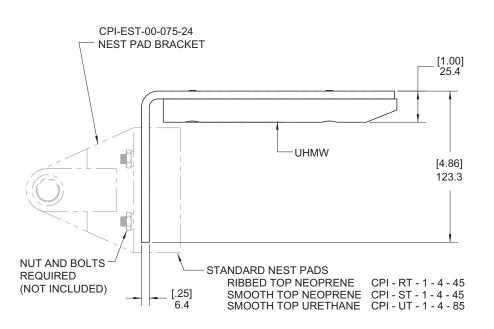
Bracket: Steel

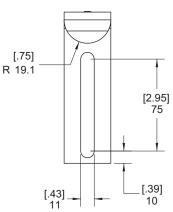
Wear Surface: UHMW

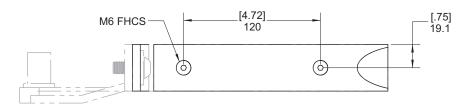














Model Number	Weight
CPI-NPG-15RL-400	0.86 kg [1.90 lb]



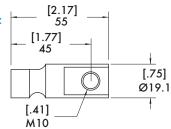


BodyBuilder™ Swivel Arm Accessories

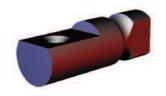
SAP-BM10 Ø19mm [.75 in] Apple Core Nest Bumper Mount



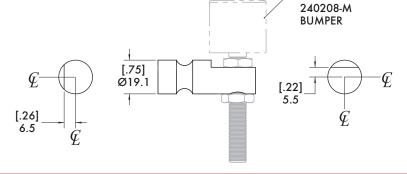
Specifications: Max. Static Clamp Load: 271 N*m [200 ft-lb] Material: Steel



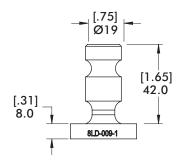




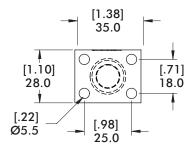
Model Number	Weight
CPI-SAP-BM10	.10 kg [.21 lb]



8LD Ø19mm [75 in] Apple Core Mini-Clamp Mounts

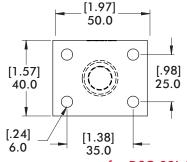


Apple Core and Base Thickness **Dimensions for all Models**



for DSC-82L25

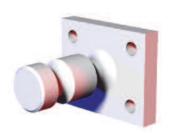
Model Number	Weight
8LD-009-1	.10 kg [.21 lb]



DE-STA-CO

for DSC-82L40

Model Number	Weight
8LD-010-1	.10 kg [.21 lb]

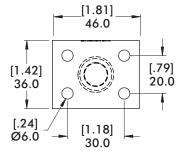


8LD-010-1 (Shown)

Specifications:

Max. Static Clamp Load: 41 N*m [30 ft-lb]

Material: Aluminum



for DSC-82L32

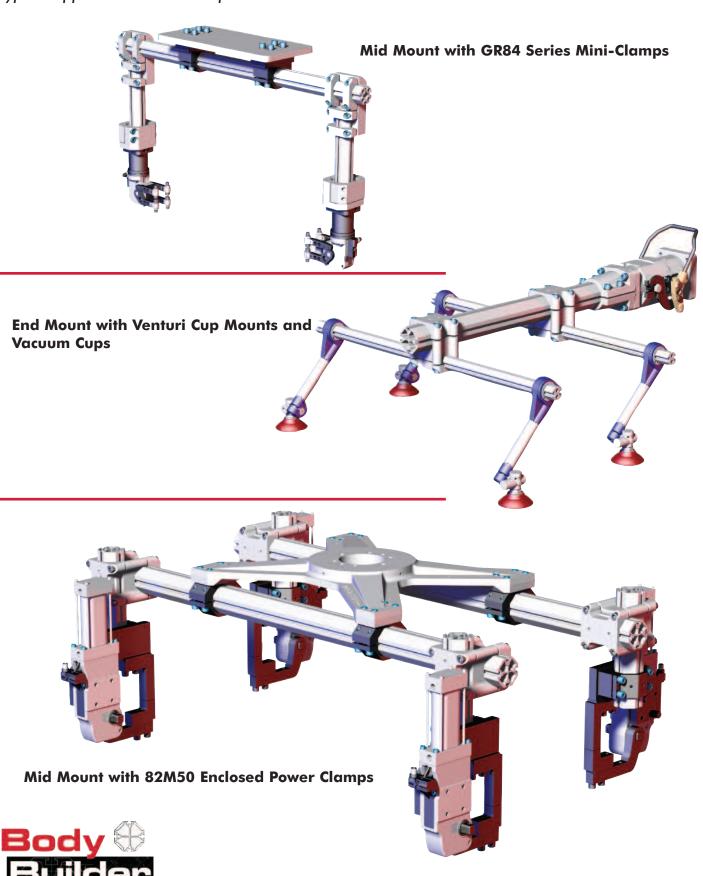
Model Number	Weight
8LD-012-1	.10 kg [.21 lb]





