

End Effectors

06/03/2026

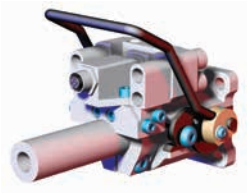
This catalog is a custom document and the products included is based on your unique selection from portions of complete catalogs that already exist. Please refer to our full catalogs for more information on products not included in this customized document.

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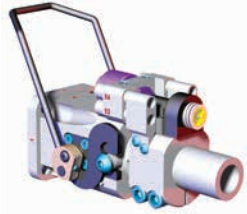
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DBG Series Bag Grippers	EE-DBG 1
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MANUAL TOOL CHANGERS

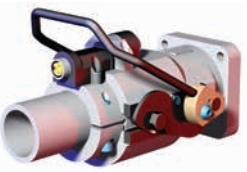
Features & Benefits



Quick Disconnect for 25mm/1.00 in. Tubes	
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Quick Disconnect for 40mm/1.50 in. Tubes	
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RDN/RDC SERIES

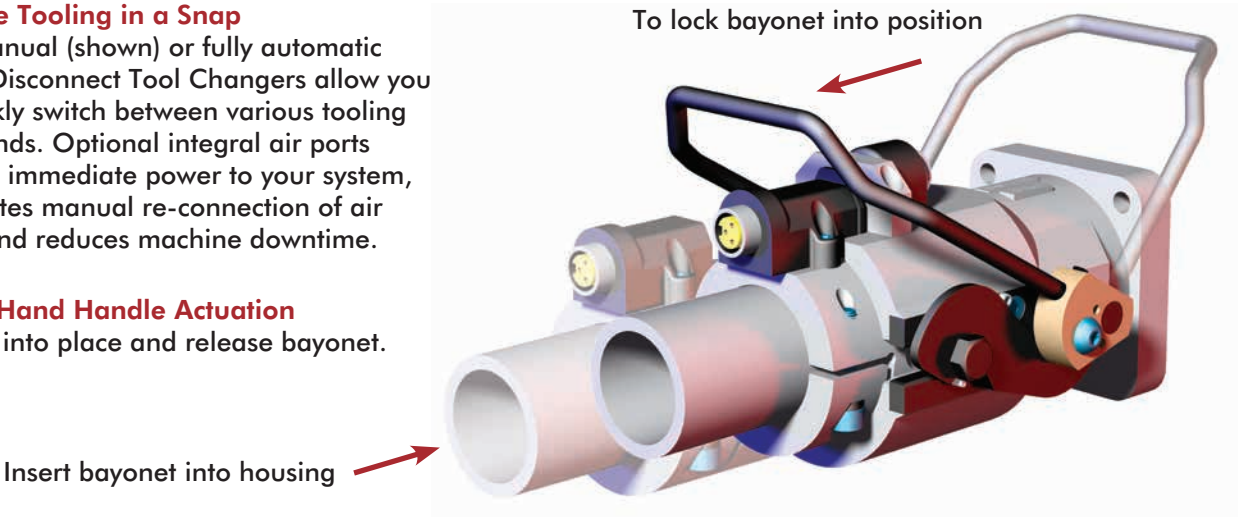
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Change Tooling in a Snap

Our manual (shown) or fully automatic Quick Disconnect Tool Changers allow you to quickly switch between various tooling in seconds. Optional integral air ports provide immediate power to your system, eliminates manual re-connection of air lines, and reduces machine downtime.

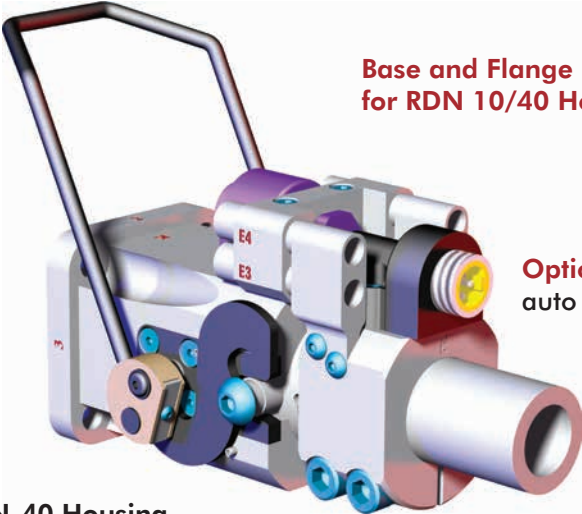
Single Hand Handle Actuation

To lock into place and release bayonet.



RDN/RDC Features

(Handle in release position)



Base and Flange mounting for RDN 10/40 Housing

RDN-40 Housing
RDC-40/15 Bayonet
for Ø40mm/1.50"(in)
Tooling Boom/Tubes

Internal urethane bumpers ensures a tight interface between the robot and tool sides

Air & electrical connections stay properly sequenced when tool is removed.

Additional electrical connectors available
RDN-40 and RDH electrical connectors must be ordered separately from Housing/Bayonet.

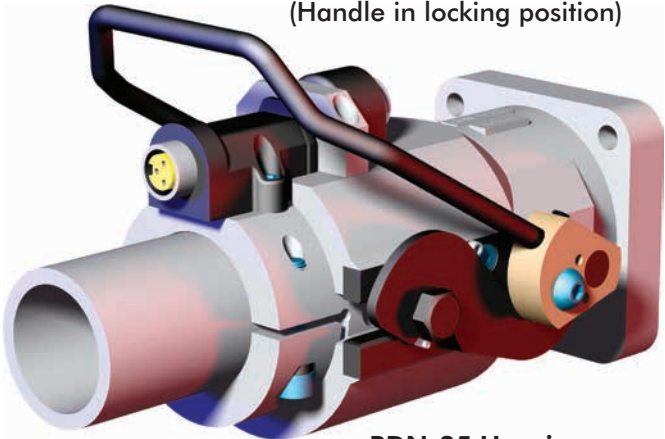
(Handle in locking position)



RDN-10 Housing
RDC-10/25M Bayonet
for Ø25mm/1.00"(in)
Tooling Boom/Tubes

Optional air port modules auto disconnect when handle is released

(Handle in locking position)



RDN-25 Housing
RDC-60/25 Bayonet
for Ø60mm/2.50"(in)
Tooling Boom/Tubes

BAYONETS FOR MANUAL TOOL CHANGERS

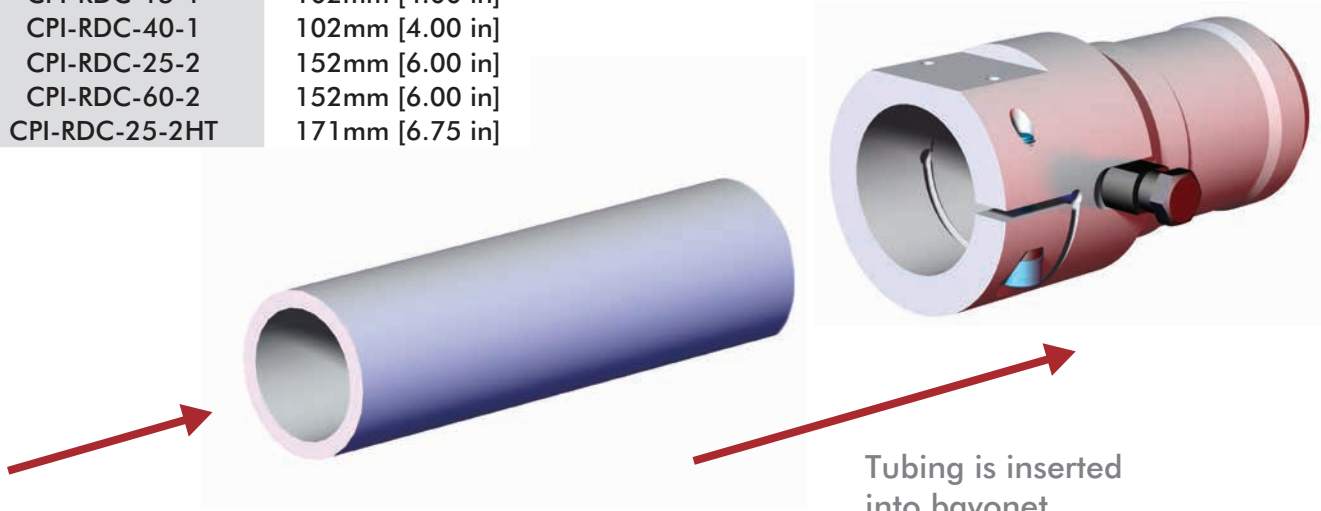
Manual Tool Changers | Bayonet & Boom Assembly Procedure | Product Overview

Overview:

The internal surface of the bayonet is tapered to lock the tubing in the position during hi-torque operations. Tubing must be inserted the proper distance to completely engage the taper.

Procedure:

Part Number	Depth
CPI-RDC-10-1	70mm [2.75 in]
CPI-RDC-25M-1	70mm [2.75 in]
CPI-RDC-15-1	102mm [4.00 in]
CPI-RDC-40-1	102mm [4.00 in]
CPI-RDC-25-2	152mm [6.00 in]
CPI-RDC-60-2	152mm [6.00 in]
CPI-RDC-25-2HT	171mm [6.75 in]



It is helpful to tap on the end of the tubing with a mallet until the tubing is seated firmly against the taper

Tubing is inserted into bayonet

RDN-10 DISCONNECT HOUSINGS

Manual Tool Changers | Flange Style Housing for RDC-10 Series Bayonets | Product Overview

Features:

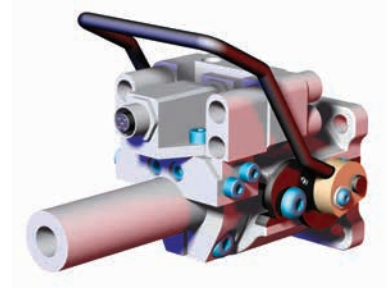
- 50.8mm [2.00 in.] Sq. Flange Mntg.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors
- Internal urethane rings eliminate vibration and seat the bayonet securely

Specifications:

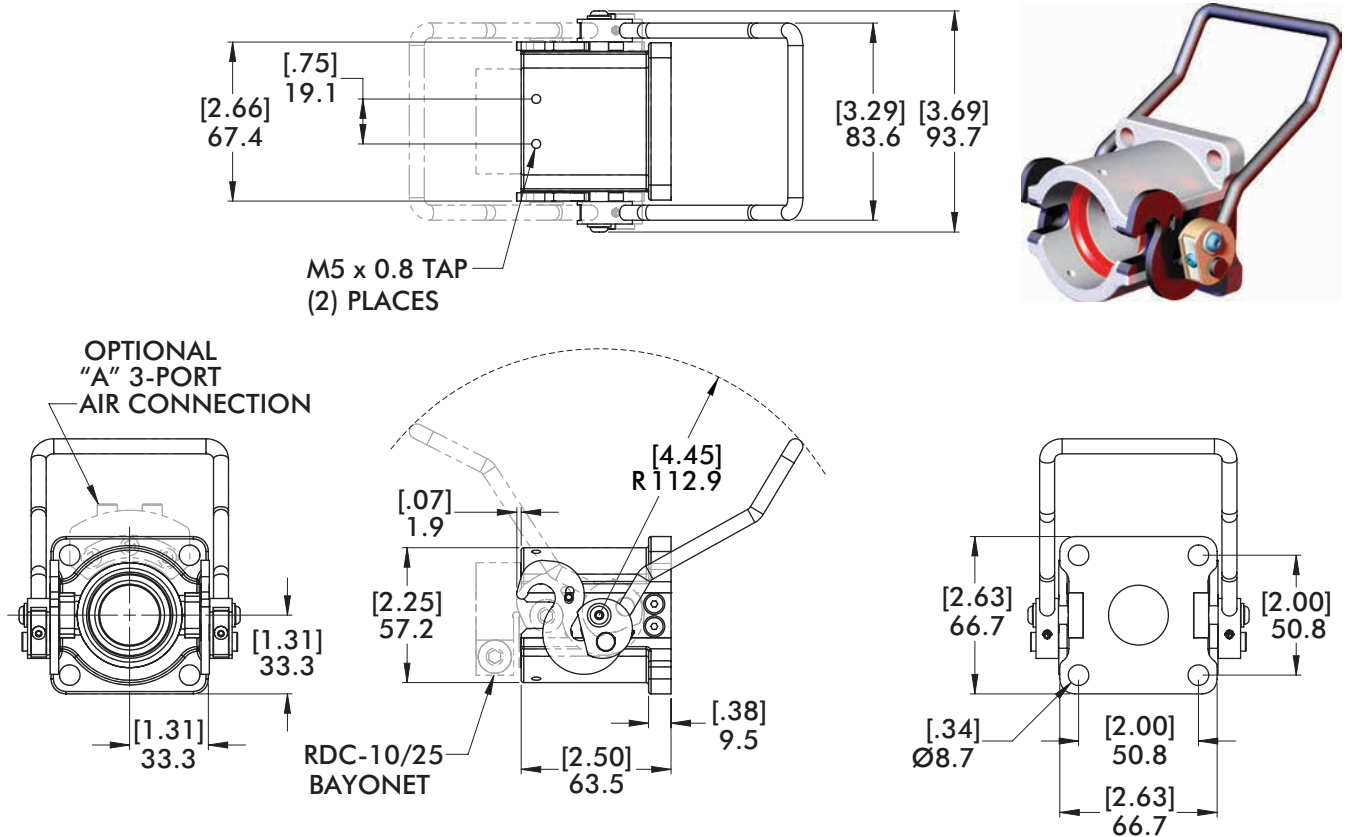
Max. Static Product Load:
47 N*m [35 ft-lb]

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

Weight:
0.63 kg [1.4 lb]



Dimensions

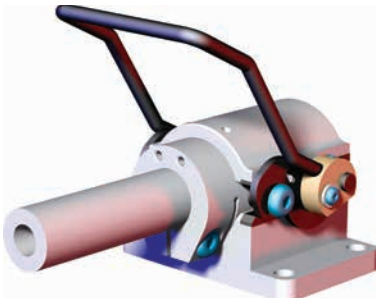


How To Order

	Model	Mounting	Air Port Connection	Electrical Connection
CPI	RDN-10	1F	4AS	5E
	"RDN-10" Ø25mm/1.00" Quick Disconnect Housing	"1F" Flange Type Mounting	"A" (3-Port Connector) "5A" (5-Port Connector) "4AS" (4-Port Connector) (Leave blank for No Options)	"5E" (5-Pin Connector) (Only available for "4AS" Option)

RDN-10 HOUSINGS

Manual Tool Changers | Base Mount Style for RDC-10 Series Bayonets | Product Overview



Specifications:

Max. Static Product Load: 47 N*m [35 ft-lb]

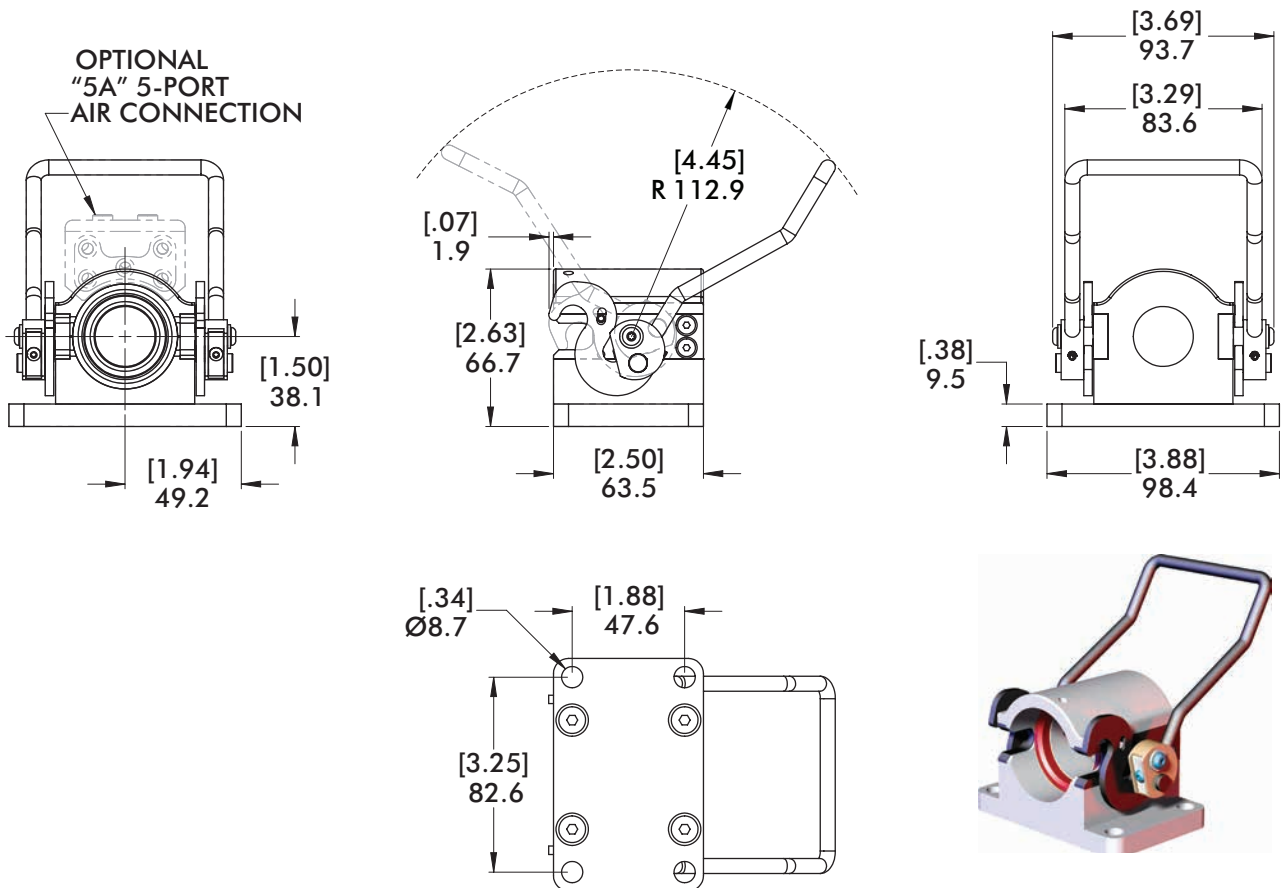
Material:
 Body: Aluminum
 Knuckles: Brass
 Handle and Hooks: Steel
 Inserts: Urethane

Weight: 0.82 kg [1.8 lb]

Features:

- 47.6mm x 82.6mm [1.88 in. x 3.25 in.] Base Mounting.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors
- Internal urethane rings eliminate vibration and seat the bayonet securely

Dimensions



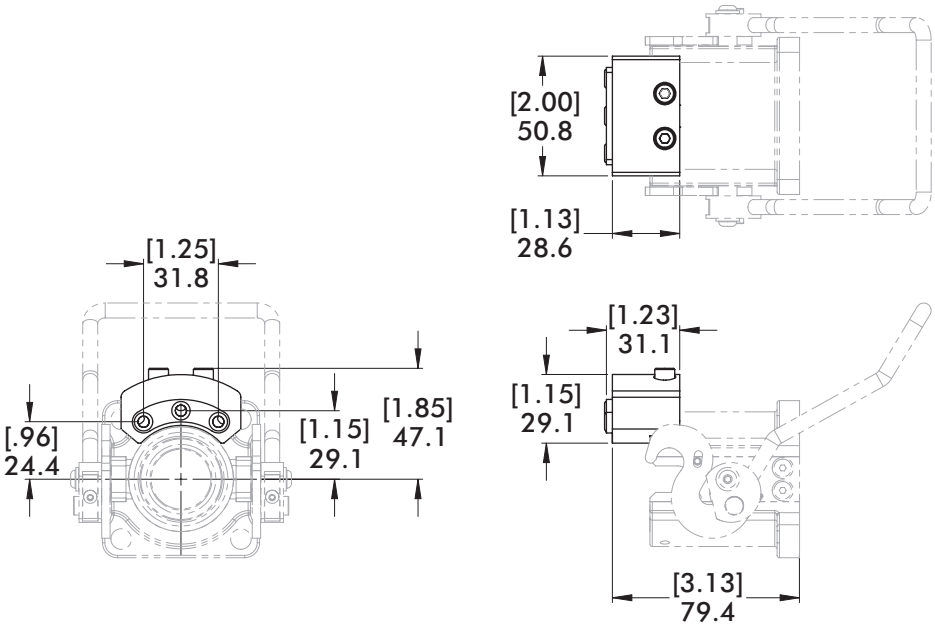
How To Order

	Model	Mounting	Air Port Connection	Electrical Connection
CPI	RDN-10	1B	4AS	5E
	 "RDN-10" Ø25mm/1.00" Quick Disconnect Housing	 "1B" Base Type Mounting	 "A" (3-Port Connector) "5A" (5-Port Connector) "4AS" (4-Port Connector) (Leave blank for No Options)	 "5E" (5-Pin Connector) (Only available for "4AS" Option)

AIR MANIFOLDS

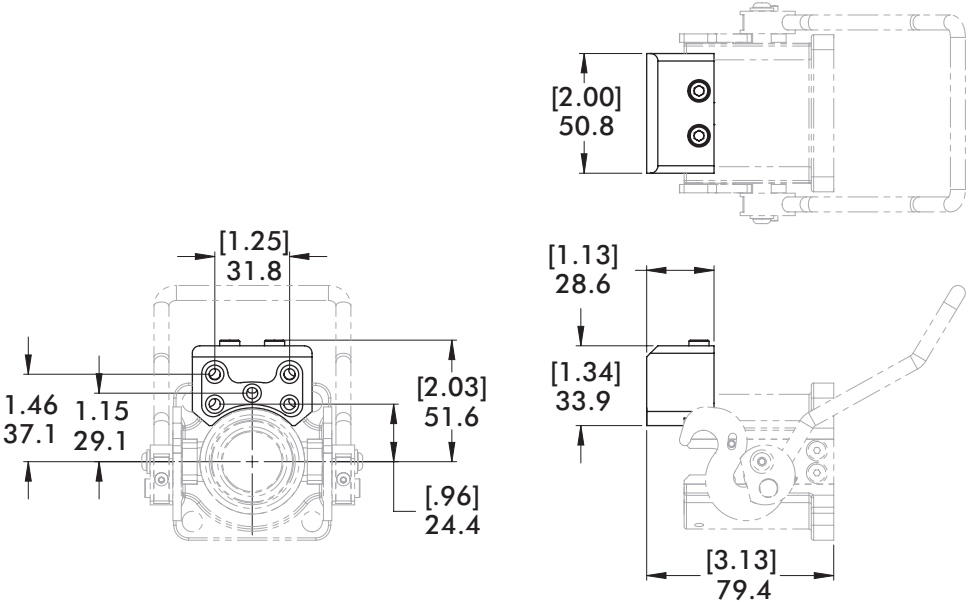
Manual Tool Changers | RDN-10 Disconnect Series | Dimensions

1A 3-Port Air Connection



REPLACEMENT PART
RDN-10-8

5A 5-Port Air Connection

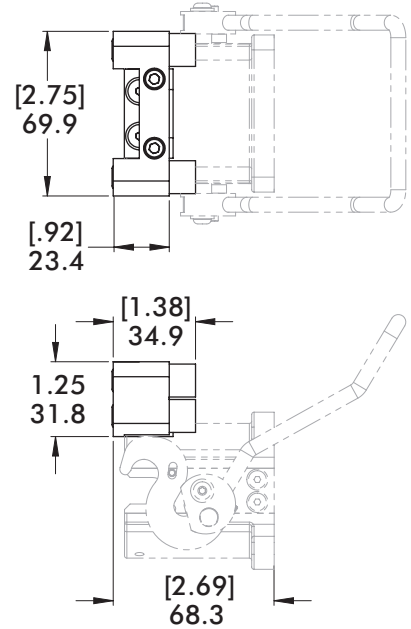
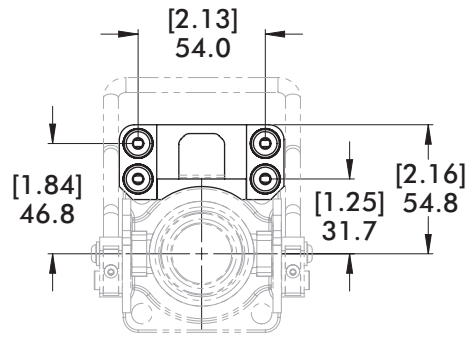
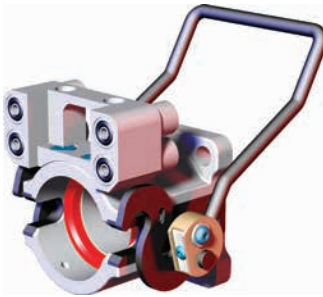


REPLACEMENT PART
RDN-10-9

AIR MANIFOLDS WITH OR WITHOUT ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-10 Disconnect Series | Dimensions

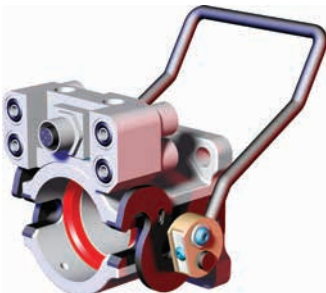
4AS 4-Port Air Connection with Shutoff



REPLACEMENT PART
CPI-RDN-10-4AS

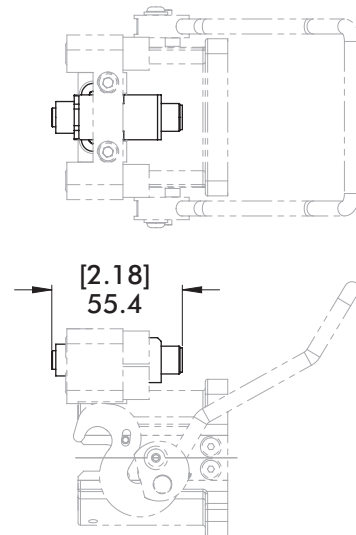
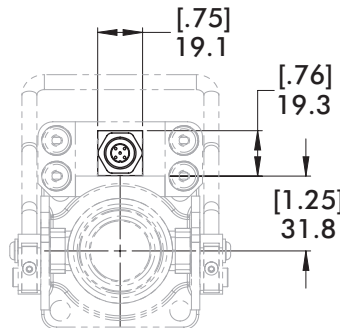
Air fittings
(4) Needed
RDN-AS-U18

5E 5-Pin Micro Electric Connection



See Page 17 for
Pin Configuration

REPLACEMENT PART
CPI-RDH-F5S-5MCM



RDC-10/25 SERIES BAYONETS

Manual Tool Changers | 25mm or 1.0" Booms | Product Overview

Features:

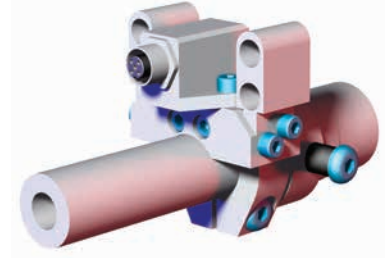
- Used in conjunction with the Quick Disconnect Housing to provide efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the bayonet.