BodyBuilder™ Tooling Sample Assembly

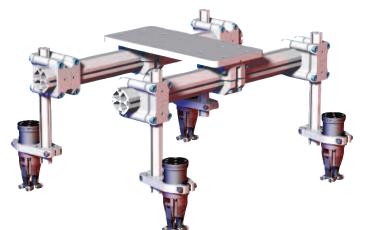
Typical Application Build Examples





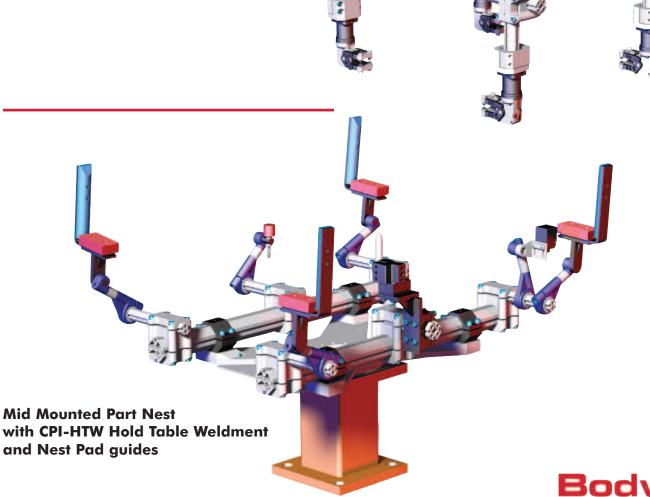
BodyBuilder™ Tooling Sample Assembly

Typical Application Build Examples



Mid Mount with GR1Series Gripper

End Mount with GR84 Series Mini Clamp





BodyBuilder™ Tooling Application Examples

Customer Application Examples

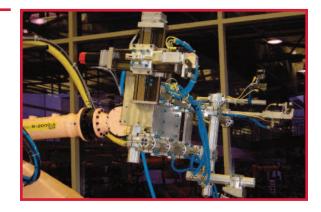
Our Customers

Our major customer base is a diverse mix of applications and industries, including applications in automotive, machine tool, general industrial, plastics, and electronics.

Many of our customers have locations around the world, requiring similar solutions and consistent program support. DE-STA-CO is competitively positioned to provide this support through our global support strategy, which include offering services in design, engineering, training, team building, and education in application solutions throughout the world.

Bodyside

Two Model Servo Select



Dash

Three Model Pneumatic Select



Pick-up Bed and Cross Member

Three Model - Multiple Parts



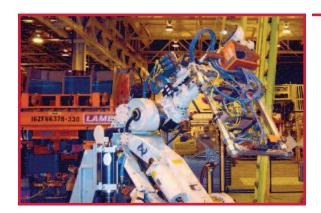




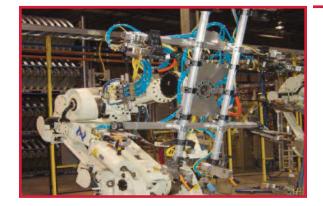
BodyBuilder™ Tooling Application Examples

Customer Application Examples

Door Assembly Hem Press Load/Unload



Underbody Pedestal Weld



Underbody Mechanical Handling



Door Assembly All Electric Programmable







DE-STA-CO offers Complete End Effector System Solutions

DE-STA-CO Products commonly used with BodyBuilder™

Pneumatic Modular Grippers

GR1 Modular Gripper

- · Can be flange or cylinder mounted.
- Offered with several different jaw opening and point options.
- Toggle-Locking Mechanism holds the part if air pressure is lost.

GR84 Enclosed Modular Mini Clamp

- Also offers several different jaw and tip options.
- Can also be flange or cylinder mounted.
- Locking Mechanism holds the part if air pressure is lost and is protected from contaminates.



Pneumatic Enclosed Power Clamps

82M Series Clamps

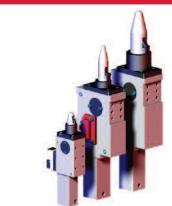
- Offered in two sizes, 50mm and 63mm.
- Angle of arm opening can be adjusted in the field in 15° increments.
- · Lightweight highest weight to power ratio.
- Optional integrated open/closed sensing package will accommodate all major switches.
- Built-in flow controls.
- NAAMS style arms and mounting.
- Sealed roller bearing.
- Toggle-locking mechanism holds the part if air pressure is lost
- Protected from contaminates.



Pneumatic Locating Pin Clamps

82P Series Pin Clamps

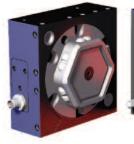
- Optional "Weld-Slag Resistant" offers protection from contamination entering the unit
- Standard rest blocks heights of 25 and 50mm, with others block heights available.
- Hardened and ground precision tool steel locating pin
- Enclosed aluminum body houses a full toggling mechanism that secures the part in place even when air is removed from the tool.
- · Protected from contaminates.

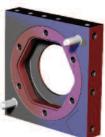


Modular Tool Changer

Quick Change 1200 Series

 End effector tooling can be changed quickly and easily to accommodate many different styles of parts on the same robot.







DE-STA-CO offers Complete End Effector System Solutions

DE-STA-CO Products commonly used with BodyBuilder™

Pneumatic Modular CAM Grippers

84A2 and 84A3 Modular CAM Gripper

- Two sensing systems are provided along with interchangeable gripper teeth and pads.
- High speed material movement in restricted spaces.
- High clamping force and fast opening and closing action.
- Roller and cam principal, self-locking at end stop position.
- Multiple mounting and jaw opening options.
- Small size, low weight.



Vacuum Cup Mounts and Adapters

CPI-500 and **750** Series Port Only Adapters

 Provides an option for integrating swivel arms and vacuum cups with a remote vacuum source.

CPI-ARV AND VSA Series Venturi Adapters

- Generates vacuum at the cup level.
- Integrated automatic quick panel release (ARV).
- Available with blow-off and low-profile.

CPI-SCM Series Spring Loaded Cup Mounts

- Available in different porting and travel options.
- Works with CPI-750 Series Venturi Adapters.



Pneumatic Actuated Magnets

CPI-TPLP Series Magnets

- Provides instantaneous pick up and release without electricity, maintaining positive hold even when air pressure is lost.
- Supplied with urethane pad which softens the impact of the magnet and avoids damage to delicate surfaces.



Vacuum Cups

Flatfoot Vacuum Cups

Maximizes lifting capacity and minimizes slip.

Belcup Vacuum Cups

Picks up material that vary slightly in position.

Traction Vacuum Cups

 For applications with wet or oily surfaces or for destackers.

Deepdish Vacuum Cups

· Works best on materials with convex surfaces.



PRECISELY POSITIONING OUR CUSTOMERS FOR PRODUCTIVITY.

Workholding

- Widest variety of workholding products
- High durability and reliability
- Flexible solutions for all applications
- Custom products for unique requirements

Automation

- Broad range of engineered automation products
- Complementary products for modular integration
- Unmatched accuracy, reliability and performance
- Unparalleled global sales, service and engineering support

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