Specifications:

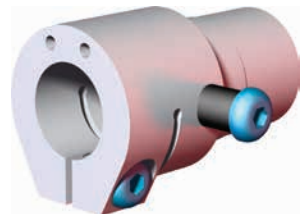
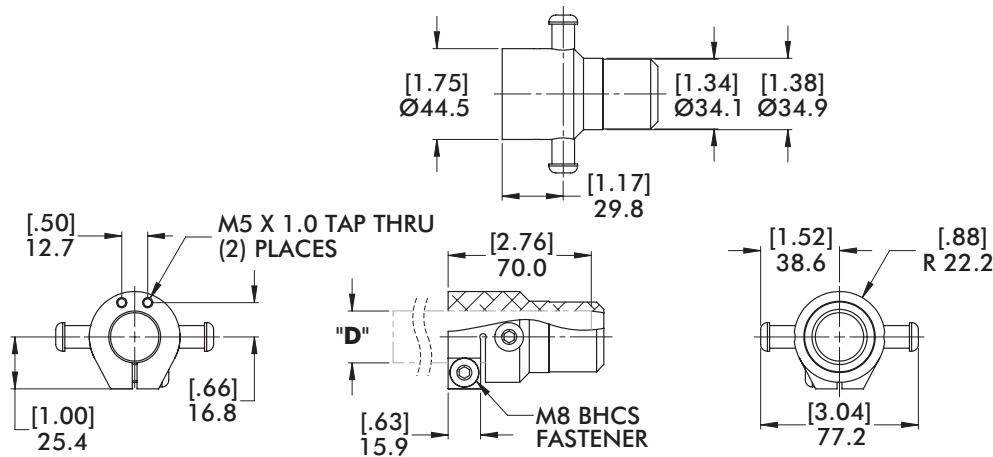
Max. Static Product Load:
47 N*m [35 ft-lb]

Material:
Body: Aluminum
Pins: Steel

Weight:
0.23 kg [0.5 lb]



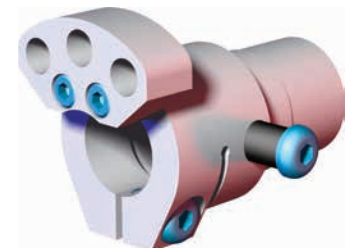
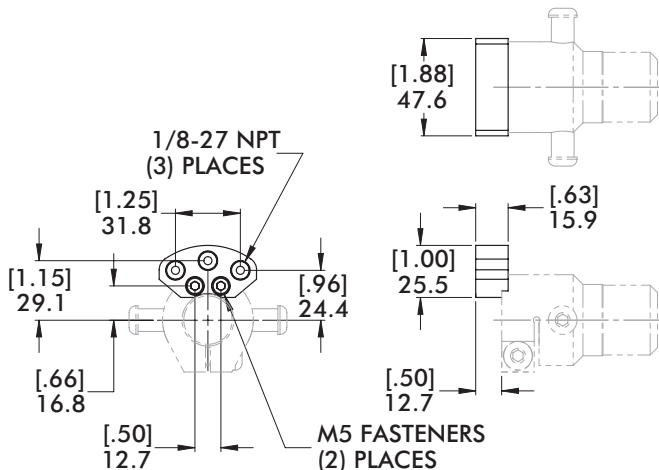
Dimensions



How To Order

CPI	Model	Boom/Tube (Ø) "D"	Air Port Connection	Electrical Connection
	RDC	10	4AS	5E
	"RDC" Quick Disconnect Bayonet	"10" 1.00"(in) "25M" 25mm	"1" "1A" "5A" "4AS" "1-4AS"	"5E" (5-Pin Connector) (Only available for "4AS or 1-4AS" Options)
			No Options (3-Port Connector) (5-Port Connector) (4-Port Connector-Imperial Only) (4-Port Connector-Metric Only)	

1A 3-Port Air Connection



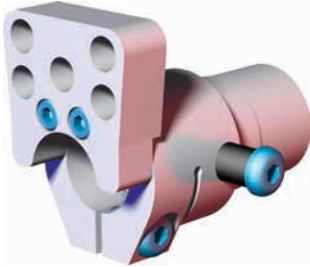
REPLACEMENT PART

RDC-10-3

AIR MANIFOLDS WITH OR WITHOUT ELECTRICAL CONNECTIONS

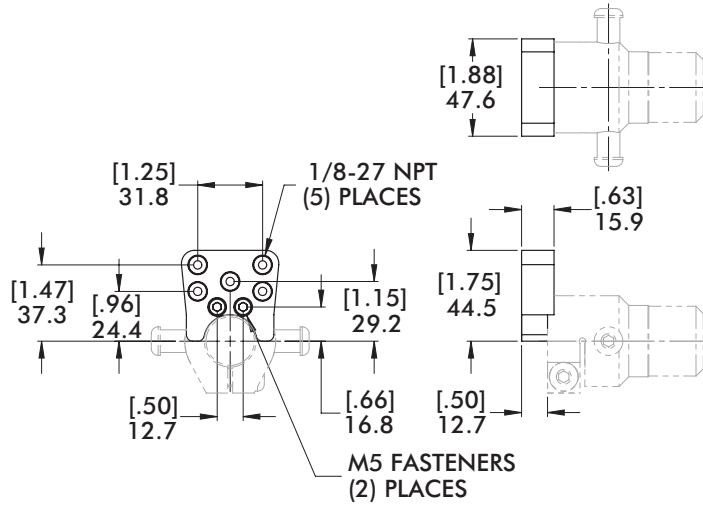
Manual Tool Changers | RDC-10/25 Series Bayonets | Dimensions

5A 5-Port Air Connection

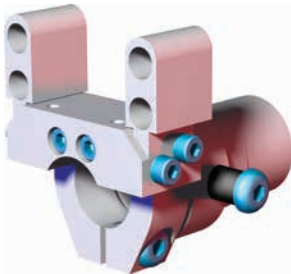


REPLACEMENT PART

RDC-10-5



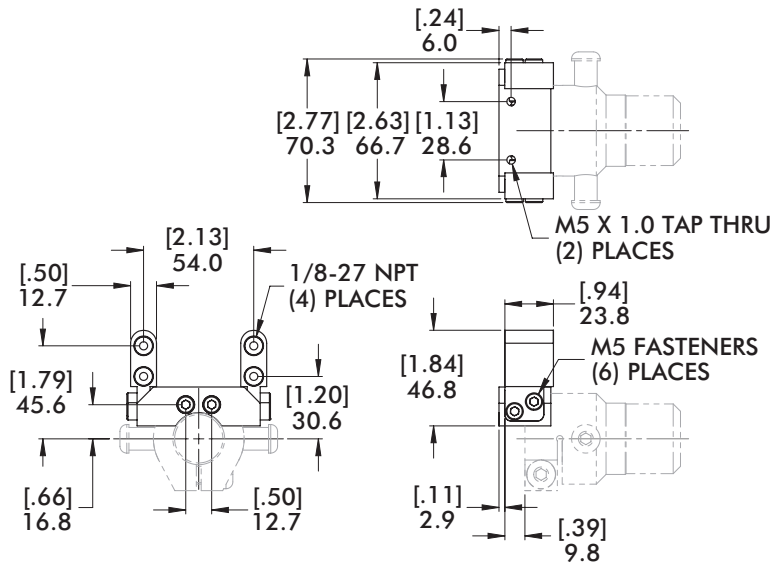
4AS 4-Port Air Connection with Shutoff



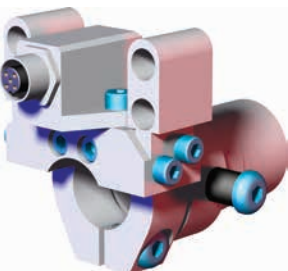
(2) Required

REPLACEMENT PART

RDC-10-4



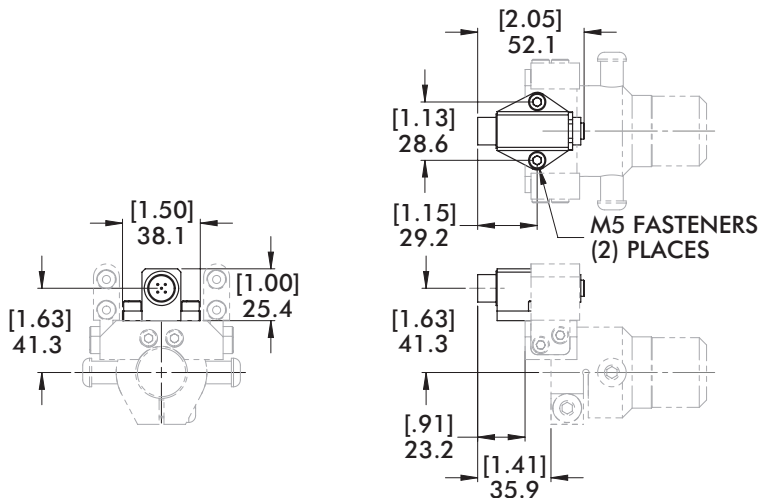
5E 5-Pin Micro Electric Connection



See Page 23 for Pin Configuration

REPLACEMENT PART

CPI-RDB-M5P-5MCF



RDN-40 DISCONNECT HOUSINGS

Manual Tool Changers | Flange Style Housing for RDC-40/150 Series Bayonets | Product Overview

Features:

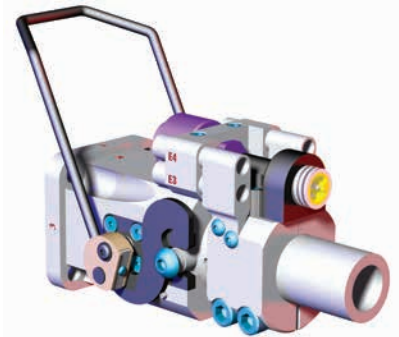
- 60.3mm [2.38 in.] Sq. Flange Mntg.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
- Internal urethane rings eliminate vibration and seat the bayonet securely.

Specifications:

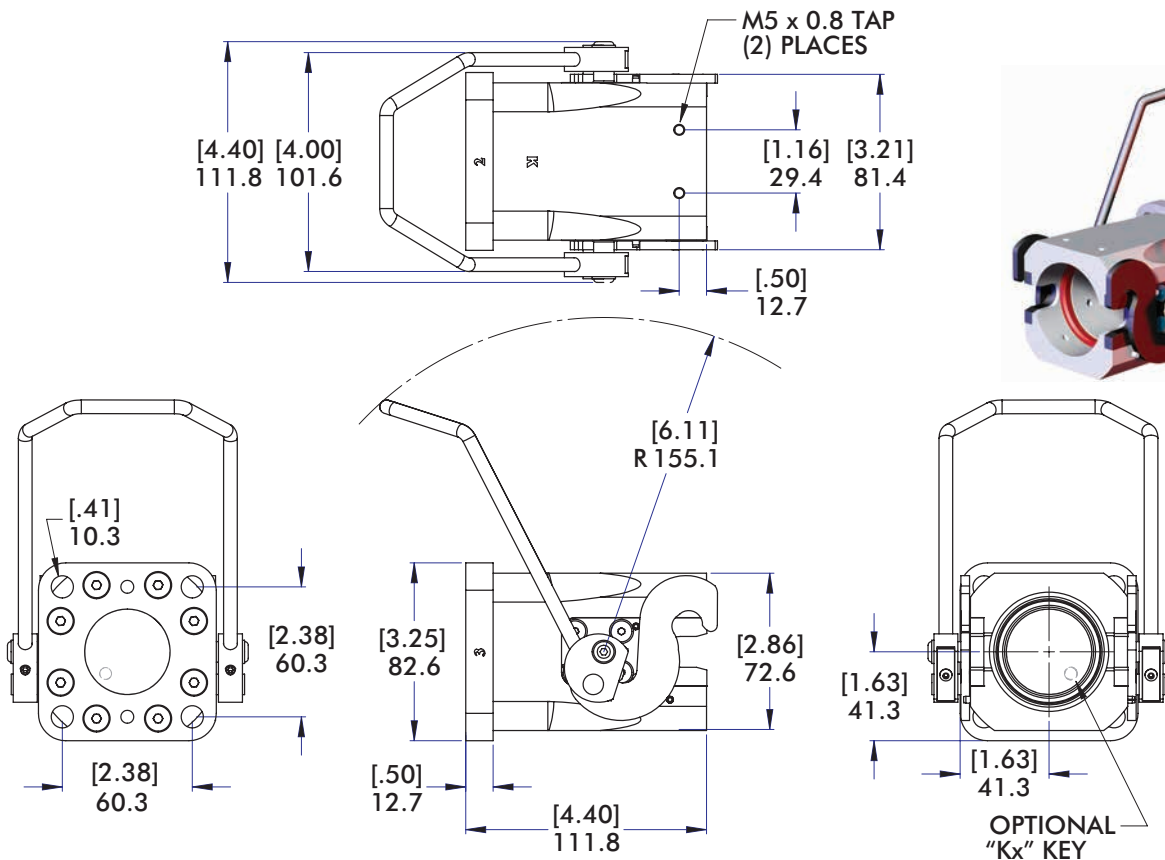
Max. Static Product Load:
305 N*m [225 ft-lb]

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

Weight:
1.5 kg [3.3 lb]



Dimensions



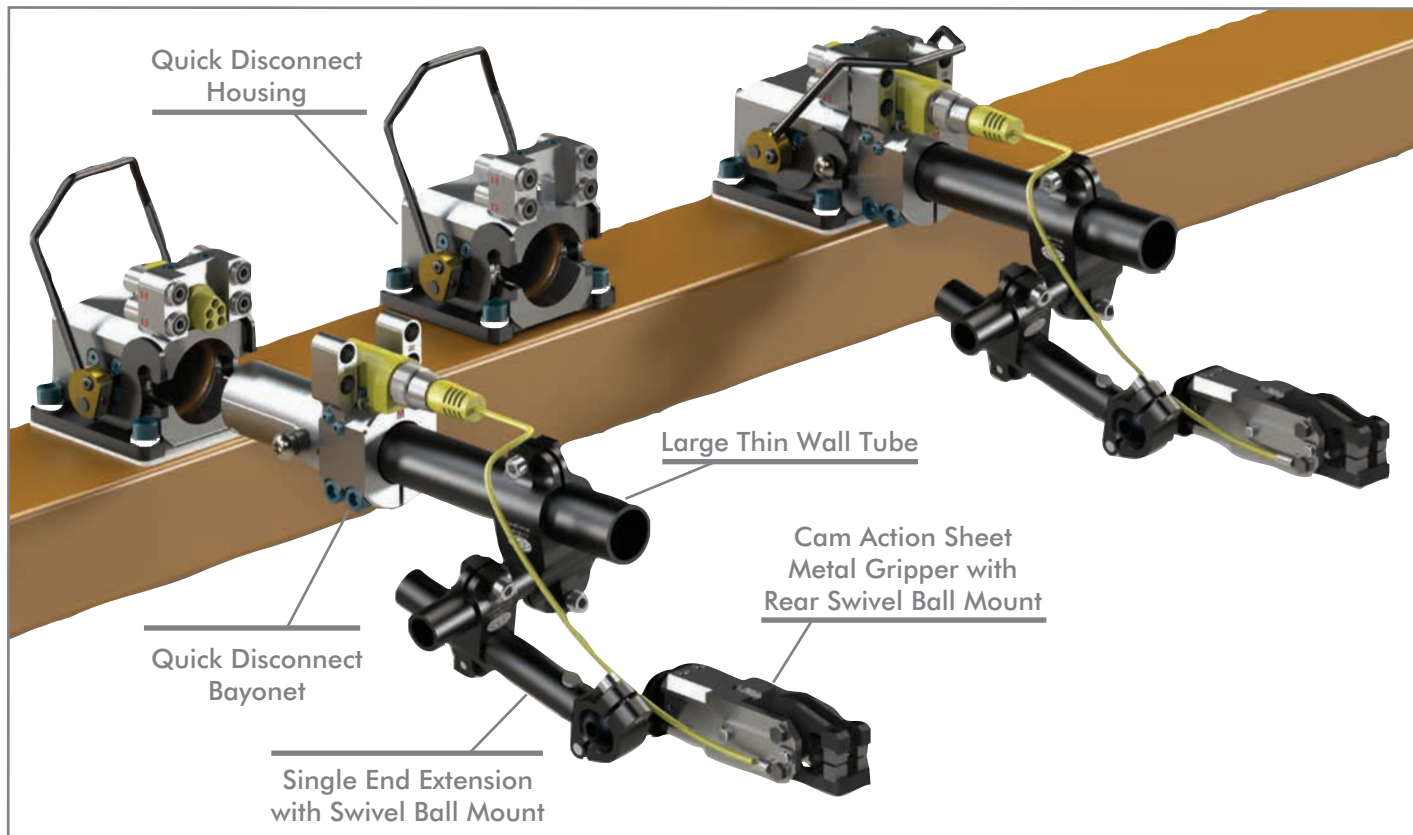
How To Order

Add for
"E4" or "E6"
Air Port
Connection
Only

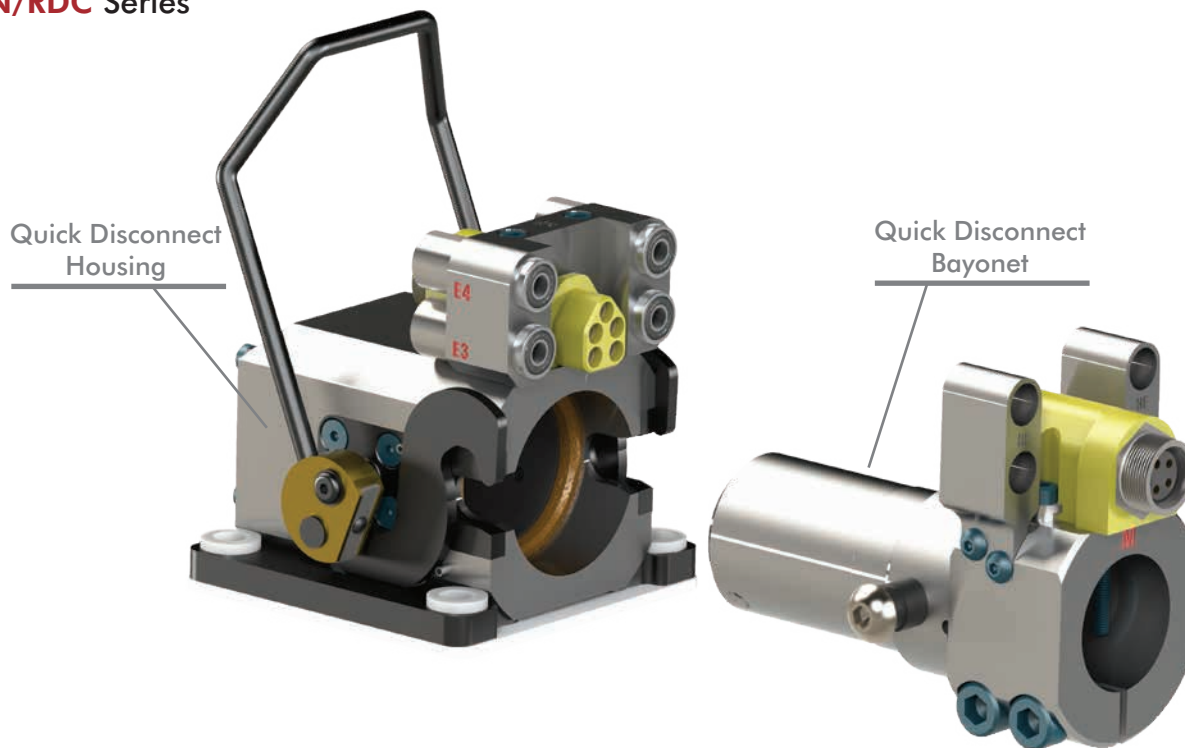
Model	Mounting	Air Port Connection	Key Position	Electrical Connection	Options
CPI — RDN-40	— 1F	— S4	— K2	— MC	— HF
"RDN-40" Ø40mm/1.50" Quick Disconnect Housing	"1F" Flange Type Mounting	"S4" (4-Port Internal) "E4" (4-Port External) "E6" (6-Port External) "SE4" (4-Port Int & Ext) (Leave blank for No Options)	"K1 (1-4)" "VWK (1-16)" (Leave blank for No Options)	"MC" (Micro 5-Pin) "MN" (Mini 3-Pin) (Leave blank for No Options)	

RDN-40 BASE MOUNT DISCONNECT HOUSINGS

Manual Tool Changers | Tri-Axis Rail Tooling Example



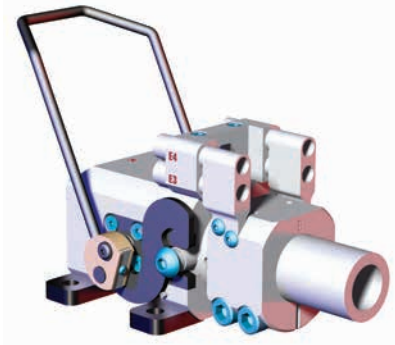
RDN/RDC Series



Model Number	Description
CPI-RDN-40-JB-E4-5MNM-HF-INS	Quick Disconnect Housing with 4-Port High Flow Air, 5-Pin Electric, Insulation
CPI-RDC-15-E4-5MNF-HF	Quick Disconnect Bayonet with 4-Port High Flow Air, 5-Pin Electric

RDN-40 DISCONNECT HOUSINGS

Manual Tool Changers | Base Mount Housing for RDC-40/150 Series Bayonets | Product Overview



Specifications:

Max. Static Product Load:
305 N*m [225 ft-lb]

Material:

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

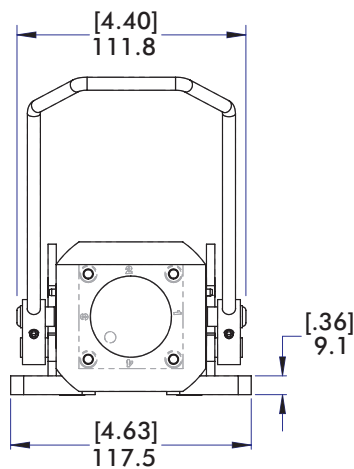
Weight:

1.4 kg [3.1 lb]

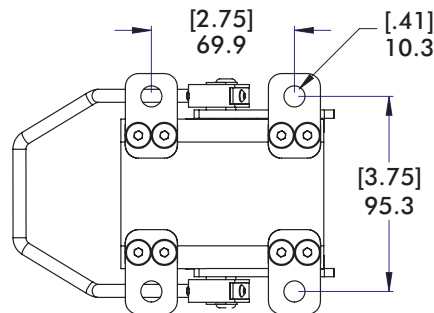
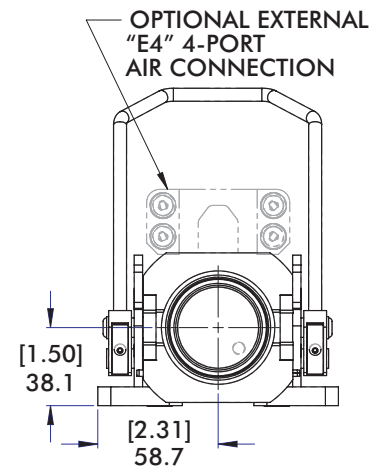
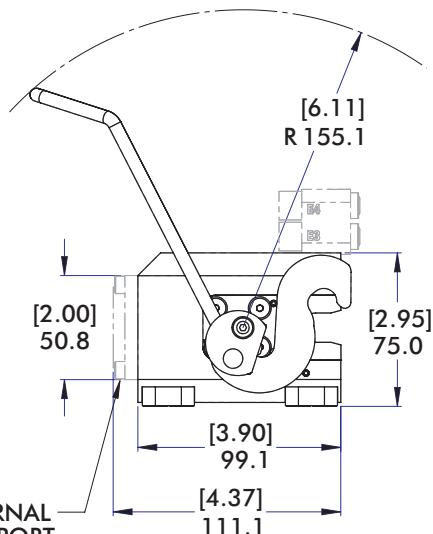
Features:

- 70mm x 95.3mm [2.75 in. x 3.75 in.] Base Mounting.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
- Internal urethane rings eliminate vibration and seat the bayonet securely.

Dimensions, How To Order



OPTIONAL INTERNAL
"Kx" KEY/"S4" 4-PORT
AIR CONNECTION



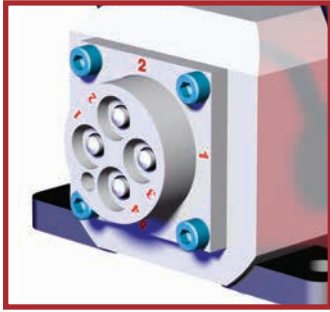
How To Order

CPI	RDN-40	1B	S4	K2	MC	HF	Add for "E4" or "E6" Air Port Connection Only
	"RDN-40" Ø40mm/1.50" Quick Disconnect Housing	"1B" Base Type Mounting	"S4" "E4" "E6" "SE4"	"K (1-4)" "VWK (1-16)" (Leave blank for No Options)	"MC" (Micro 5-Pin) "MN" (Mini 3-Pin) (Leave blank for No Options)		
			(Leave blank for No Options)				

TOOLING ERROR PROOF KEY AND AIR PORTS

Manual Tool Changers | RDN-40 Flange Mount Disconnect Housings | Dimensions

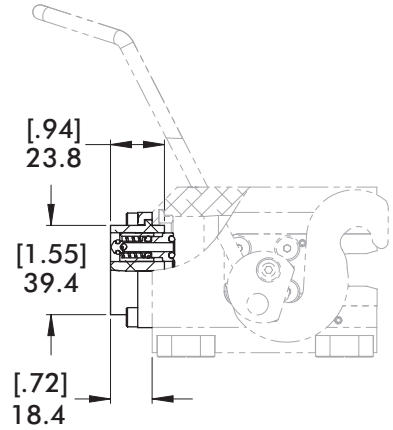
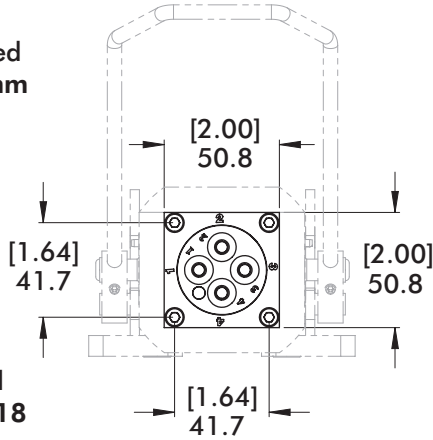
S4 4-Port Internal Air Connection for Base Style Mounting



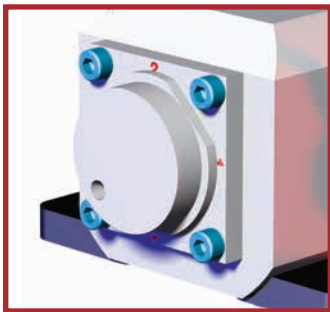
REPLACEMENT PART
RDN-40-10-IAB

Dowels
(1) Needed
M6 x 25mm

Air fittings
(4) Needed
RDN-SAS-U18

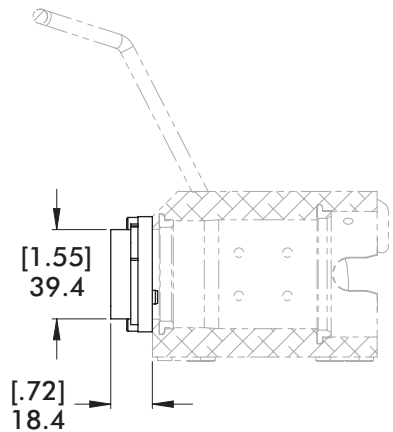
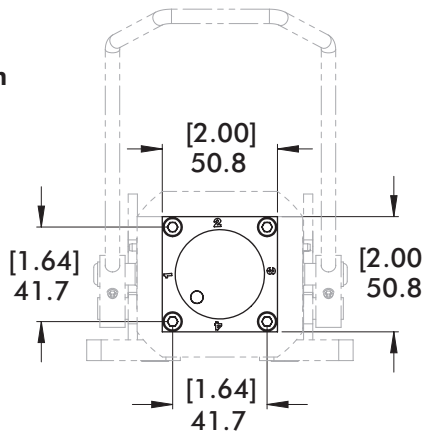


Kx Locating Key for Base Style Mounting

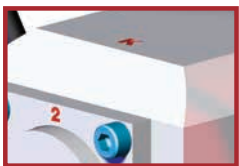


REPLACEMENT PART
RDN-40-10-IKB

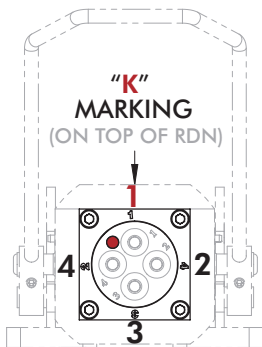
Dowels
(1) Needed
M6 x 25mm



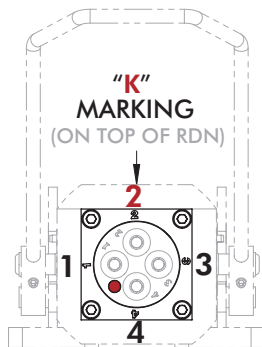
S4 and Kx Internal Key Position for Base Style Mounting



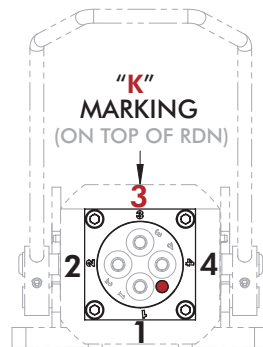
BASE MOUNT RING
(1) Needed
RDN-40-3-MR



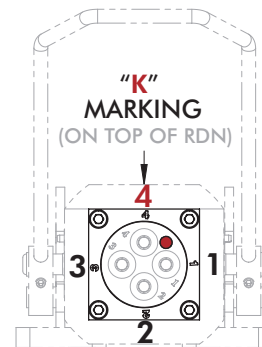
"K1" POSITION



"K2" POSITION



"K3" POSITION

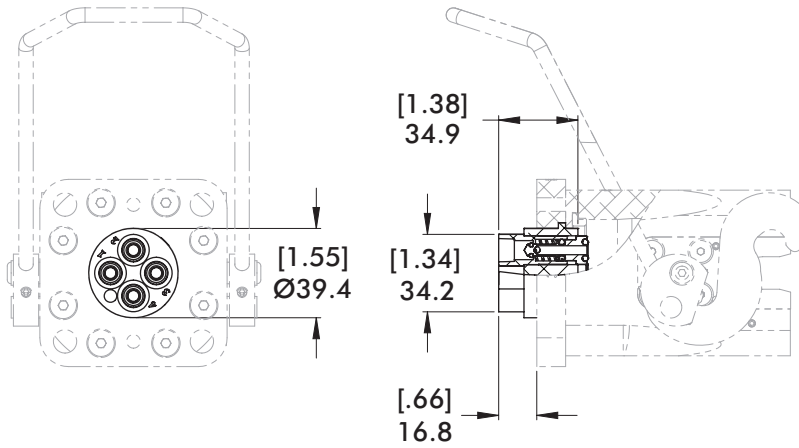


"K4" POSITION

TOOLING ERROR PROOF KEY AND AIR PORTS

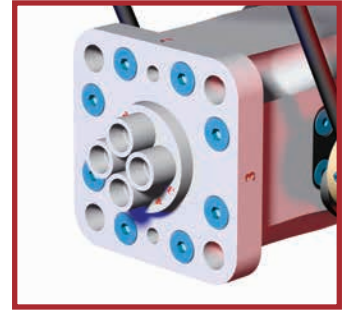
Manual Tool Changers | RDN-40 Flange Mount Disconnect Housings | Mounting

S4 4-Port Internal Air Connection for Flange Style Mounting



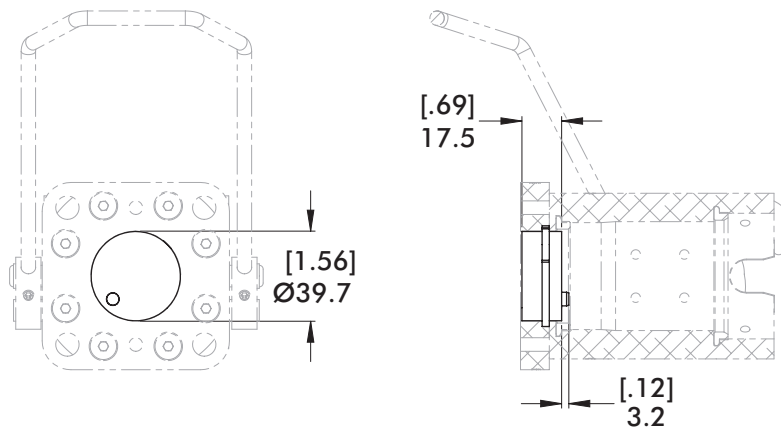
Dowels
(1) Needed
M6 x 25mm

Air fittings
(4) Needed
RDN-AS-U18

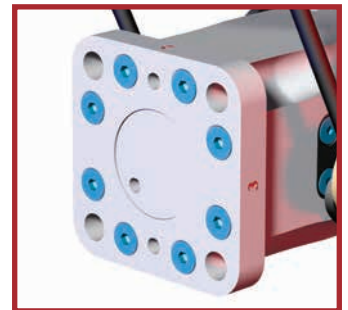


REPLACEMENT PART
RDN-40-10-IAB

Kx Locating Key for Flange Style Mounting

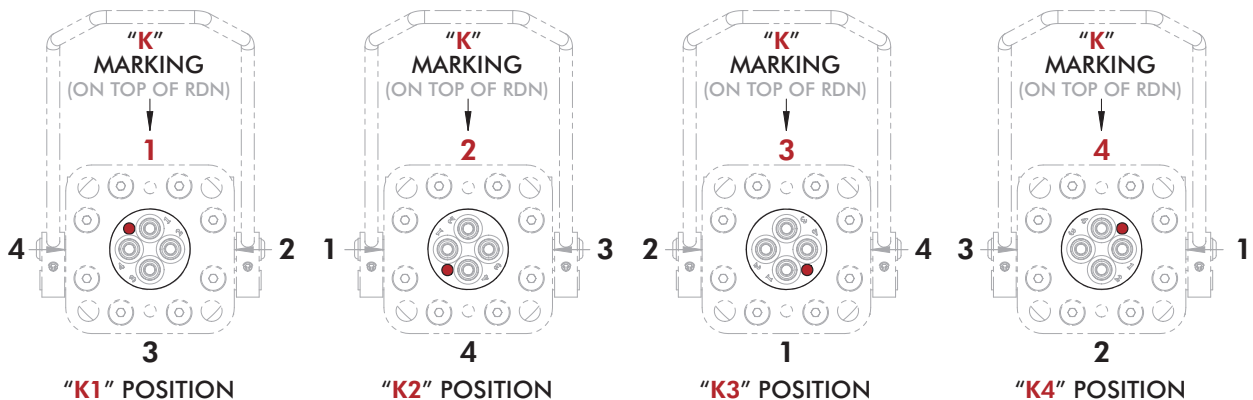
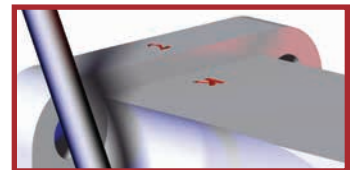


Dowels
(1) Needed
M6 x 25mm



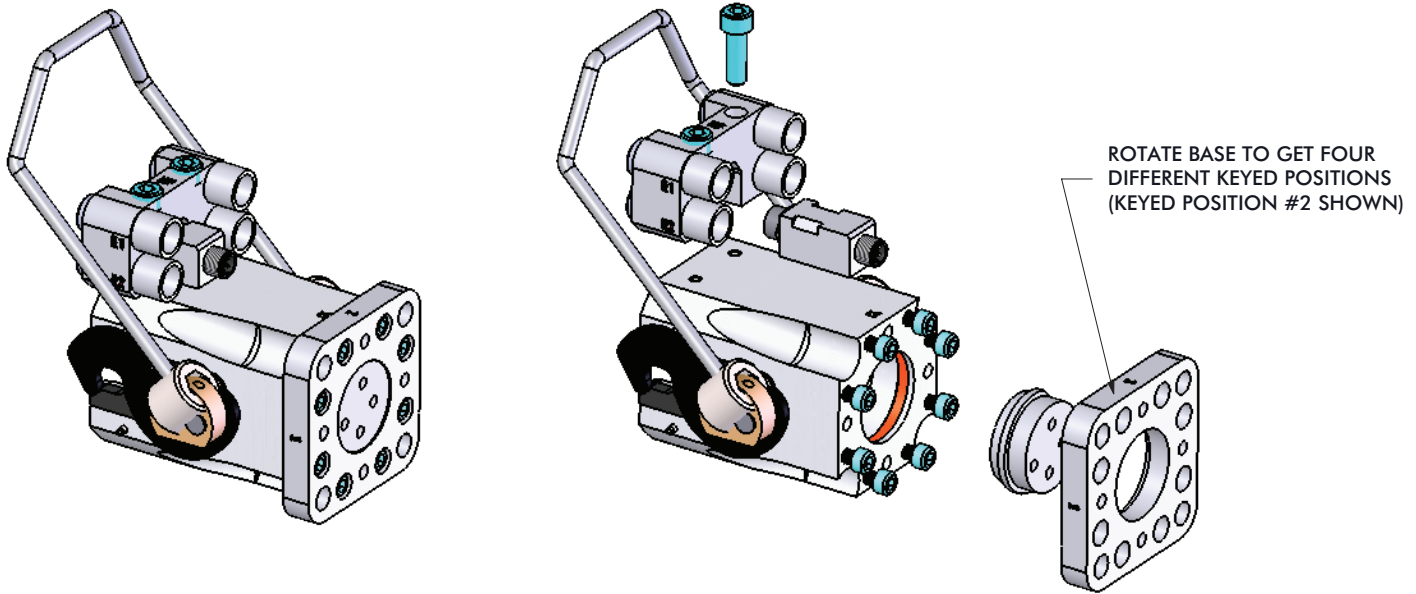
REPLACEMENT PART
RDN-40-10-IKB

S4 and Kx Internal Key Position for Flange Style Mounting

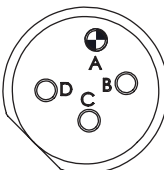
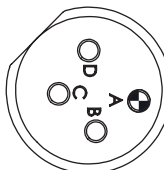
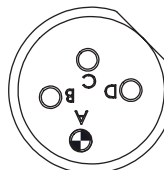
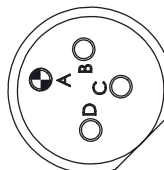
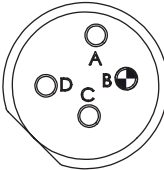
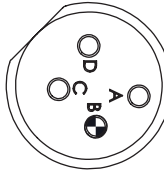
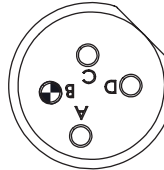
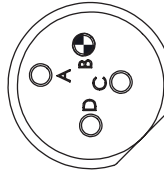
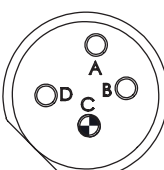
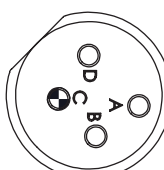
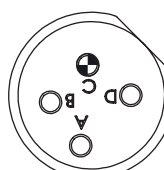
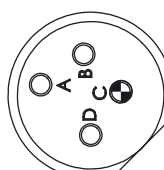
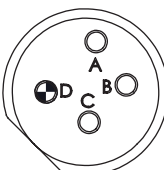
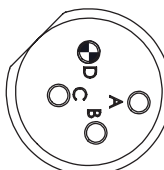
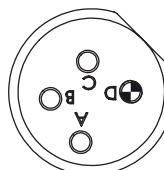
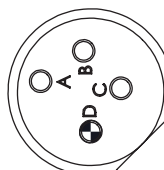


TOOLING ERROR PROOF KEY POSITIONS

Manual Tool Changers | Key Position Callout Chart



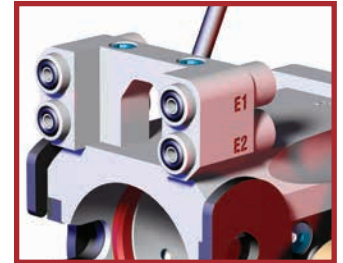
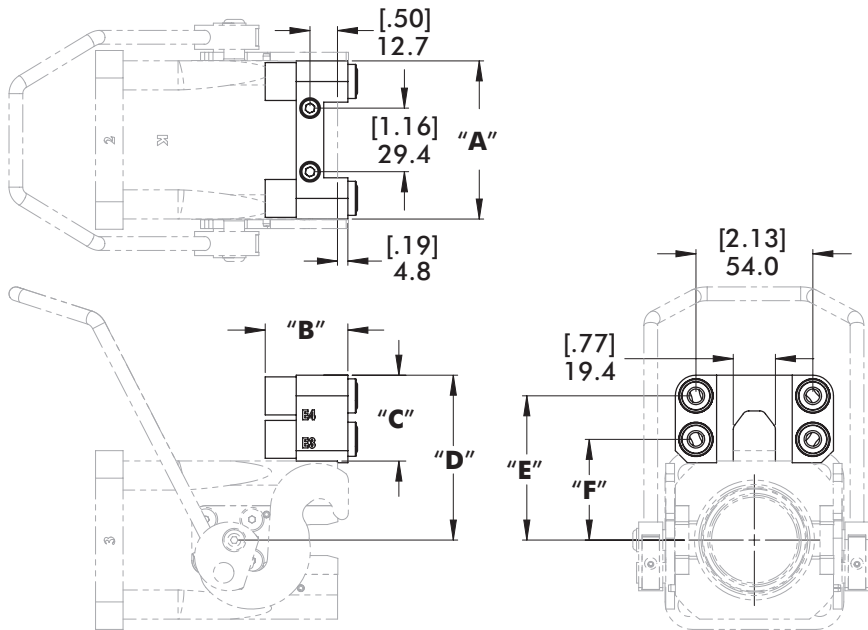
VIEWED FROM FRONT OF HOUSING

	POSITION #1	POSITION #2	POSITION #3	POSITION #4
DOWEL IN HOLE A	 VWK1	 VWK5	 VWK9	 VWK13
DOWEL IN HOLE B	 VWK2	 VWK6	 VWK10	 VWK14
DOWEL IN HOLE C	 VWK3	 VWK7	 VWK11	 VWK15
DOWEL IN HOLE D	 VWK4	 VWK8	 VWK12	 VWK16

AIR PORTS

Manual Tool Changers | RDN-40 Series Disconnect Housing | Dimensions

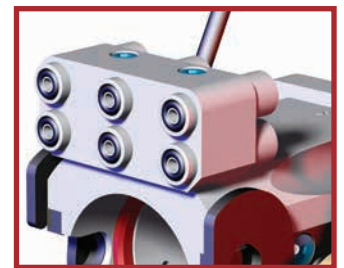
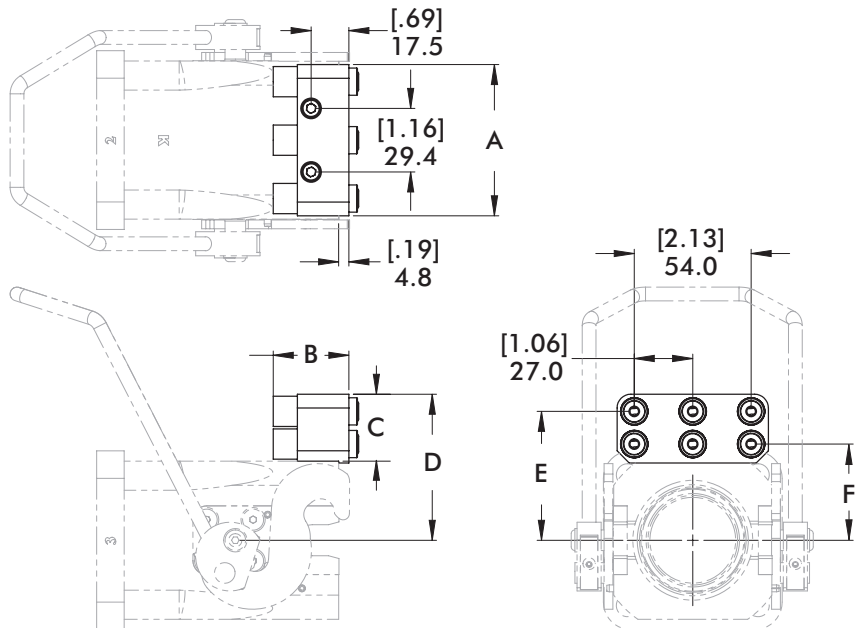
E4 4-Port External Air Connection



Air fittings
(4) Included
RDN-AS-U18-Standard
RDN-AS-U14-High Flow

ORDER OPTION	REPLACEMENT PART	"A"	"B"	"C"	"D"	"E"	"F"	WEIGHT
"E4" (Standard High Flow) (Replacement for "E4" Legacy Applications only)	CPI-RDN-40-4AS-HF	[2.88] 73.0	[1.50] 38.1	[1.56] 39.6	[3.00] 76.1	[2.62] 66.6	[1.83] 46.5	[0.38 lb] 0.23 kg
	CPI-RDN-40-4AS	[2.75] 69.9	[1.38] 34.9	[1.22] 31.0	[2.66] 67.5	[2.34] 59.5	[1.75] 44.4	[0.23 lb] 0.10 kg

E6 6-Port External Air Connection



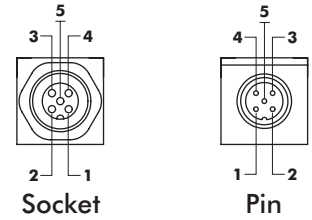
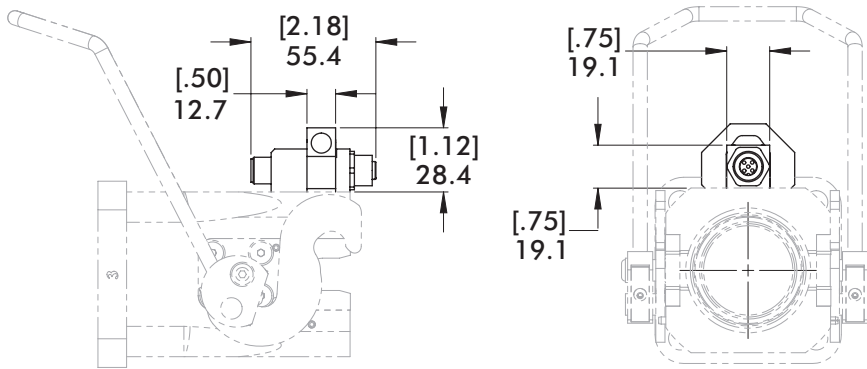
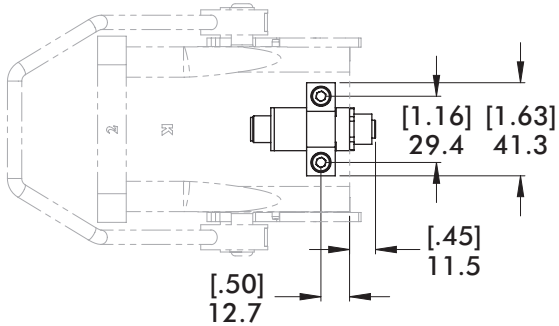
Air fittings
(6) Included
RDN-AS-U18-Standard
RDN-AS-U14-High Flow

ORDER OPTION	REPLACEMENT PART	"A"	"B"	"C"	"D"	"E"	"F"	WEIGHT
"E6" (Standard High Flow) (Replacement for "E6" Legacy Applications only)	CPI-RDN-40-10-6P-HF	[3.00] 76.2	[1.5] 38.1	[1.59] 40.5	[3.03] 76.9	[2.69] 68.3	[1.87] 47.5	[0.54 lb] 0.25 kg
	RDN-40-10-6AS	[2.75] 69.9	[1.38] 34.9	[1.22] 31	[2.66] 67.5	[2.43] 59.5	[1.75] 44.4	[0.37 lb] 0.17 kg

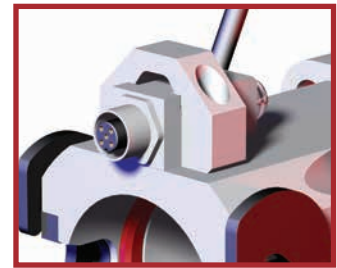
ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-40 Series Disconnect Housings | Dimensions

MC 5-Pin Micro Electric Connection



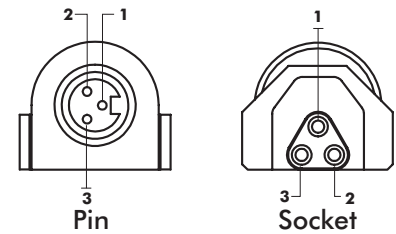
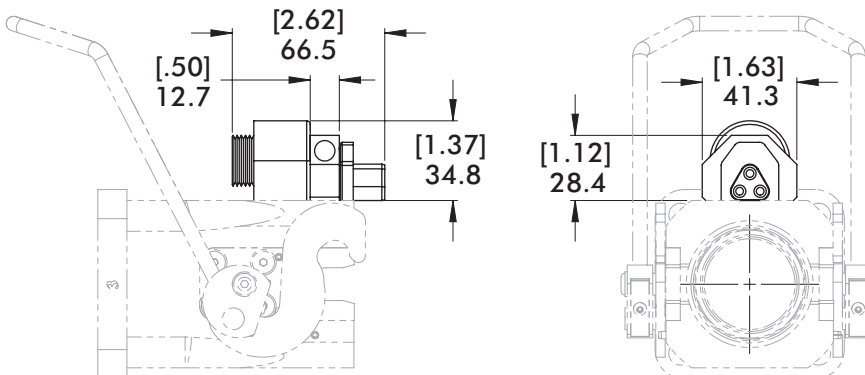
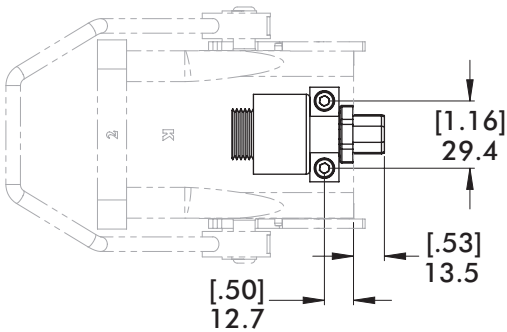
SOCKET #1	PIN #1
SOCKET #2	PIN #2
SOCKET #3	PIN #3
SOCKET #4	PIN #4
SOCKET #5	PIN #5



Part Number

Plug & Strap	CPI-RDH-F5S-5MCM
Plug	RDH-F5S-5MCM
Strap	540-22005

MN 3-Pin Mini Electric Connection



SOCKET #1	PIN #1
SOCKET #2	PIN #2
SOCKET #3	PIN #3



REPLACEMENT PART

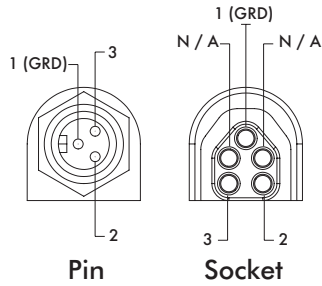
CPI-TTH-F3S-3B3

ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-40 Series Disconnect Housings | Dimensions

5-Pin Mini Electric Connection

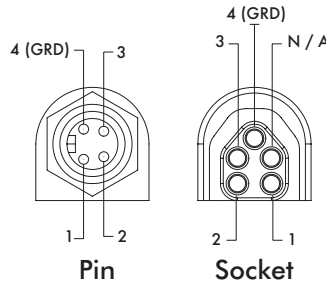
CPI-RDN-40-F5S-3MNM



SOCKET #1	GREEN	PIN #1
SOCKET #2	BLACK	PIN #2
SOCKET #3	WHITE	PIN #3
N / A		PIN #3
N / A		

PLUG COLOR: BLACK

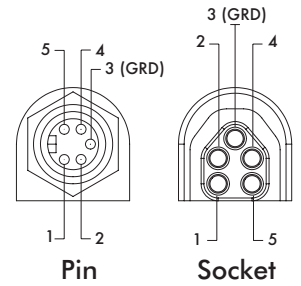
CPI-RDN-40-F5S-4MNM



SOCKET #1	BLACK	PIN #1
SOCKET #2	WHITE	PIN #2
SOCKET #3	RED	PIN #2
SOCKET #4	GREEN	PIN #3
N / A		PIN #4

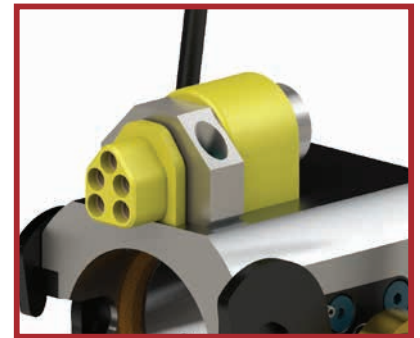
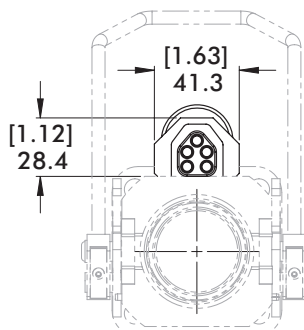
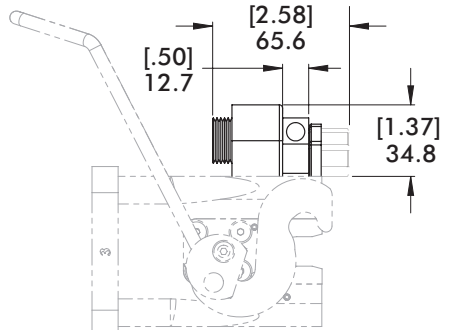
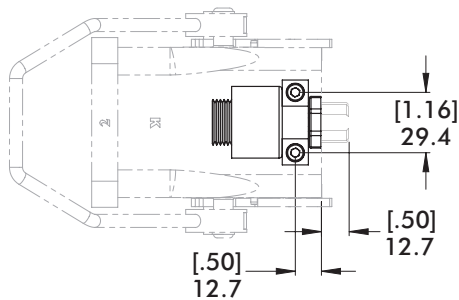
PLUG COLOR: GREEN

CPI-RDN-40-F5S-5MNM

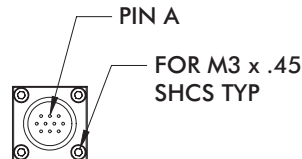
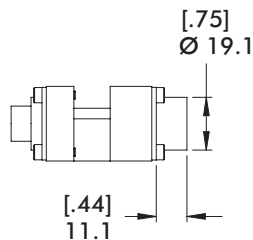
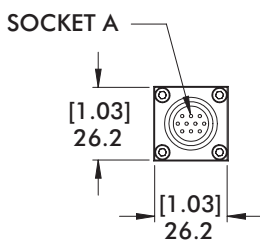
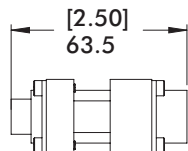


SOCKET #1	WHITE	PIN #1
SOCKET #2	RED	PIN #2
SOCKET #3	GREEN	PIN #3
SOCKET #4	ORANGE	PIN #4
SOCKET #5	BLACK	PIN #5

PLUG COLOR: YELLOW



Strap not included



10-Pin Amphenol

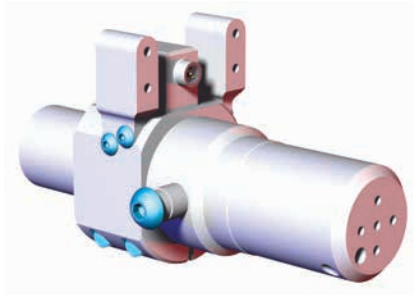


REPLACEMENT PART

CPI-RDN-40-5-10

RDC SERIES BAYONET

Manual Tool Changers | 40mm / 1.50" Diameter Booms | Product Overview



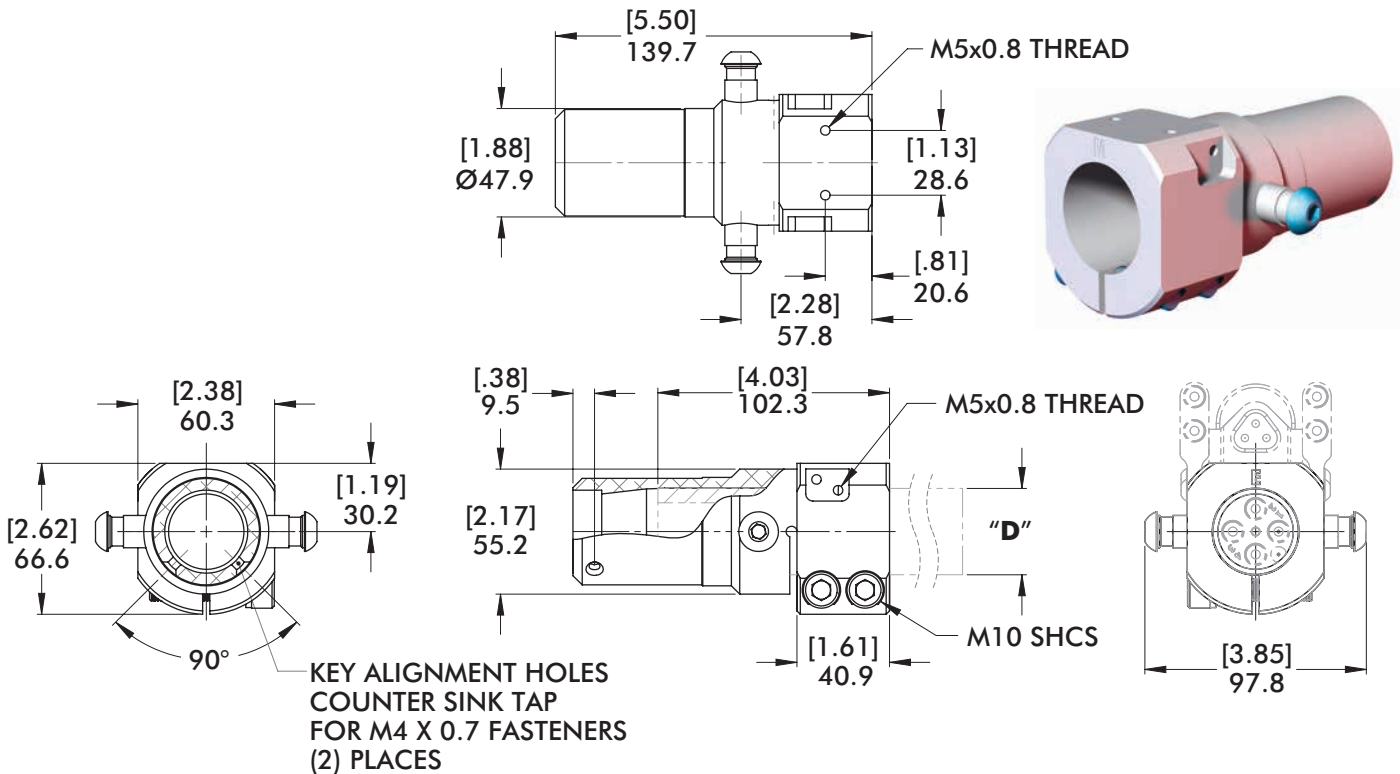
Features:

- Used in conjunction with the Quick Disconnect Housing to provide efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the housing.
- Optional internal key positioning prevents bayonet from being inserted in the wrong orientation.

Specifications:

Max. Static Product Load:
305 N*m [225 ft-lb]
Material:
Body: Aluminum
Pins: Steel
Weight:
0.69 kg [3.5 lb]

Dimensions



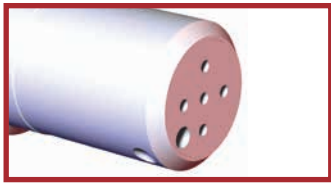
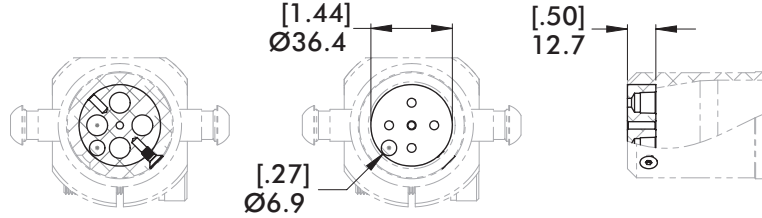
How To Order

Model	Boom/Tube (Ø) "D"	Air Port Connection	Key Position	Electrical Connection	Add for "E4" or "E6" Air Port Connection Only
CPI - RDC	40	S4	K1	MC	HF
"RDC" Quick Disconnect Bayonet	"1510" 1.00" (in) "15" 1.50" (in) "40" 40mm Add "-1" after Boom/Tube (Ø) for No Options	"S4" (4-Port Internal) "E4" (4-Port External) "E6" (6-Port External) "SE4" (4-Port Int & Ext) (Leave blank for No Options)	"K (1-4)" "VWK (1-16)" (Leave blank for No Options)	"MC" (Micro 5-Pin) "MN" (Mini 3-Pin) (Leave blank for No Options)	

TOOLING ERROR PROOF KEYS

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

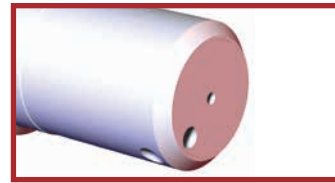
S4 4-Port Internal Air Connection and Kx Locating Key



"S4" 4-Port Internal Air Connection

REPLACEMENT PART

RDC-40-4-IAB

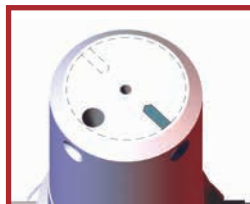
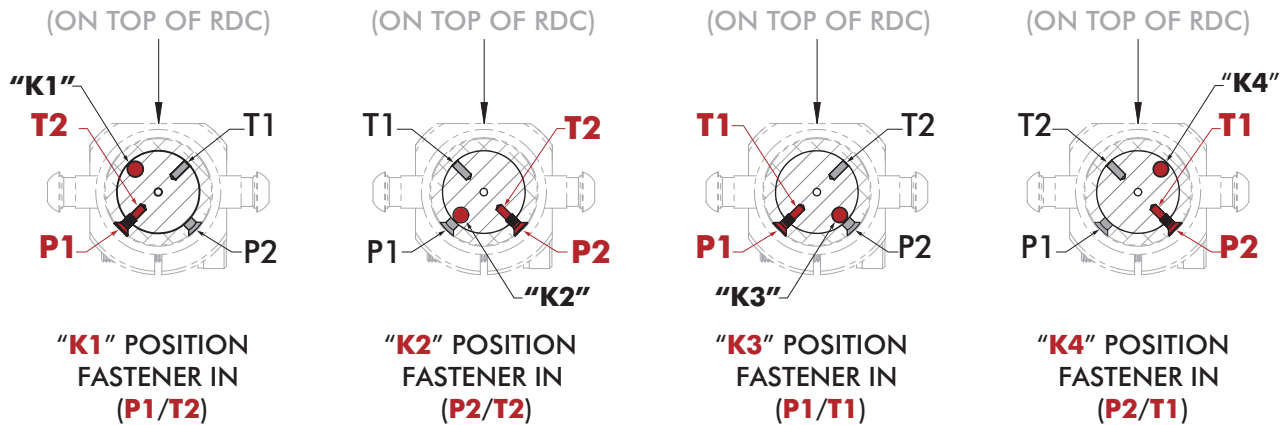


"Kx" Locating Key
(x) Refers to Position

REPLACEMENT PART

RDC-40-4-IKB

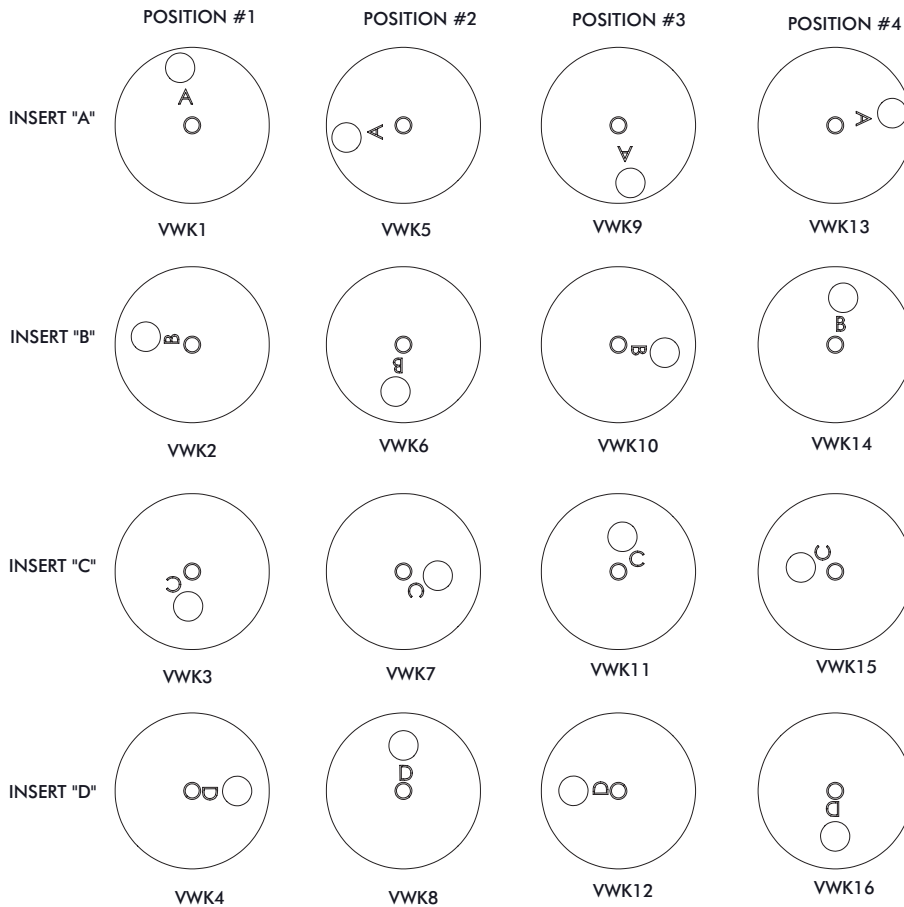
S4 and Kx Internal Key Position



TOOLING ERROR PROOF KEY POSITIONS

Manual Tool Changers | RDC-40/150 Series Bayonets

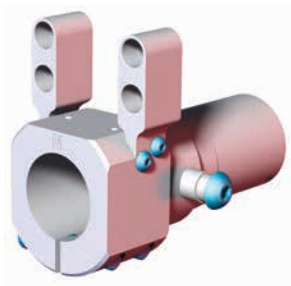
ASSEMBLY #	KEY POSITION #	KEY BLOCK #	INSERT	POSITION
CPI-RDC-40-E4-VWK1-MC-HF	VWK1	RDC-40-4-IKB-16-KA1-4	A	1
CPI-RDC-40-E4-VWK2-MC-HF	VWK2	RDC-40-4-IKB-16-KB1-4	B	1
CPI-RDC-40-E4-VWK3-MC-HF	VWK3	RDC-40-4-IKB-16-KC1-4	C	1
CPI-RDC-40-E4-VWK4-MC-HF	VWK4	RDC-40-4-IKB-16-KD1-4	D	1
CPI-RDC-40-E4-VWK5-MC-HF	VWK5	RDC-40-4-IKB-16-KA1-4	A	2
CPI-RDC-40-E4-VWK6-MC-HF	VWK6	RDC-40-4-IKB-16-KB1-4	B	2
CPI-RDC-40-E4-VWK7-MC-HF	VWK7	RDC-40-4-IKB-16-KC1-4	C	2
CPI-RDC-40-E4-VWK8-MC-HF	VWK8	RDC-40-4-IKB-16-KD1-4	D	2
CPI-RDC-40-E4-VWK9-MC-HF	VWK9	RDC-40-4-IKB-16-KA1-4	A	3
CPI-RDC-40-E4-VWK10-MC-HF	VWK10	RDC-40-4-IKB-16-KB1-4	B	3
CPI-RDC-40-E4-VWK11-MC-HF	VWK11	RDC-40-4-IKB-16-KC1-4	C	3
CPI-RDC-40-E4-VWK12-MC-HF	VWK12	RDC-40-4-IKB-16-KD1-4	D	3
CPI-RDC-40-E4-VWK13-MC-HF	VWK13	RDC-40-4-IKB-16-KA1-4	A	4
CPI-RDC-40-E4-VWK14-MC-HF	VWK14	RDC-40-4-IKB-16-KB1-4	B	4
CPI-RDC-40-E4-VWK15-MC-HF	VWK15	RDC-40-4-IKB-16-KC1-4	C	4
CPI-RDC-40-E4-VWK16-MC-HF	VWK16	RDC-40-4-IKB-16-KD1-4	D	4



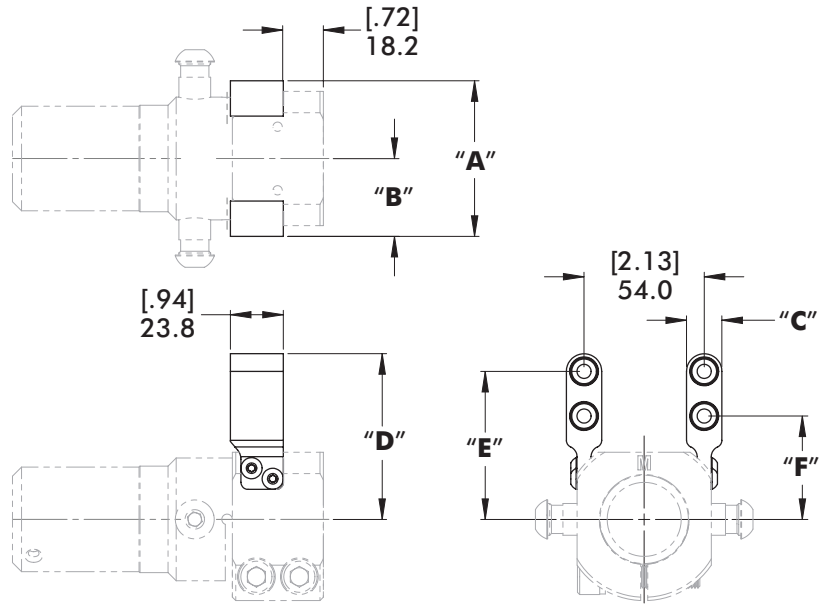
EXTERNAL AIR MANIFOLDS

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

4-Port External Air Connection

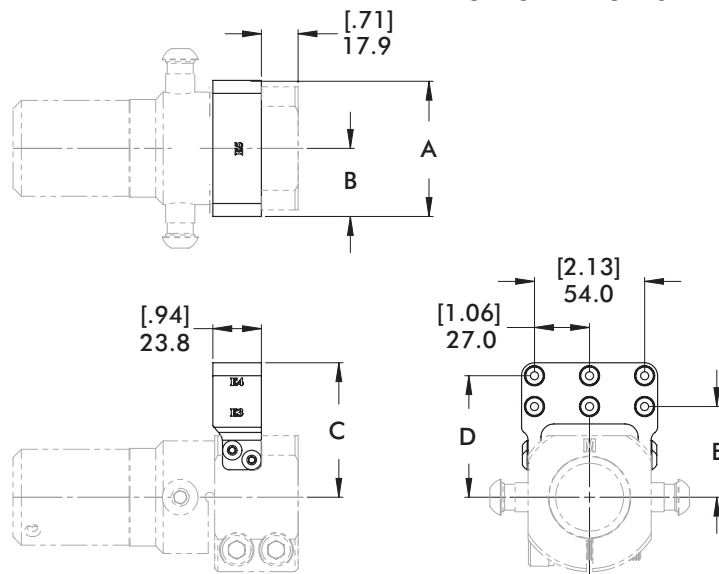
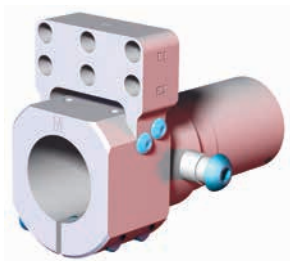


(2) Required



ORDER OPTION	REPLACEMENT PART	"A"	"B"	"C"	"D"	"E"	"F"	WEIGHT
"E4" (Standard High Flow)	CPI-RDC-40-4-HF	[2.75] 69.9	[1.38] 34.9	[1.56] 39.6	[3.00] 76.1	[2.62] 66.6	[1.83] 46.5	[2.90 lb] 1.32 kg
(Replacement for "E4" Legacy Applications only)	CPI-RDC-40-4	[2.63] 66.7	[1.30] 32.9	[1.22] 31.0	[2.66] 67.5	[2.34] 59.5	[1.75] 44.4	[2.89 lb] 1.31 kg

6-Port External Air Connection

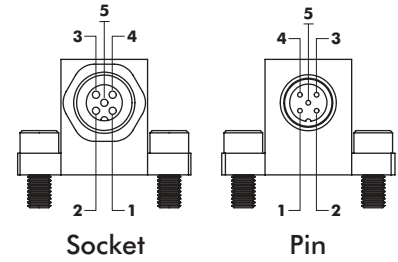
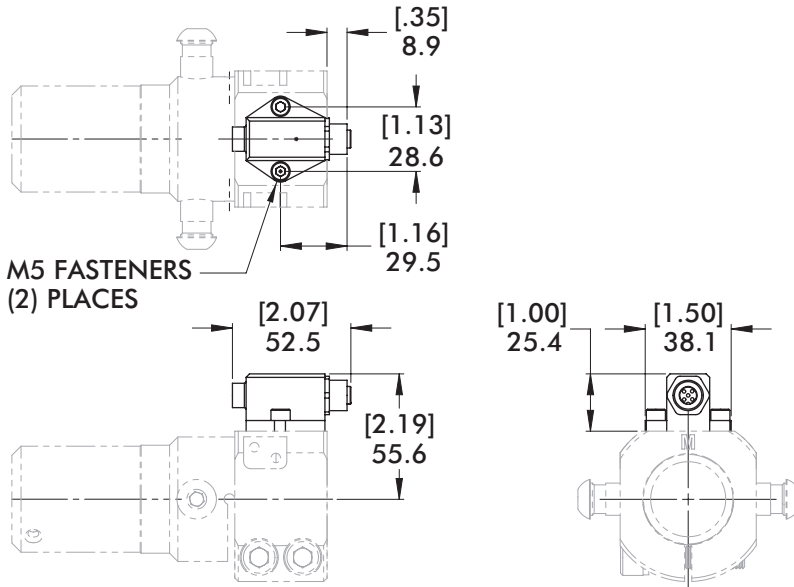


ORDER OPTION	REPLACEMENT PART	"A"	"B"	"C"	"D"	"E"
(Replacement for "E6" Legacy Applications only)	RDC-40-4-6PA	[2.61] 66.3	[1.31] 33.4	[2.59] 65.9	[2.34] 59.6	[1.75] 44.5
"E6" (Standard High Flow)	RDC-40-E6-HF	[2.75] 69.9	[1.38] 34.9	[3.12] 79.2	[2.62] 66.5	[1.83] 46.5

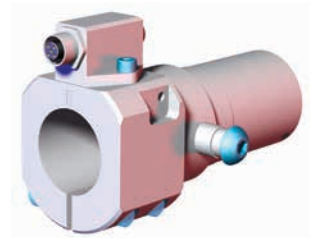
ELECTRICAL CONNECTORS

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

MC 5-Pin Micro Electric Connection



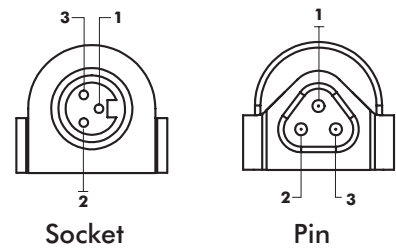
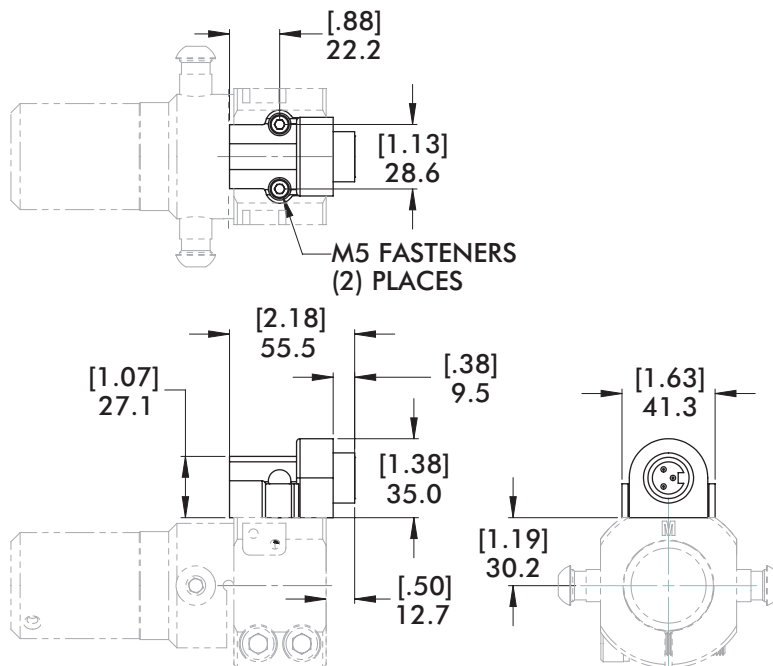
SOCKET #1	PIN #1
SOCKET #2	PIN #2
SOCKET #3	PIN #3
SOCKET #4	PIN #4
SOCKET #5	PIN #5



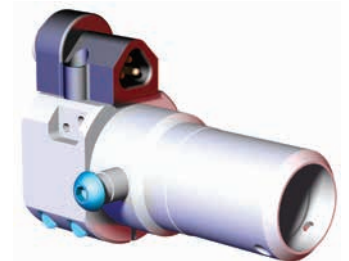
REPLACEMENT PART

CPI-RDB-M5P-5MCF

MN 3-Pin Mini Electric Connection



SOCKET #1	PIN #1
SOCKET #2	PIN #2
SOCKET #3	PIN #3



REPLACEMENT PART

CPI-TTB-M3P-3B3

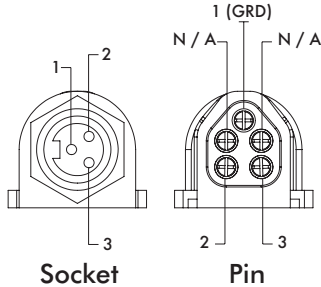
ELECTRICAL CONNECTORS

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

MNF 5-Pin Mini Electric Connection

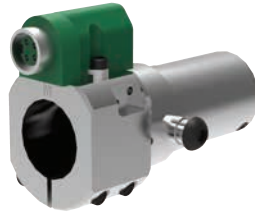


CPI-RDC-40-M5P-3MNF

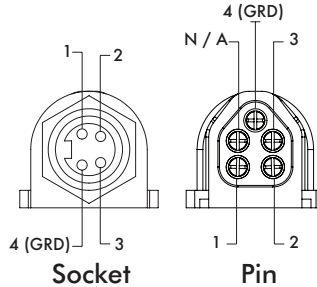


SOCKET #1	GREEN	PIN #1
SOCKET #2	BLACK	PIN #2
SOCKET #3	WHITE	PIN #3
	— N/A	
	— N/A	

PLUG COLOR: BLACK

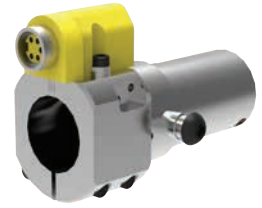


CPI-RDC-40-M5P-4MNF

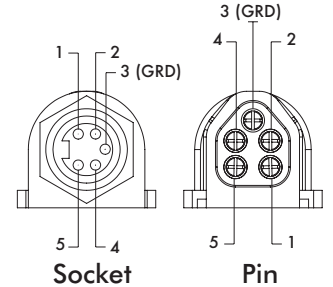


SOCKET #1	BLACK	PIN #1
SOCKET #2	WHITE	PIN #2
SOCKET #3	RED	PIN #3
SOCKET #4	GREEN	PIN #4
	— N/A	

PLUG COLOR: GREEN

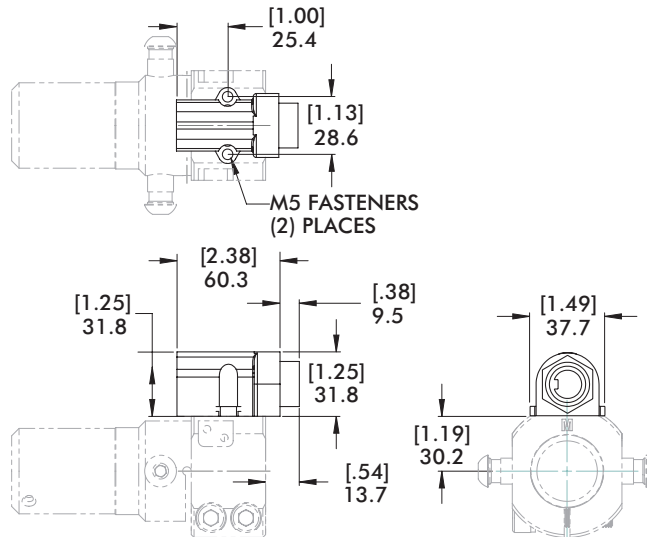


CPI-RDC-40-M5P-5MNF

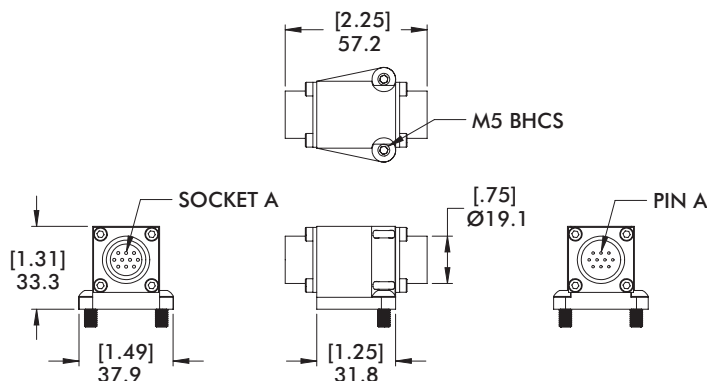


SOCKET #1	WHITE	PIN #1
SOCKET #2	RED	PIN #2
SOCKET #3	GREEN	PIN #3
SOCKET #4	ORANGE	PIN #4
SOCKET #5	BLACK	PIN #5

PLUG COLOR: YELLOW



10-Pin Electric Connection

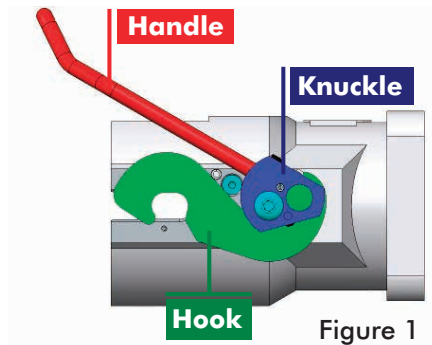


REPLACEMENT PART

CPI-RDC-40-5-10

RDN-25 SERIES DISCONNECT HOUSING

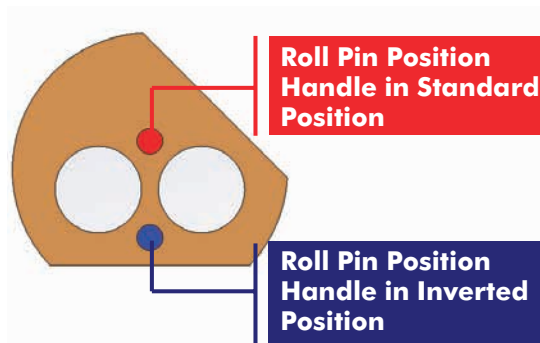
Manual Tool Changers | Instructions for Inverting the Disconnect Locking Handle



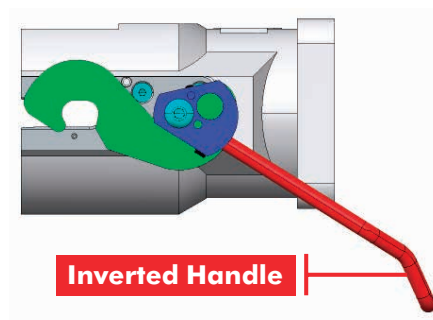
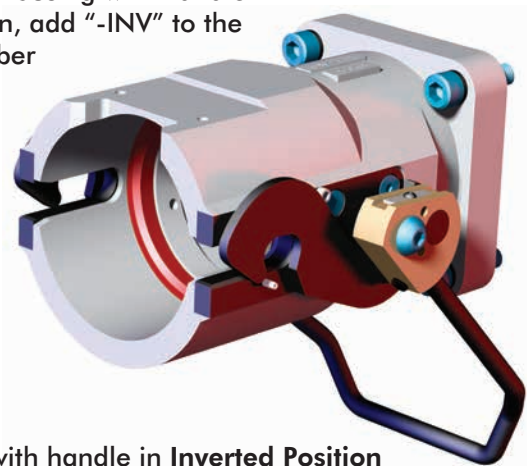
If the handle of the Quick Disconnect Housing interferes with other equipment, it can be inverted and accessed from below the housing. In the inverted position, the hooks and housing remain in the upright position.

1. Loosen the set screw at the base of the handle in each knuckle.
2. Unscrew the button head screw from each knuckle, then remove the handle. (See Figure 1)
3. Slide knuckles and hooks off the main body of the housing. (See Figure 1)
4. Slide hook off each knuckle.
5. Remove the roll pin in each knuckle and insert a 3/16 x 5/16 pin into the hole for the inverted handle position, as shown. (See Figure 2)
6. Rotate each knuckle 180° from previous position and reinstall the hooks. Return the knuckle/hook sub-assembly to the housing.
7. Reinstall handle in the inverted position and tighten set screws. (See Figure 3)

Figure 2 - Housing Knuckle



To order RDN-25 housing with handle in Inverted Position, add "-INV" to the end of order number



RDN-25 DISCONNECT HOUSING

Manual Tool Changers | RDC-25/60 Series Bayonets | Product Overview

Features:

- 89mm [3.50 in.] Sq. Flange Mtng.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
- Internal urethane rings eliminate vibration and seat the bayonet securely.

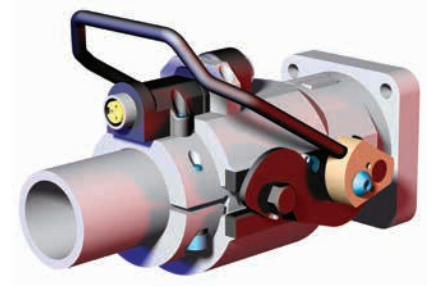
Specifications:

Max. Static Product Load:
949 N*m [700 ft-lb]

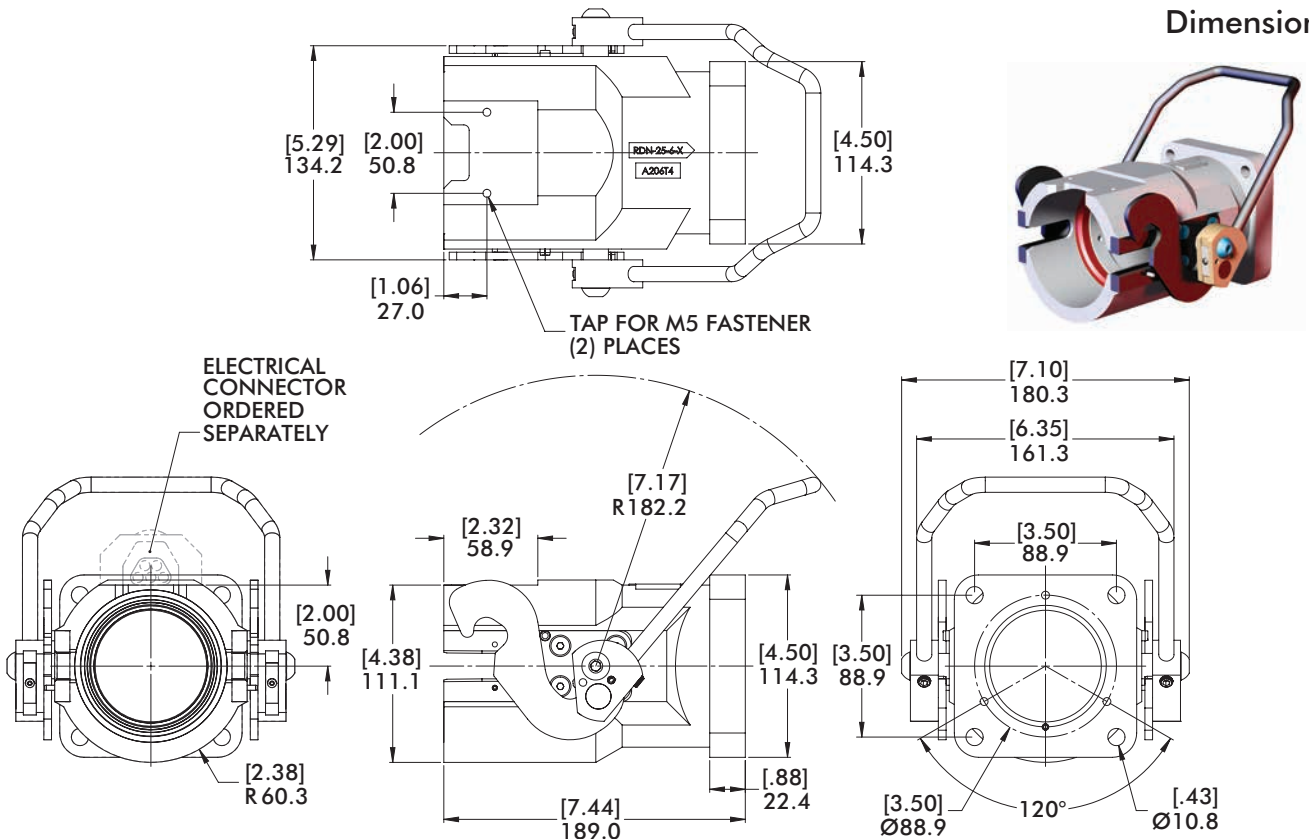
Material:

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

Weight:
4.00 kg [8.90 lb]



Dimensions



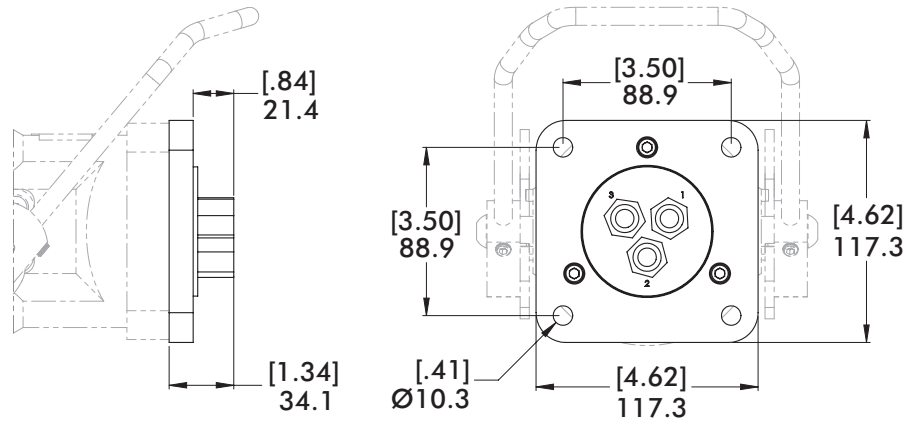
How To Order

Model	Air Port Connection A3 (3 Port) or A6 (6-Port) "O(x)" = (Qty) of Open Ports / "S(x)" = (Qty) of Shutoff Ports	Electrical Mounting
CPI — RDN-25-6	A3-O1-S2	EL10
 "RDN-25-6" Ø60mm/2.50" Quick Disconnect Housing	 "A3-O0-S3" (0)Open-(3)Shutoff "A3-O1-S2" (1)Open-(2)Shutoff "A3-O2-S1" (2)Open-(1)Shutoff "A3-O3-S0" (3)Open-(0)Shutoff "A6-O0-S6" (0)Open-(6)Shutoff "A6-O1-S5" (1)Open-(5)Shutoff "A6-O2-S4" (2)Open-(4)Shutoff "A6-O3-S3" (3)Open-(3)Shutoff "A6-O4-S2" (4)Open-(2)Shutoff "A6-O5-S1" (5)Open-(1)Shutoff "A6-O6-S0" (6)Open-(0)Shutoff	 Mounting for Large Connectors (Leave blank for Standard Mounting)

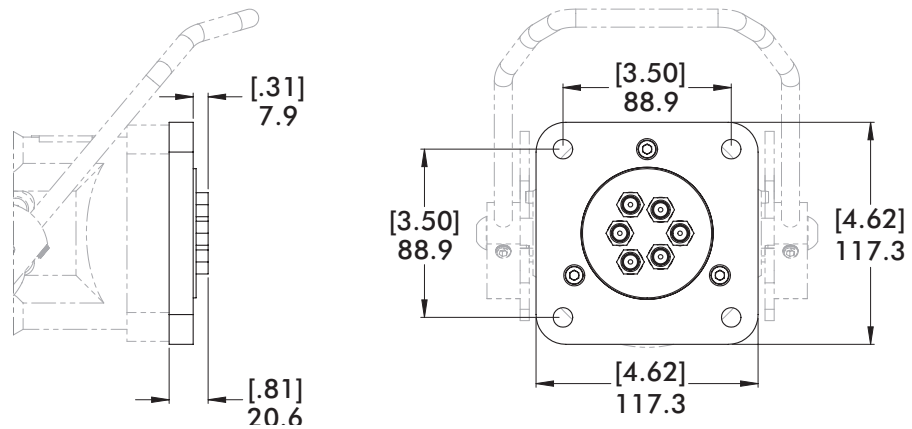
AIR PORTS AND ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-25 Flange Mount Disconnect Housings | Dimensions

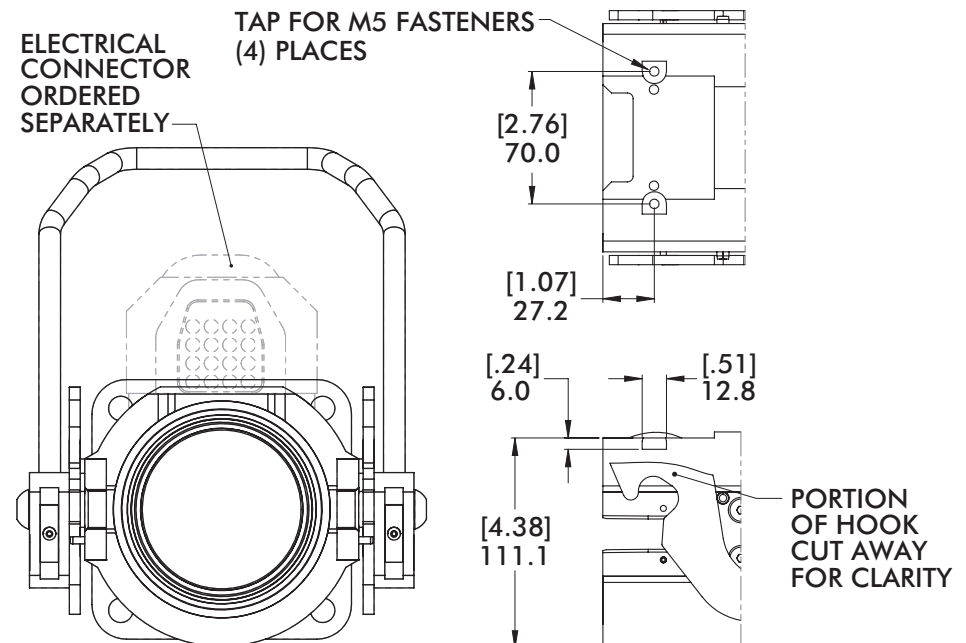
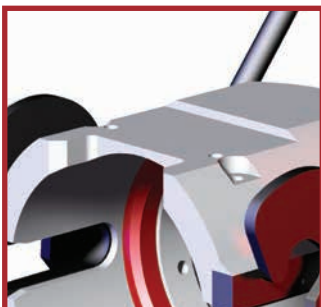
A3 3-Port Internal Air Connection with Shutoff Option



A6 6-Port Internal Air Connection with Shutoff Option

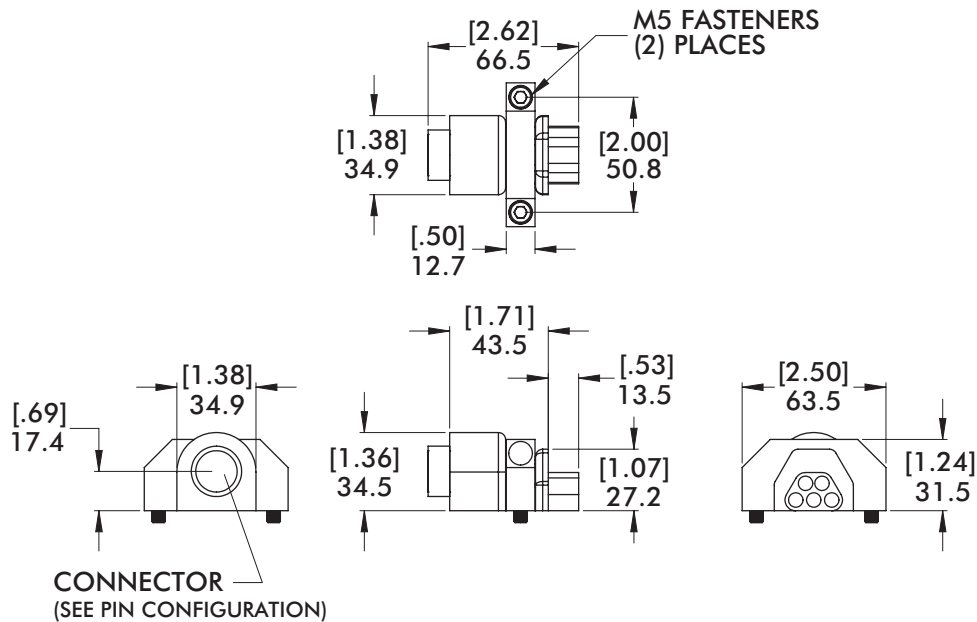


EL10 Mounting for Large Electric Connection

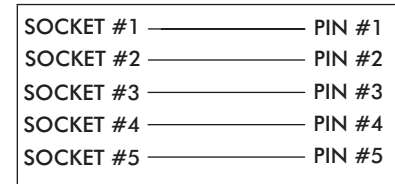
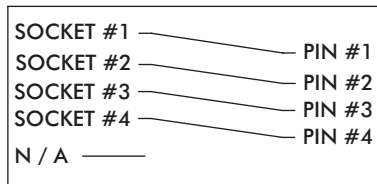
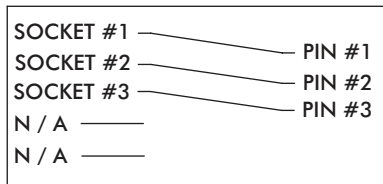
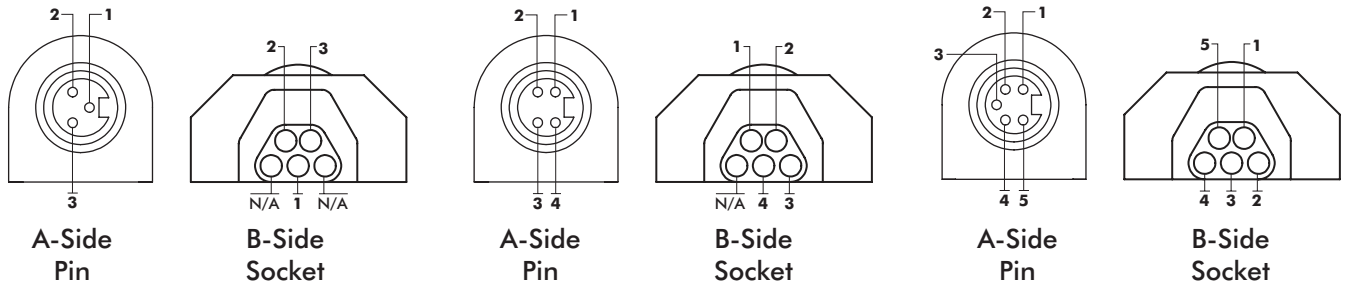


ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-25 Series Disconnect Housings | Dimensions



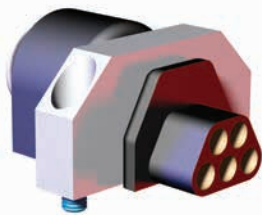
5 Pin Connectors for Housing - Standard Pin Configurations



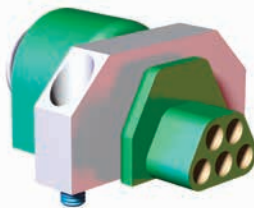
3-Pin to 5-Pin Connector	
A-Side	3-Pin, Single Key
B-Side	5-Pin, Male Plug, Female Socket

4-Pin to 5-Pin Connector	
A-Side	4-Pin, Single Key
B-Side	5-Pin, Male Plug, Female Socket

5-Pin to 5-Pin Connector	
A-Side	5-Pin, Single Key
B-Side	5-Pin, Male Plug, Female Socket



MODEL NUMBER
CPI-RDH-F5S-3B3



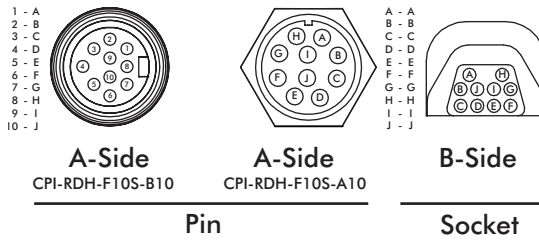
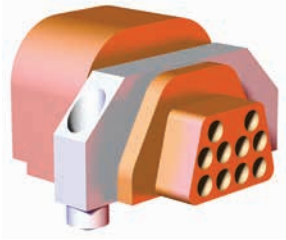
MODEL NUMBER
CPI-RDH-F5S-4B4



MODEL NUMBER
CPI-RDH-F5S-5B5

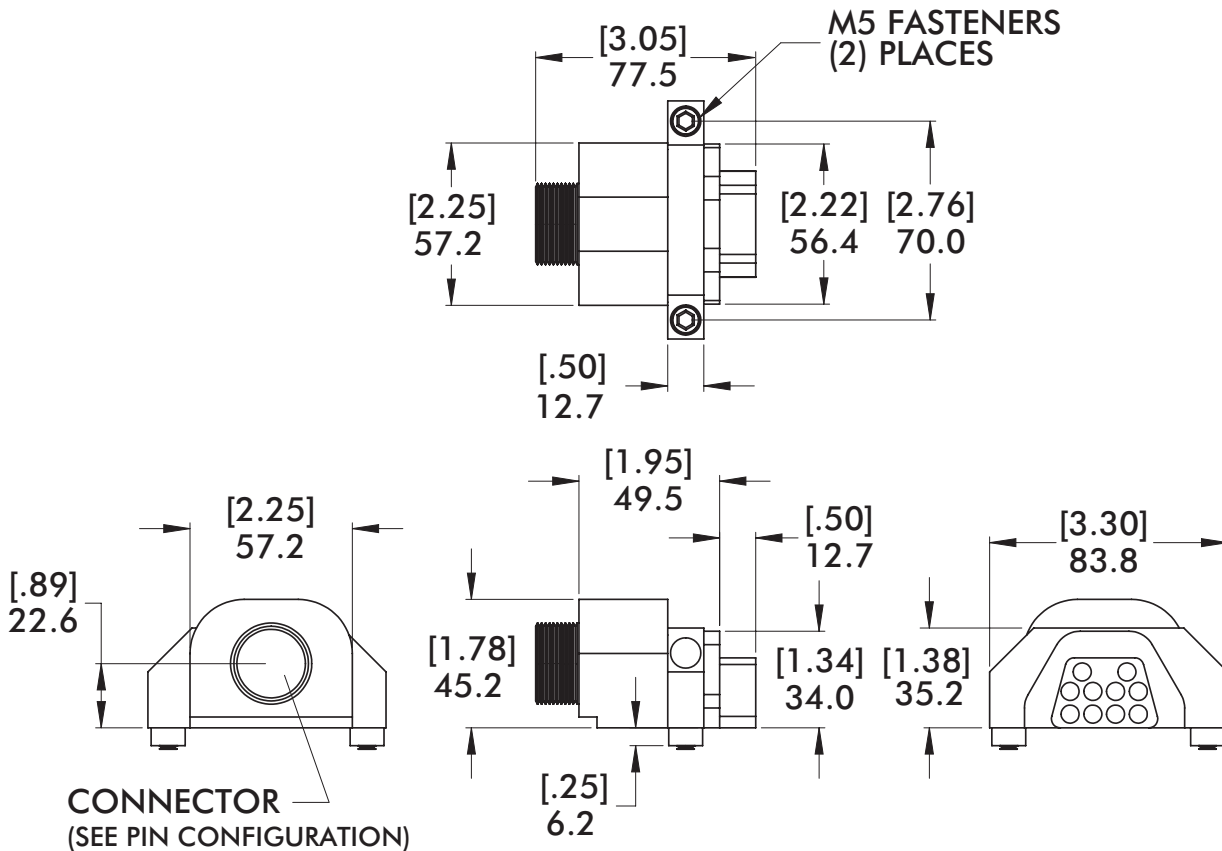
ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-25 Series Disconnect Housings | Dimensions



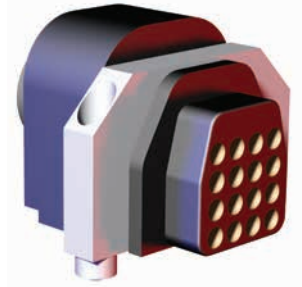
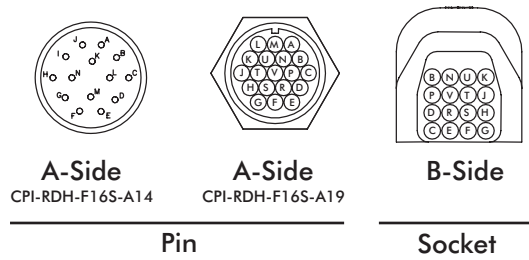
10 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDH-F10S-A10	10-Pin	10-Pin, Male Plug, Female Socket
CPI-RDH-F10S-B10	10-Pin	



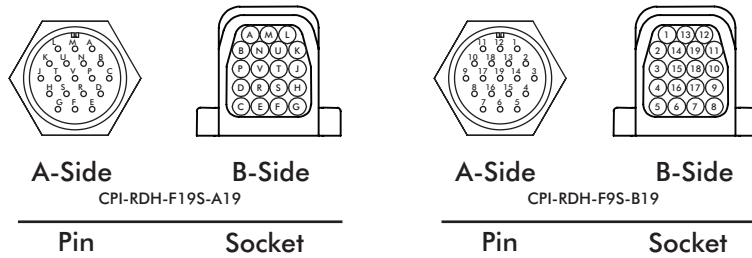
ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-25 Series Disconnect Housings | Dimensions



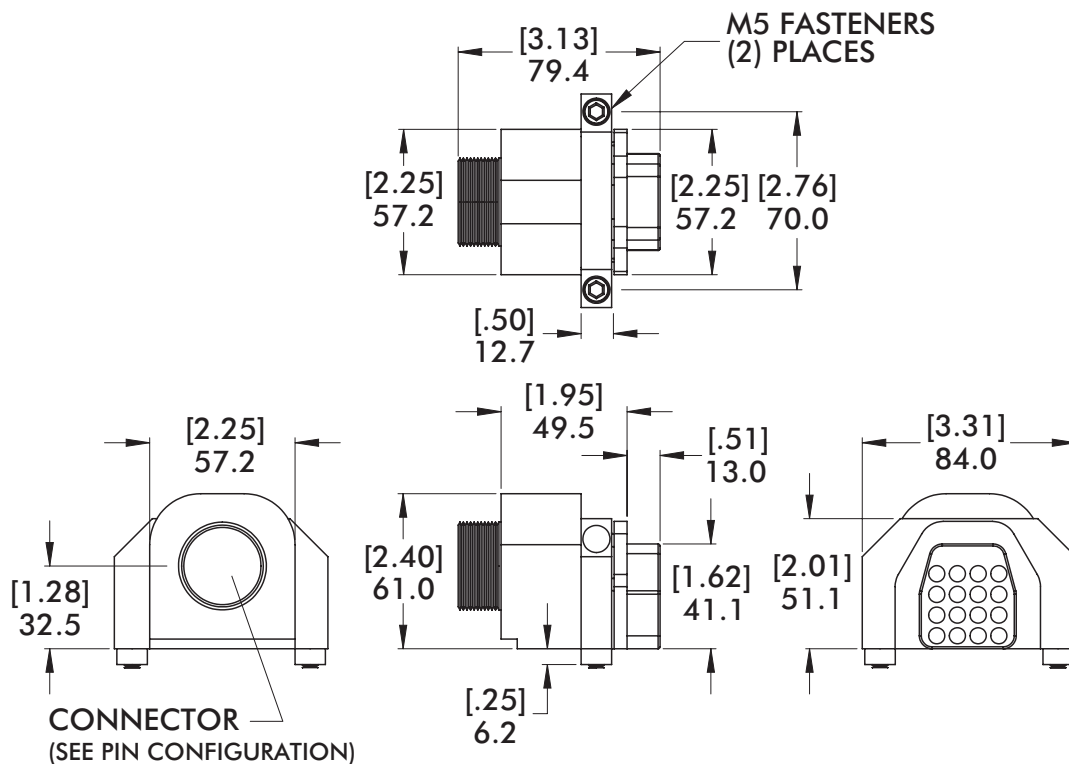
16 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDH-F16S-A19	19-Pin	16-Pin, Male Plug, Female Socket
CPI-RDH-F16S-A14	14-Pin	



19 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDH-F19S-A19	19-Pin	19-Pin, Male Plug, Female Socket
CPI-RDH-F19S-B19	19-Pin	



RDC SERIES BAYONETS

Manual Tool Changers | 2.5"/60mm Diameter Booms | Product Overview

Features:

- Used in conjunction with the Quick Disconnect Housing to provide an efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the housing.
- Optional "EL10" machined surface for large electrical connectors.

Specifications:

Max. Static Product Load:

678 N*m [500 ft-lb]

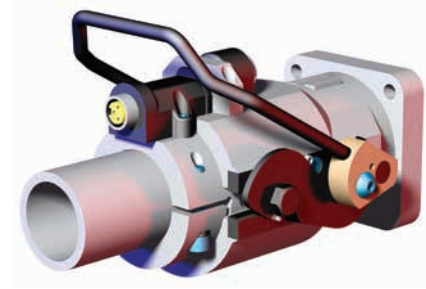
Material:

Body: Aluminum

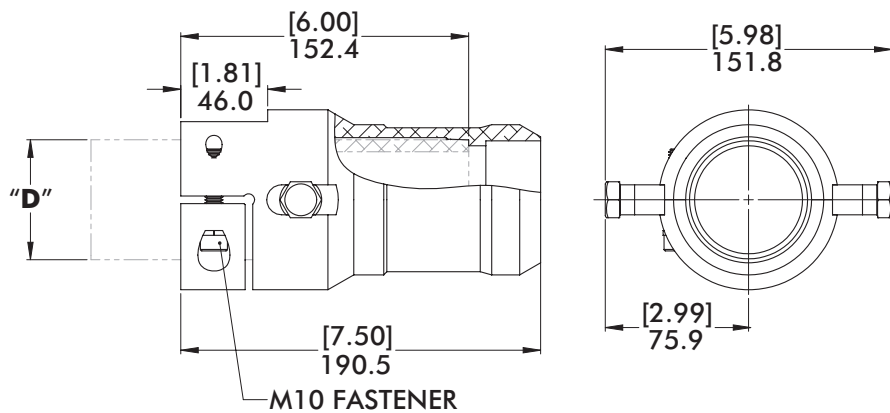
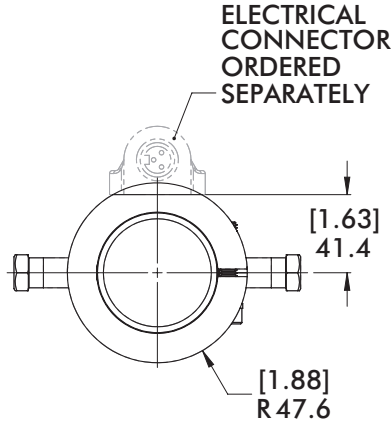
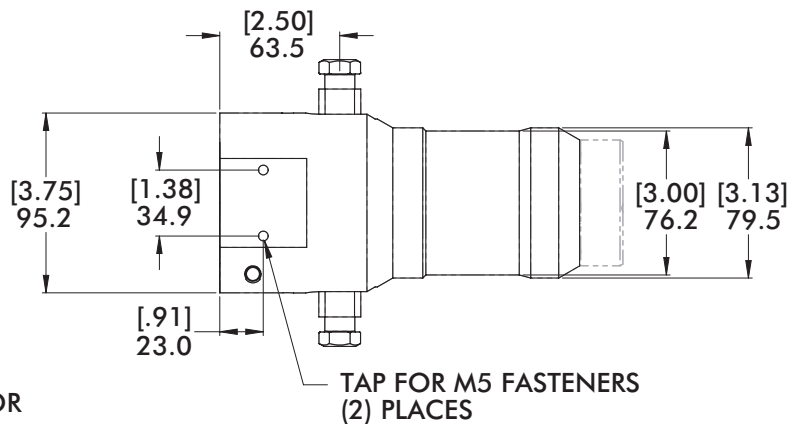
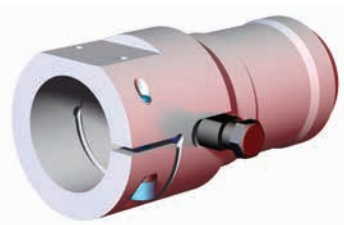
Pins: Steel

Weight:

1.6 kg [3.5 lb]



Dimensions



How To Order

	Model	Boom/Tube (Ø) "D"	Version	Air Port Connection	Electrical Mounting
CPI	RDC	25	2	A3	EL10
	"RDC" Quick Disconnect Bayonet	"25" 2.50" (in) "60" 60mm	"2" Version 2	"A3" 3-Port "A6" 6-Port	Mounting for Large Connectors (Leave blank for Standard Mounting)

RDC SERIES BAYONETS

Manual Tool Changers | 2.50"/60mm Diameter High Torque Booms | Product Overview

Features:

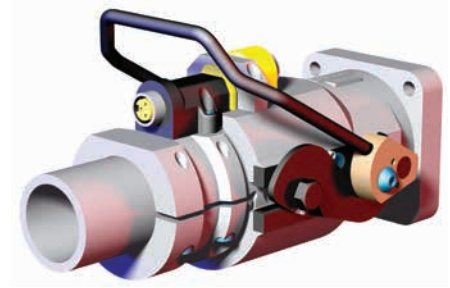
- Extended clamp area increases the holding surface and torque capacity for high speed applications.
- (2) Hardened alignment pins allows quick and accurate installation into the bayonet.
- Optional "EL10" machined surface for large electrical connectors.

Specifications:

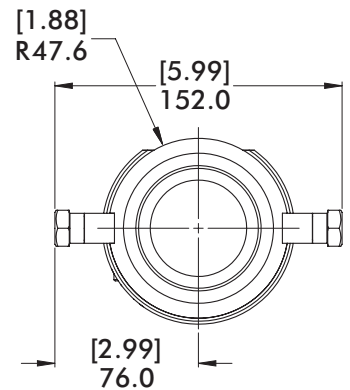
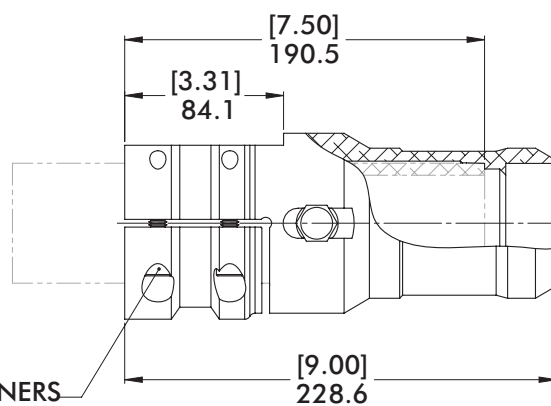
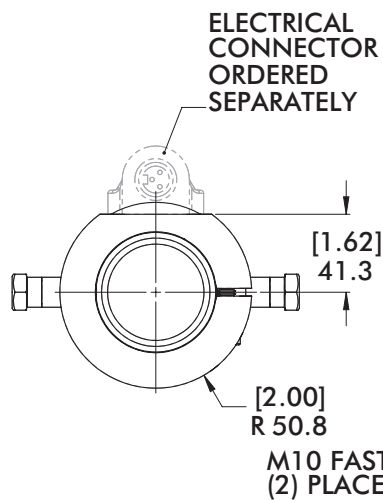
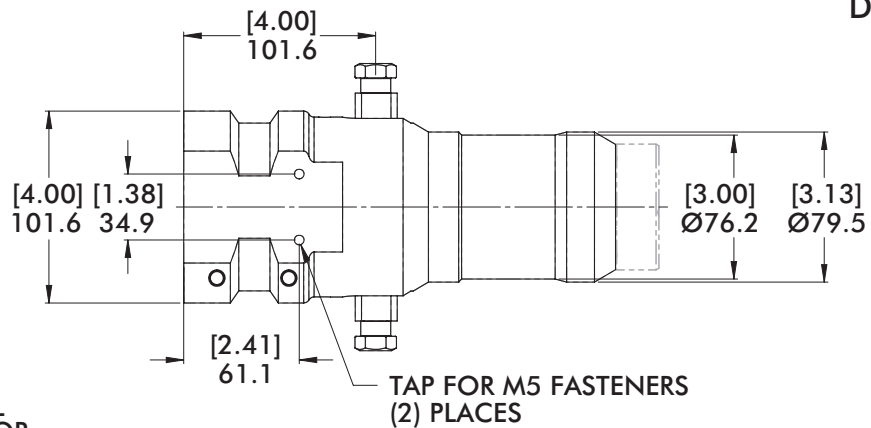
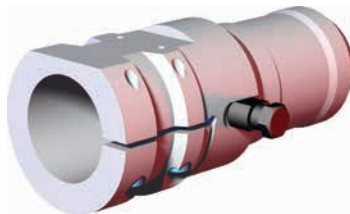
Max. Static Product Load:
949 N*m [700 ft-lb]

Material:
Body: Aluminum
Pins: Steel

Weight:
2.1 kg [4.7 lb]



Dimensions



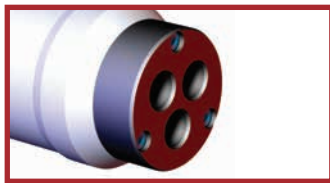
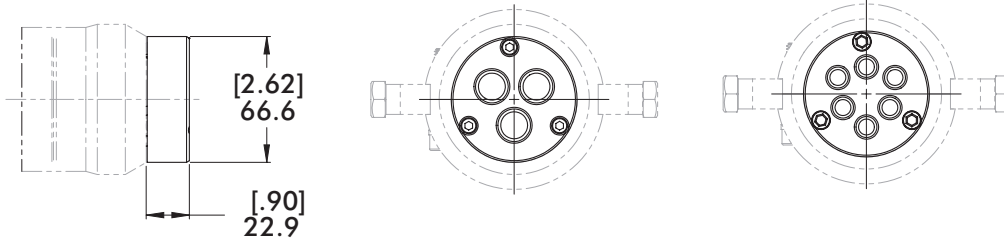
How To Order

CPI	Model	Boom/Tube (Ø) "D"	Version	Air Port Connection	Electrical Mounting
	RDC	25	2HT	A3	EL10
	"RDC" Quick Disconnect Bayonet	"25" 2.50"(in) "60" 60mm	"2HT" Version 2 Hi-Torque	"A3" 3-Port "A6" 6-Port	Mounting for Large Connectors (Leave blank for Standard Mounting)

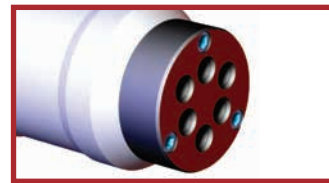
AIR PORTS AND ELECTRICAL CONNECTIONS

Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions

A3 3-Port/A6 6-Port Internal Air Connection



"A3" 3-Port Internal Air Connection



"A6" 6-Port Internal Air Connection

REPLACEMENT PART

CPI-BC-250-3-U38 (3/8 NPT ports)

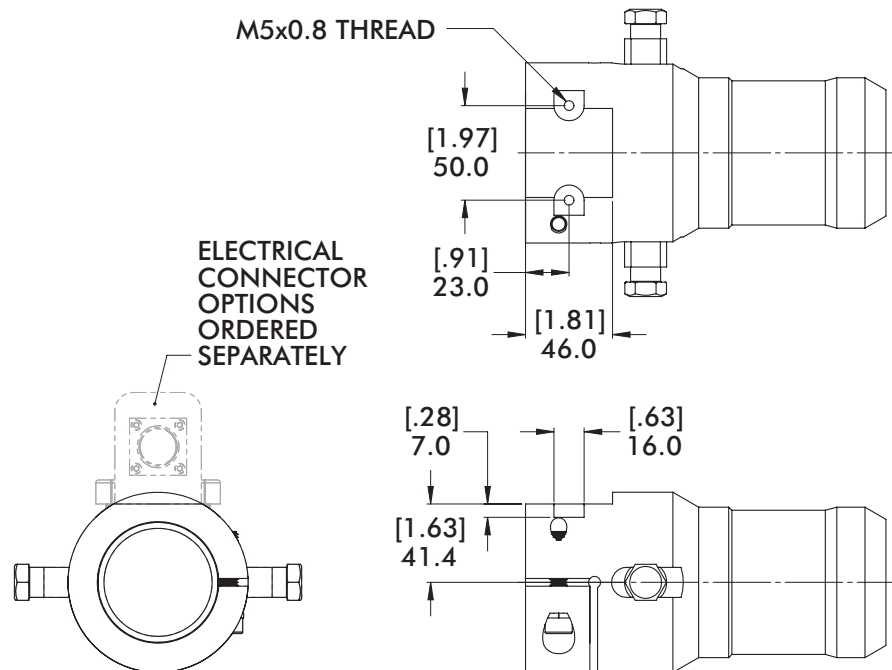
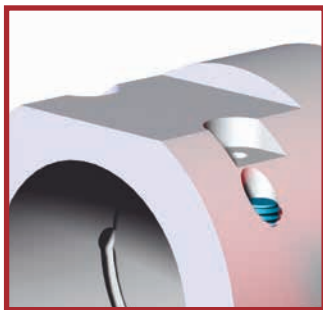
CPI-BC-60-3-G38 (G3/8 ports)

REPLACEMENT PART

CPI-BC-250-6-U18 (1/8 NPT ports)

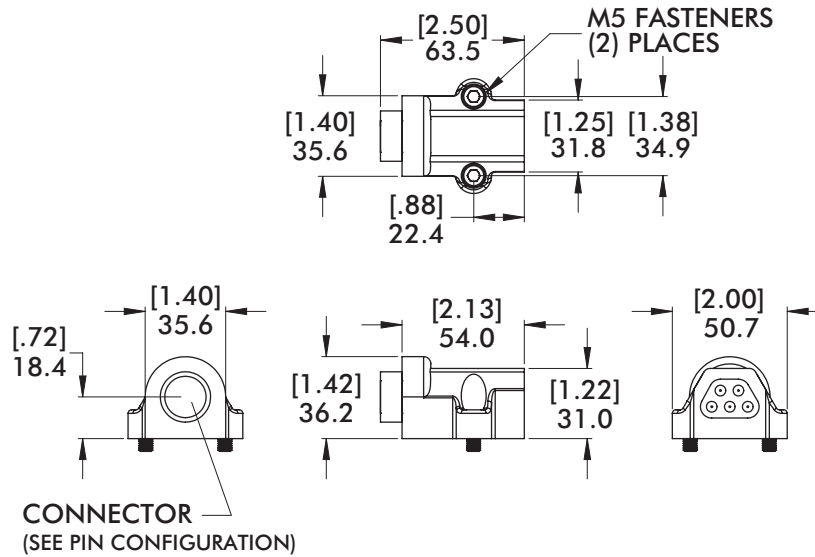
CPI-BC-60-6-G18 (G1/8 ports)

EL10 Mounting for Large Electric Connection

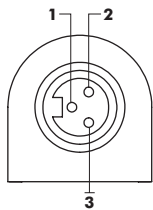


ELECTRICAL CONNECTIONS

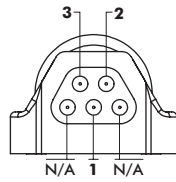
Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions



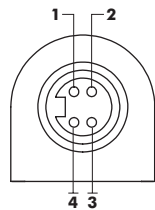
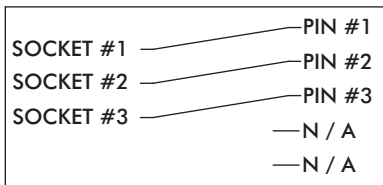
5 Pin Connectors for Bayonet (Tool Side)- Standard Pin Configurations



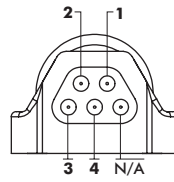
A-Side Socket



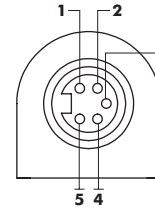
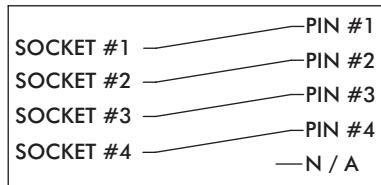
B-Side Pin



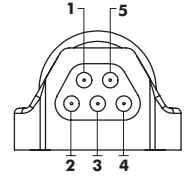
A-Side Socket



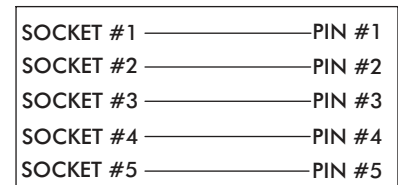
B-Side Pin



A-Side Socket



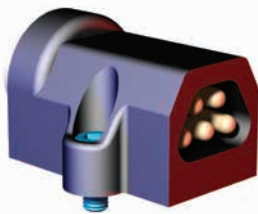
B-Side Pin



3-Pin to 5-Pin Connector	
A-Side	3-Pin, Single Key
B-Side	5-Pin, Male Pin, Female Plug

4-Pin to 5-Pin Connector	
A-Side	4-Pin, Single Key
B-Side	5-Pin, Male Pin, Female Plug

5-Pin to 5-Pin Connector	
A-Side	5-Pin, Single Key
B-Side	5-Pin, Male Pin, Female Plug



MODEL NUMBER
CPI-RDB-M5P-3B3



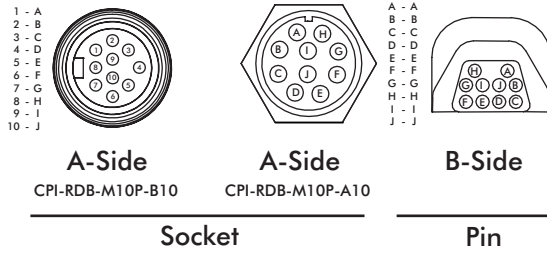
MODEL NUMBER
CPI-RDB-M5P-4B4



MODEL NUMBER
CPI-RDB-M5P-5B5

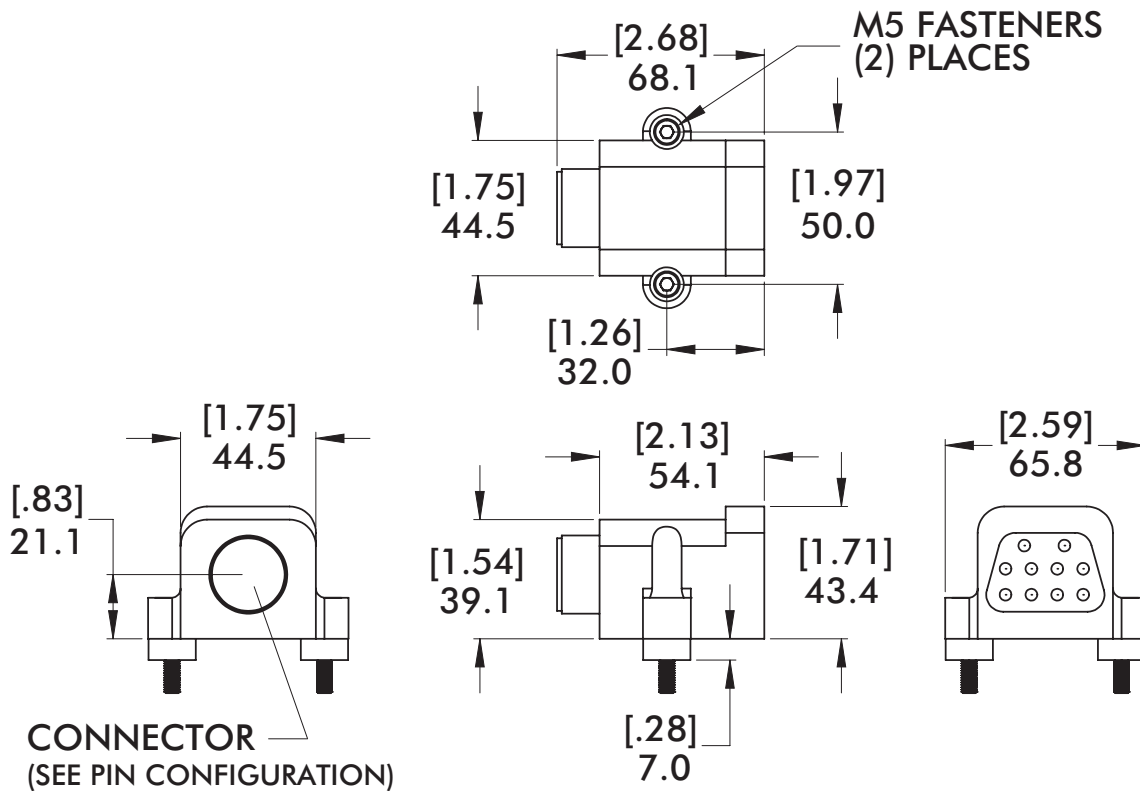
ELECTRICAL CONNECTIONS

Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions



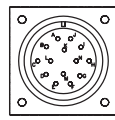
10 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDB-M10P-A10	10-Pin	10-Pin, Male Pin, Female Plug
CPI-RDB-M10P-B10	10-Pin	



ELECTRICAL CONNECTIONS

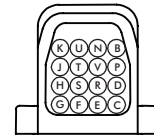
Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions



A-Side
CPI-RDB-M16P-A14



A-Side
CPI-RDB-M16P-A19



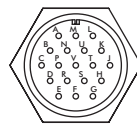
B-Side

Socket

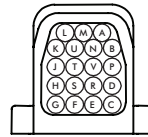
Pin

16 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDB-M16P-A19	19-Pin	16-Pin, Male Pin, Female Plug
CPI-RDB-M16P-A14	14-Pin	



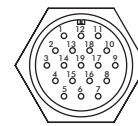
A-Side
CPI-RDB-M19P-A19



B-Side

Socket

Pin



A-Side



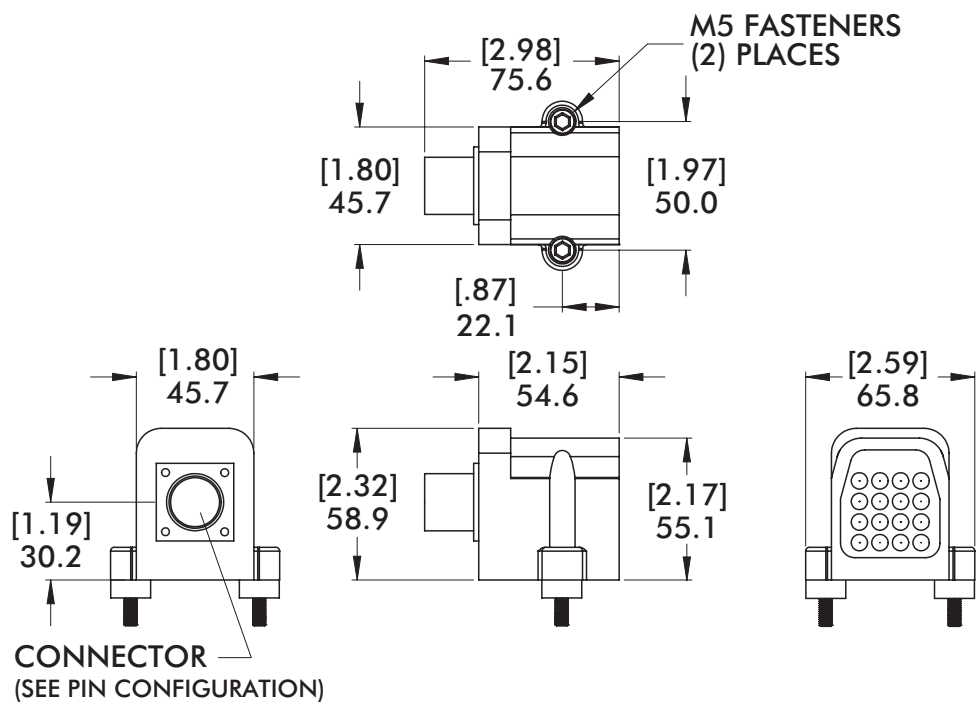
B-Side

Socket

Pin

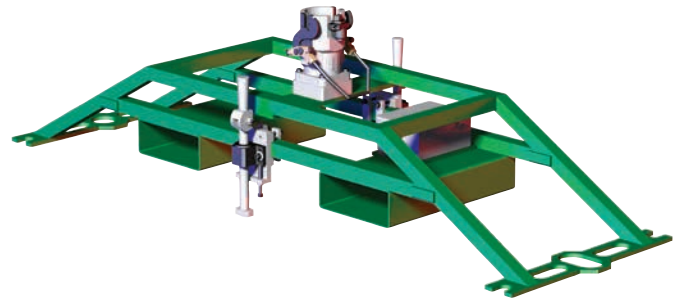
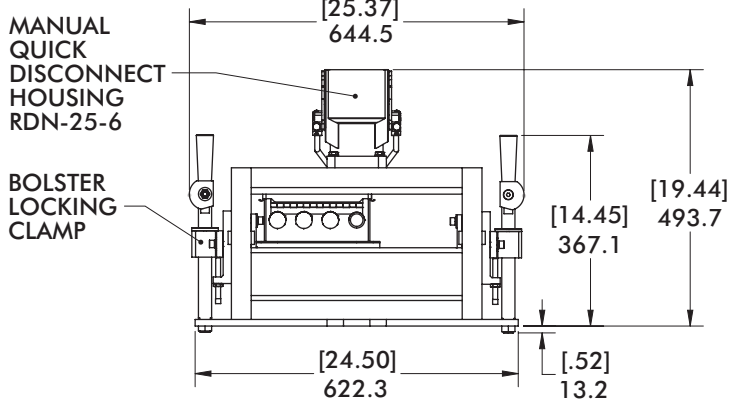
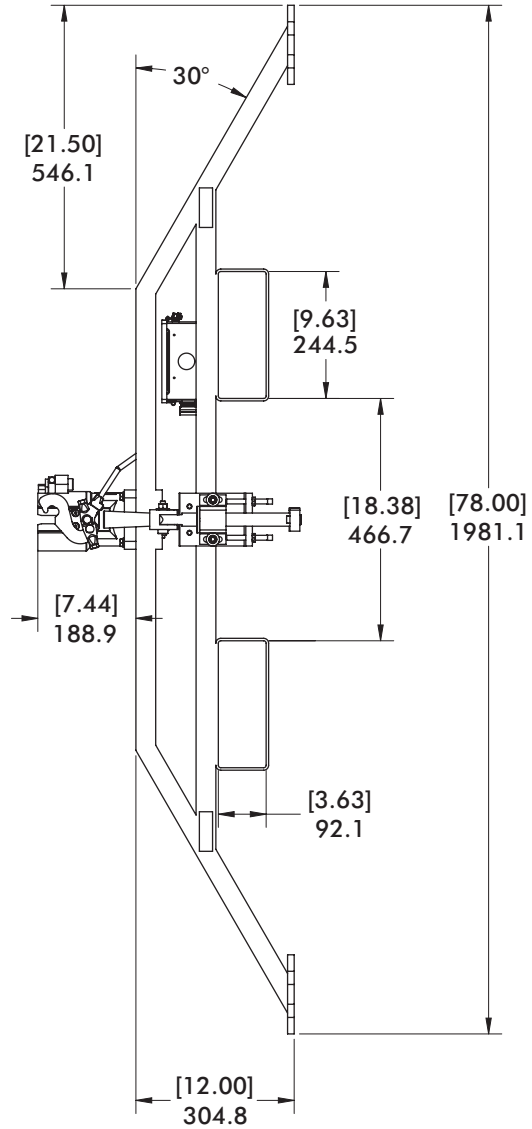
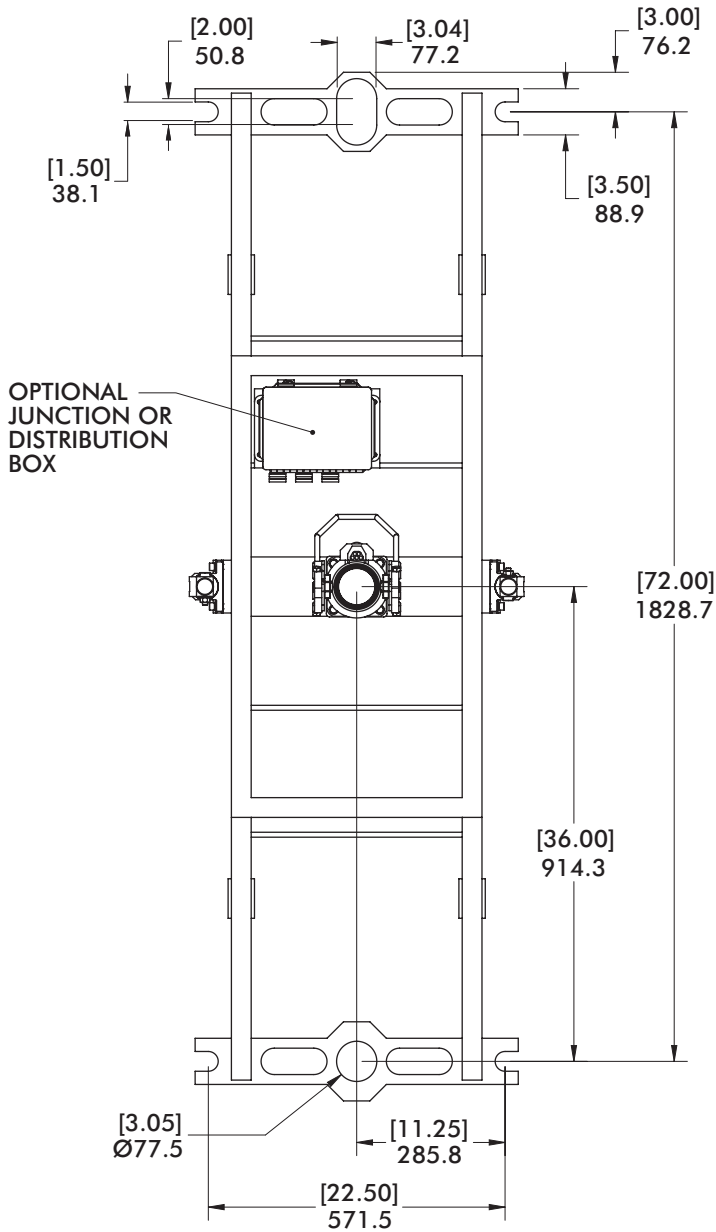
19 Pin Configuration

Model Number	A-Side	B-Side
CPI-RDB-M19P-A19	19-Pin	19-Pin, Male Pin, Female Plug
CPI-RDB-M19P-B19	19-Pin	

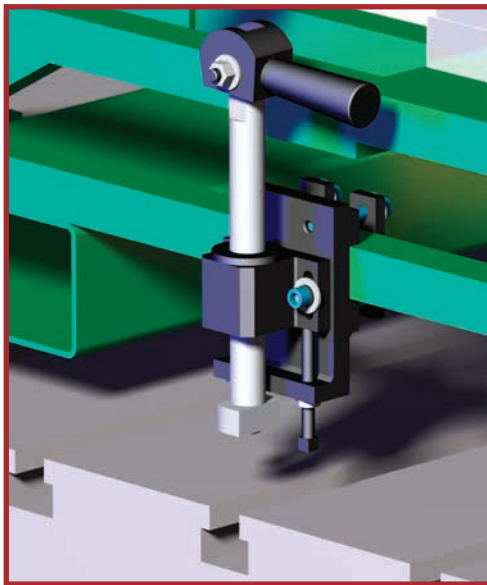
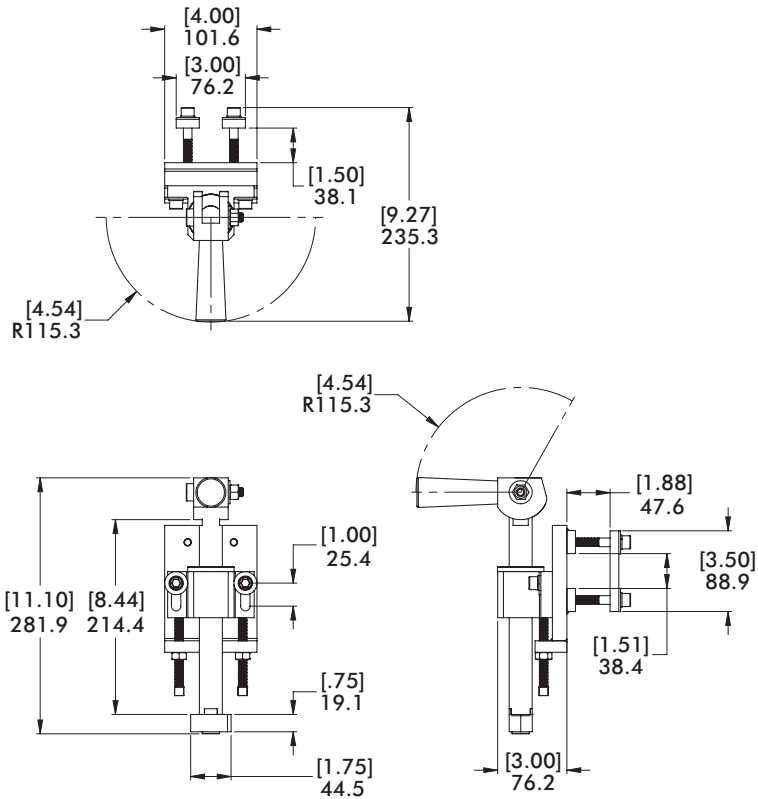


IDLE STATION

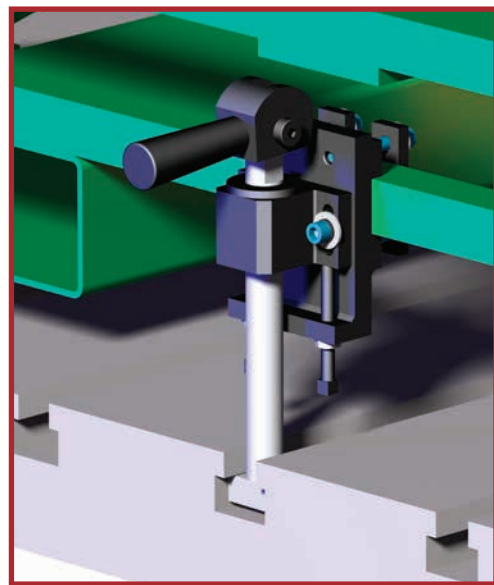
Automation Adaptors | (1) RDN-25-6 Disconnect Housings with Ability to be Fixed to Bolster | Dimensions



MODEL NUMBER	WEIGHT
CPI-PNS-ASSY	85.41 kg [188.30 lb]



Stored Position



In Use, Locked into Bolster

MODEL NUMBER

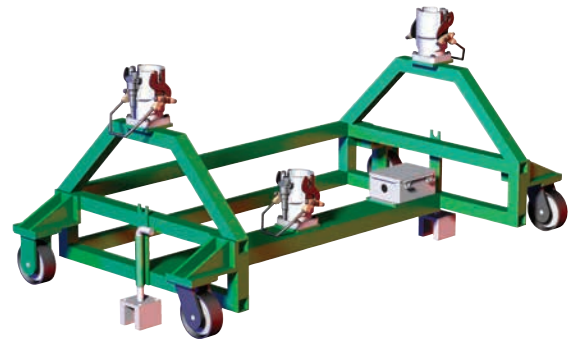
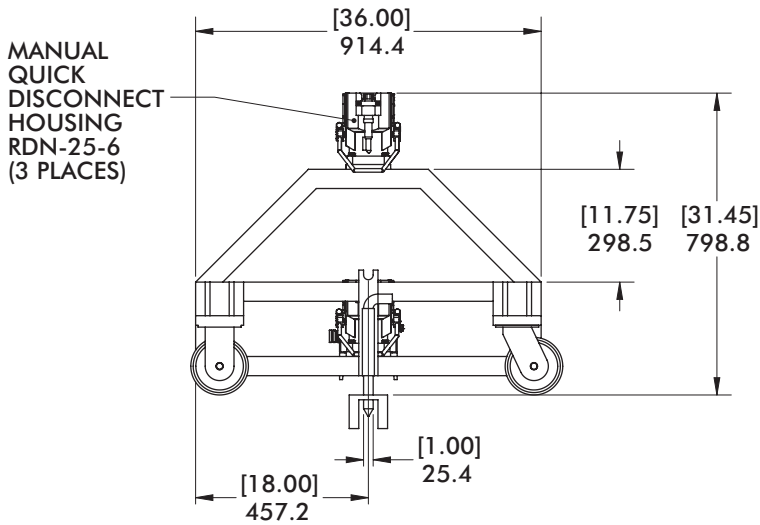
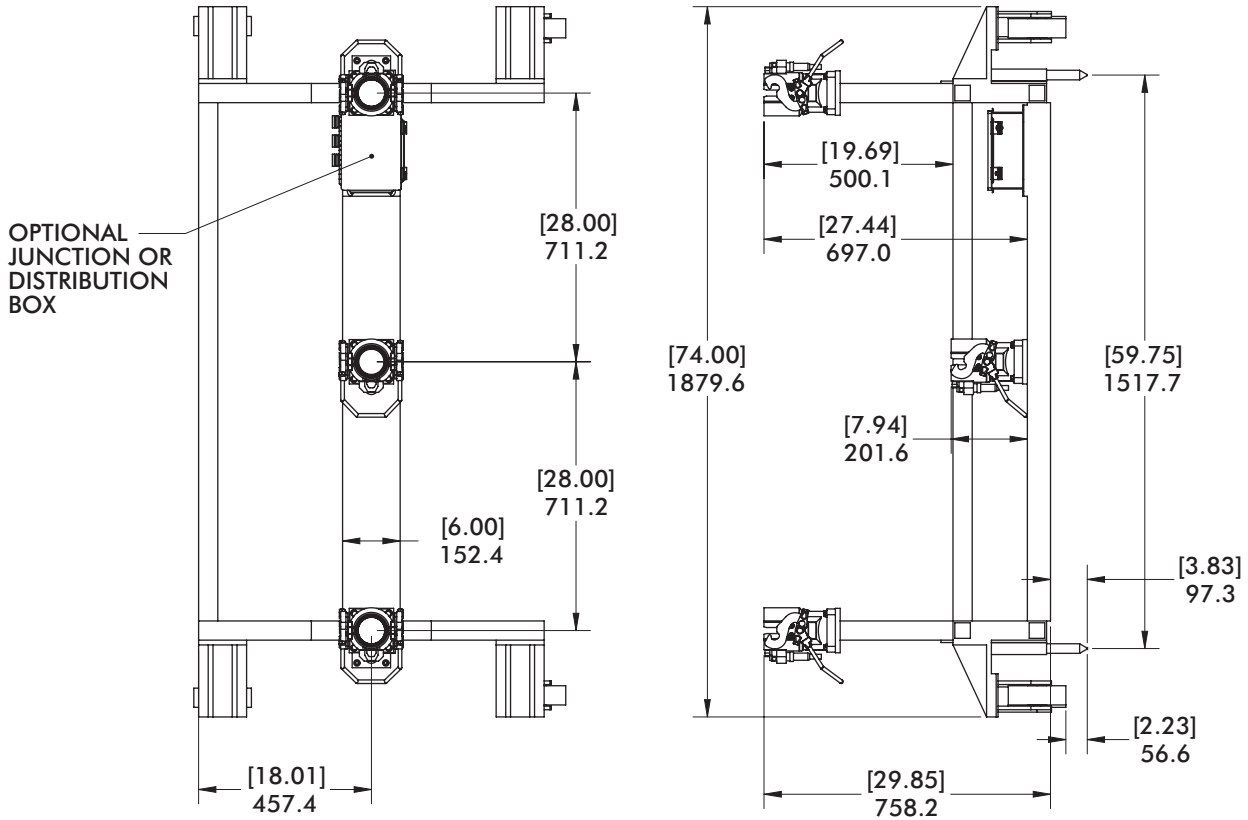
CPI-BLC-100-15-6

WEIGHT

5.50 kg [12.12 lb]

IDLE STATION

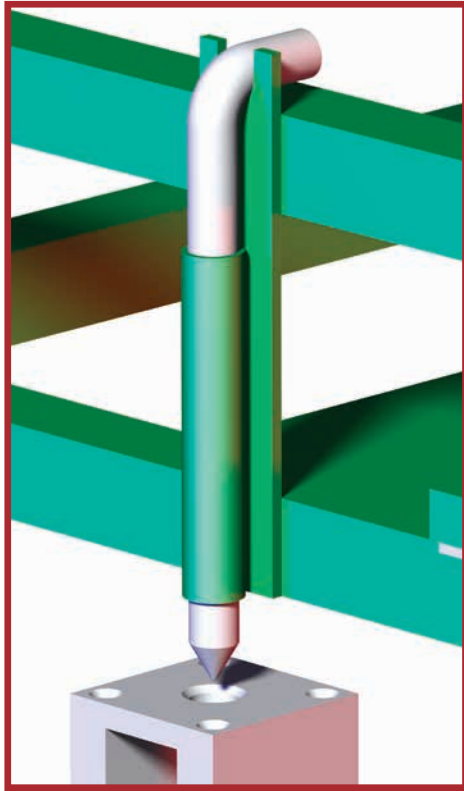
Automation Adaptors | (3) RDN-25-6 Disconnect Housings and Mobile Flexibility | Dimensions



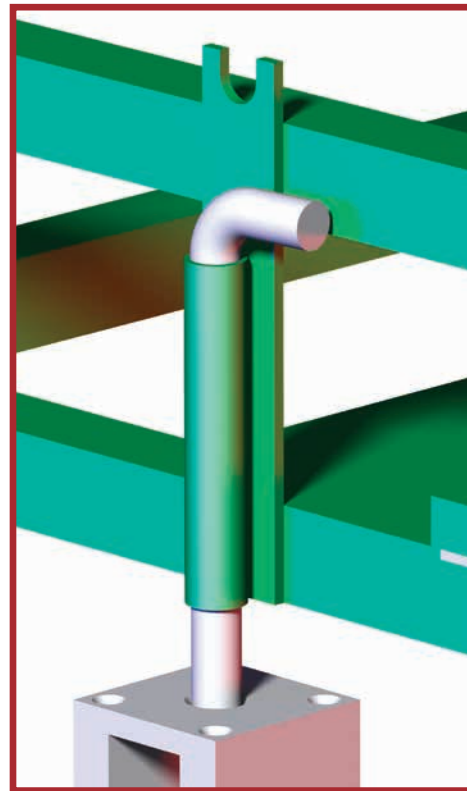
MODEL NUMBER	WEIGHT
CPI-INS-ASSY	182.67 kg [402.73 lb]

LOCKING PINS IDLE STATIONS

Automation Adaptors | Locking Pin | Operating Procedure



Stored Position



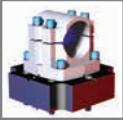
Engaged Position

ROBOT ADAPTER MOUNTS

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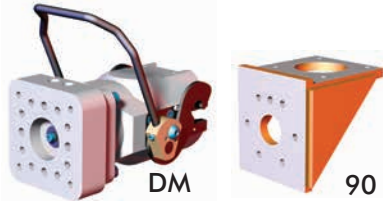


Tooling Mounting Blocks 38

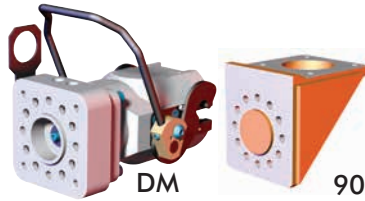
ROBOT ADAPTER MOUNTS

Robot Automation Adaptors | Selection Guide - Manual Tool Changers RDN-25 Series

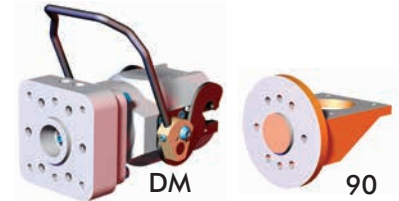
STYLE 1 (ACMX58)



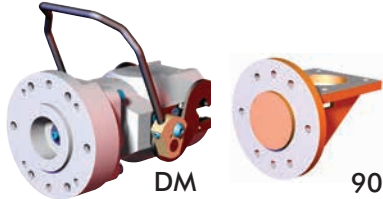
STYLE 2 (FA500)



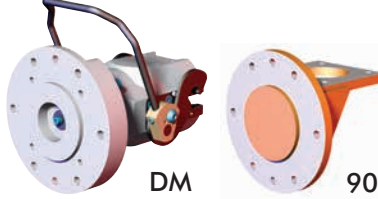
STYLE 3 (KW150)



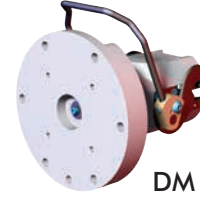
STYLE 4 (FA900)



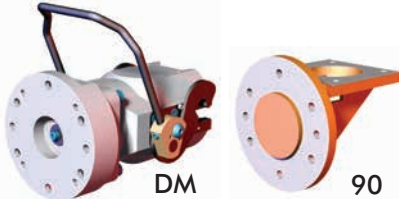
STYLE 5 (KA760)



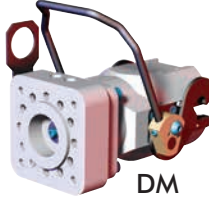
STYLE 6 (MMNY300)



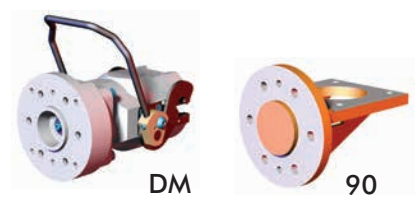
STYLE 7 (FA430I)



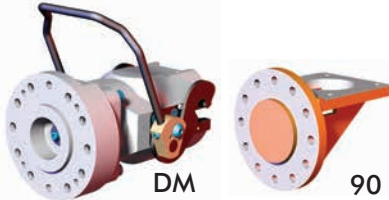
STYLE 8 (FA420)



STYLE 9 (ABB44)



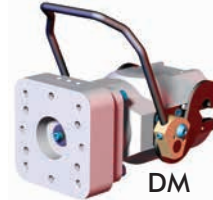
STYLE 10 (KWZ165)



STYLE 11 (KWUT120)



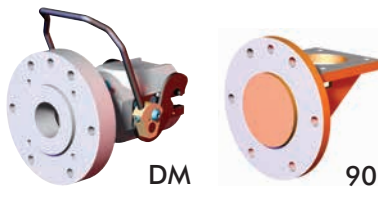
STYLE 12 (FA710)



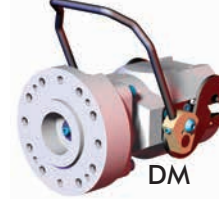
STYLE 14 (MMK100)



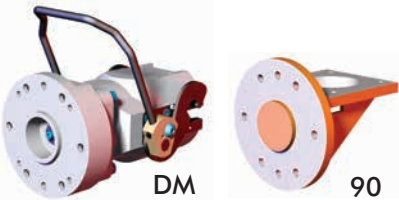
STYLE 15 (KA660)



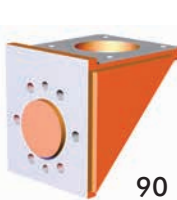
STYLE 16 (FA2000)



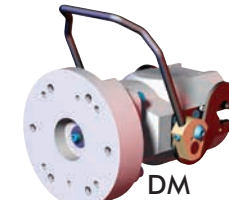
STYLE 18 (MMHP165-125)



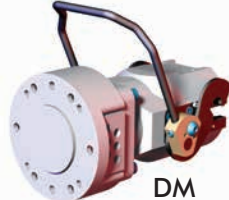
STYLE 19 (MMHP165-92)



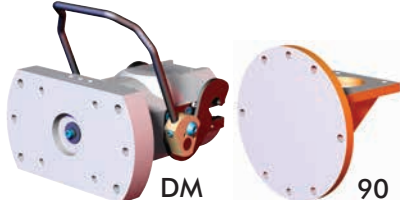
STYLE 21 (EOAMC30)



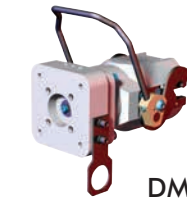
STYLE 22 (FA900-SSM)



STYLE 23 (MD350)



STYLE 24 (SA000)



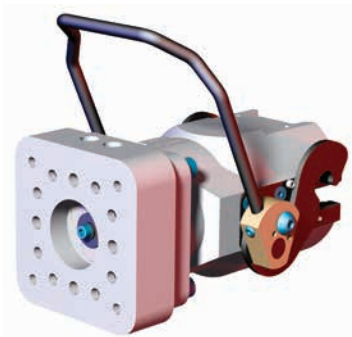
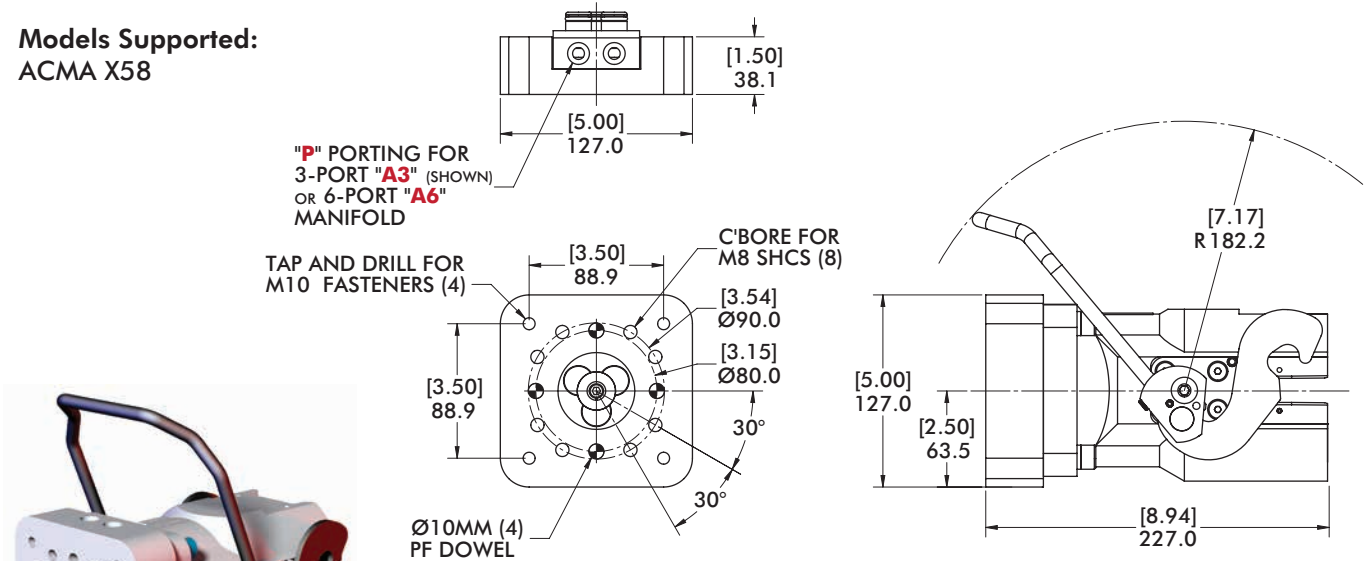
ROBOT ADAPTER MOUNTS

Robot Automation Adaptors | Selection Guide - Manual Tool Changers RDN-25 Series

250 SERIES ROBOT ADAPTOR SELECTION GUIDE										
ADAPTOR MOUNTS		MOUNTING PATTERN			DOWELS			PILOT		DWG PAGE
STYLE (MODEL)	TYPE AVAIL.	BOLT CIRCLE	BOLT SIZE	BOLTS QTY	BOLT CIRCLE	DWL SIZE	DWL QTY	DIAMETER (Ø)	DEPTH	
STYLE 1 (ACMX58)	DM/90	Ø90mm [Ø3.54"]	M8	8	Ø80mm [Ø3.15"]	10mm	4	N/A	N/A	4
STYLE 2 (FA500)	DM/90	Ø90mm [Ø3.54"]	M10	8	Ø90mm [Ø3.54"]	10mm	4	Ø59.5mm [Ø2.34"]	4.8 [.19]	5
STYLE 3 (KW150)	DM/90	Ø92mm [Ø3.62"]	M10	6	Ø92mm [Ø3.62"]	9mm	2	Ø54mm [Ø2.13"]	6.4 [.25]	6
STYLE 4 (FA900)	DM/90	Ø125mm [Ø4.92"]	M10	6	Ø125mm [Ø4.92"]	10mm	2	Ø79.5mm [Ø3.13"]	6.4 [.25]	7
STYLE 5 (KA760)	DM/90	Ø160mm [Ø6.30"]	M10	6	Ø160mm [Ø6.30"]	10mm	2	Ø99.9mm [Ø3.94"]	6.4 [.25]	8
STYLE 6 (MMNY300)	DM	Ø200mm [Ø7.87"]	M12	6	Ø200mm [Ø7.87"]	12mm	1	N/A	N/A	9
STYLE 7 (FA430I)	DM/90	Ø125mm [Ø4.92"]	M10	6	Ø125mm [Ø4.92"]	10mm	2	Ø79.5mm [Ø3.13"]	6.4 [.25]	10
STYLE 8 (FA420)	DM	Ø92mm [Ø3.62"]	M10	8	Ø92mm [Ø3.62"]	10mm	4	Ø79.5mm [Ø3.13"]	4.8 [.19]	11
STYLE 9 (ABB44)	DM/90	Ø100mm [Ø3.94"]	M10	6	Ø100mm [Ø3.94"]	8mm	2	Ø61.9mm [Ø2.44"]	6.4 [.25]	12
STYLE 10 (KWZ165)	DM/90	Ø125mm [Ø4.92"]	M10	10	Ø125mm [Ø4.92"]	10mm	2	Ø79.5mm [Ø3.13"]	6.4 [.25]	13
STYLE 11 (KWUT120)	90	Ø120mm [Ø4.72"]	M8	8	Ø120mm [Ø4.92"]	8mm	2	N/A	N/A	14
STYLE 12 (FA710)	DM	Ø100mm [Ø3.94"]	M8	6	Ø100mm [Ø3.94"]	8mm	2	N/A	N/A	15
STYLE 14 (MMK100)	90	Ø125mm [Ø4.92"]	M10	6	Ø125mm [Ø4.92"]	10mm	2	Ø61mm [Ø2.40"]	6.4 [.25]	16
STYLE 15 (KA660)	DM/90	Ø160mm [Ø6.30"]	M12	6	Ø160mm [Ø6.30"]	12mm	1	Ø99mm [Ø3.90"]	6.4 [.25]	17
STYLE 16 (FA2000)	DM	Ø125mm [Ø4.92"]	M10	10	Ø125mm [Ø4.92"]	10mm	2	Ø79.5mm [Ø3.13"]	6.4 [.25]	18
STYLE 18 (MMHP165)	DM/90	Ø125mm [Ø4.92"]	M10	6	Ø125mm [Ø4.92"]	10mm	2	Ø62.5mm [Ø2.46"]	6.4 [.25]	19
STYLE 19 (MMHP165)	90	Ø92mm [Ø3.62"]	M10	6	Ø125mm [Ø4.92"]	9mm	2	Ø62.5mm [Ø2.46"]	6.4 [.25]	20
STYLE 21 (EOAMC30)	DM	Ø127mm [Ø5.00"]	3/8-16	6	Ø108mm [Ø4.25"]	.25"(in)	2	N/A	N/A	21
STYLE 22 (FA900-SSM)	DM	Ø125mm [Ø4.92"]	M10	6	Ø125mm [Ø4.92"]	10mm	2	Ø79.5mm [Ø3.13"]	4.8 [.19]	21
STYLE 23 (MD350)	DM/90	Ø187.3mm [Ø7.38"]	3/8-16	4	Ø187.3mm [Ø7.38"]	3/8	2	N/A	N/A	22
STYLE 24 (SA000)	DM	Ø69.5mm [Ø2.74"]	M10	4	N/A	N/A	N/A	N/A	N/A	23

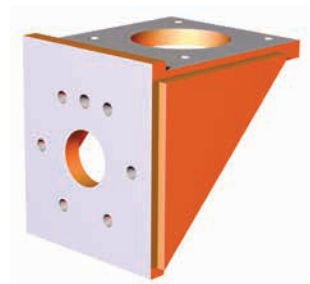
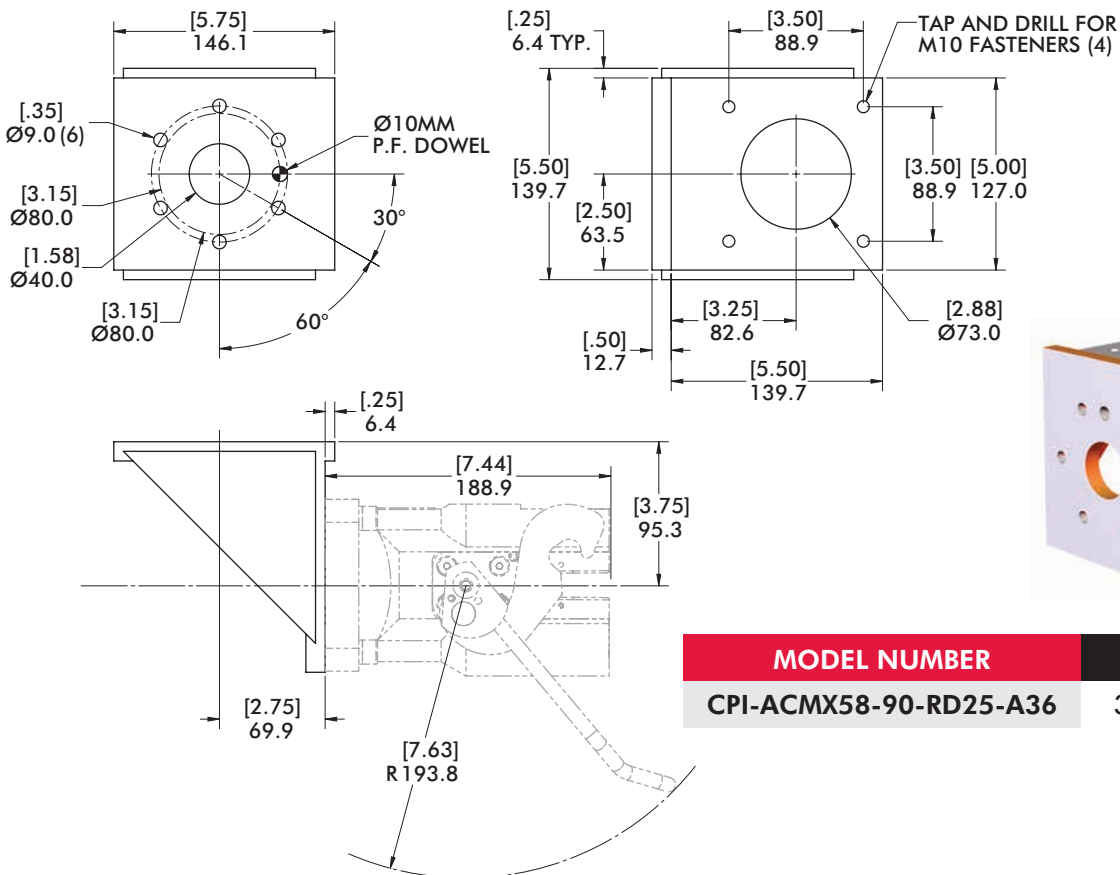
Style 01 - ACMX58 90° Robot Adaptor (Ø90mm Bolt Circle/Ø80mm Dowel Circle)

Models Supported:
ACMA X58



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-ACMX58-DM-RD25-A3	3/8 NPT	3 (2/1)	.75 kg [1.66 lb]
CPI-ACMX58-DM-RD25-A6	1/8 NPT	6 (3/3)	.79 kg [1.74 lb]

Style 01 - ACMX58 90° Robot Adaptor (Ø90mm Bolt Circle/Ø80mm Dowel Circle)



MODEL NUMBER	WEIGHT
CPI-ACMX58-90-RD25-A36	3.79 kg [8.35 lb]

FA500

Robot Automation Adaptors | Dimensions

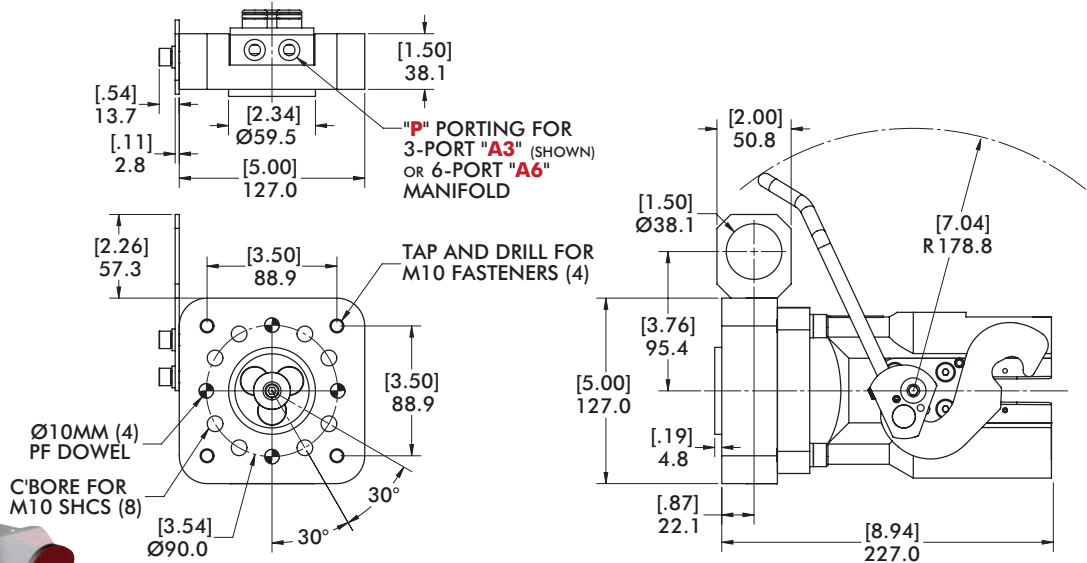
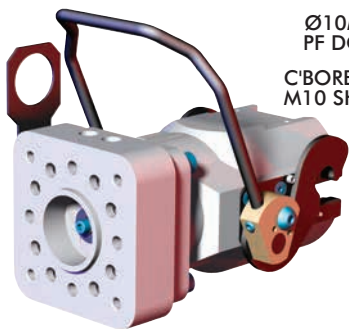
Style 02 - FA500 Direct Mount Adaptor (Ø90mm Bolt Circle)

Models Supported:

FANUC M-400

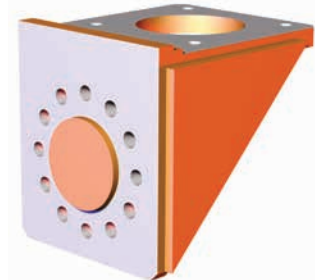
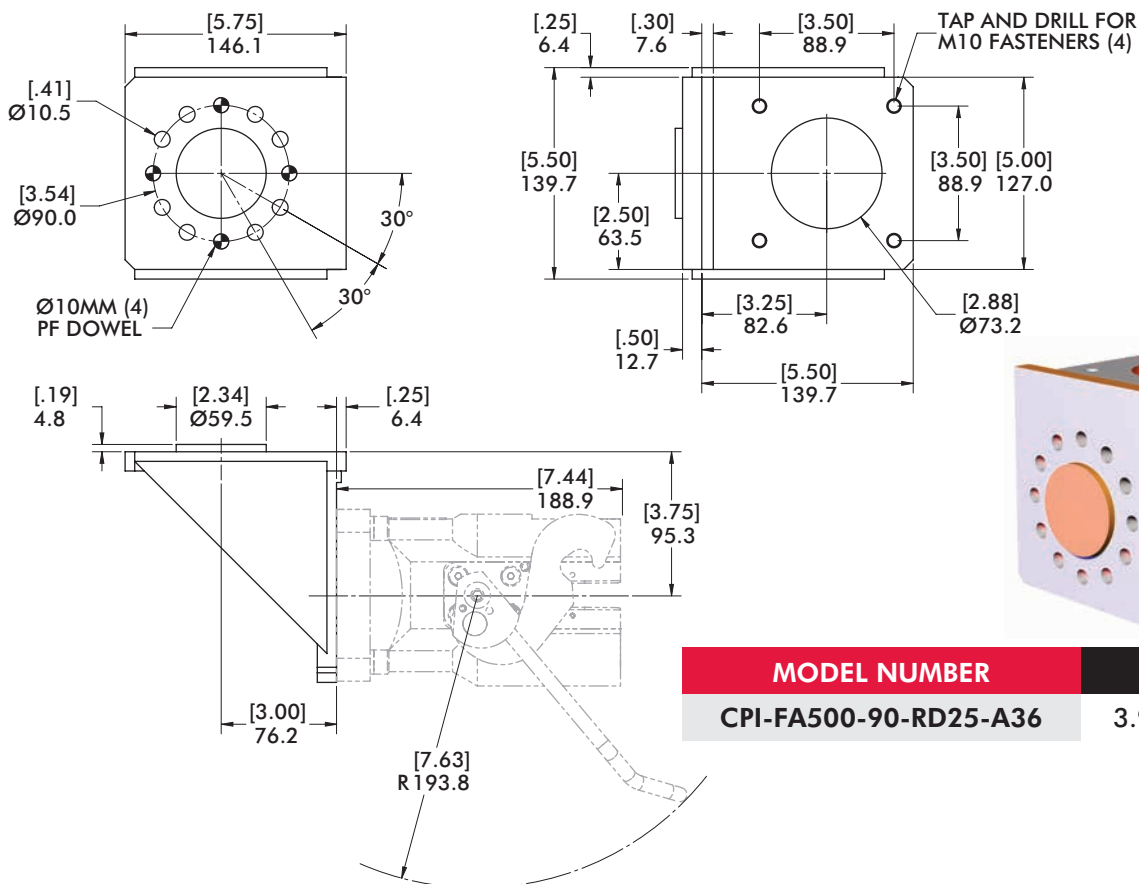
FANUC M-500

FANUC S-420 (WITH FANUC FLANGE)



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-FA500-DM-RD25-A3	3/8 NPT	3 (2/1)	1.46 kg [3.21 lb]
CPI-FA500-DM-RD25-A6	1/8 NPT	6 (3/3)	1.50 kg [3.30 lb]

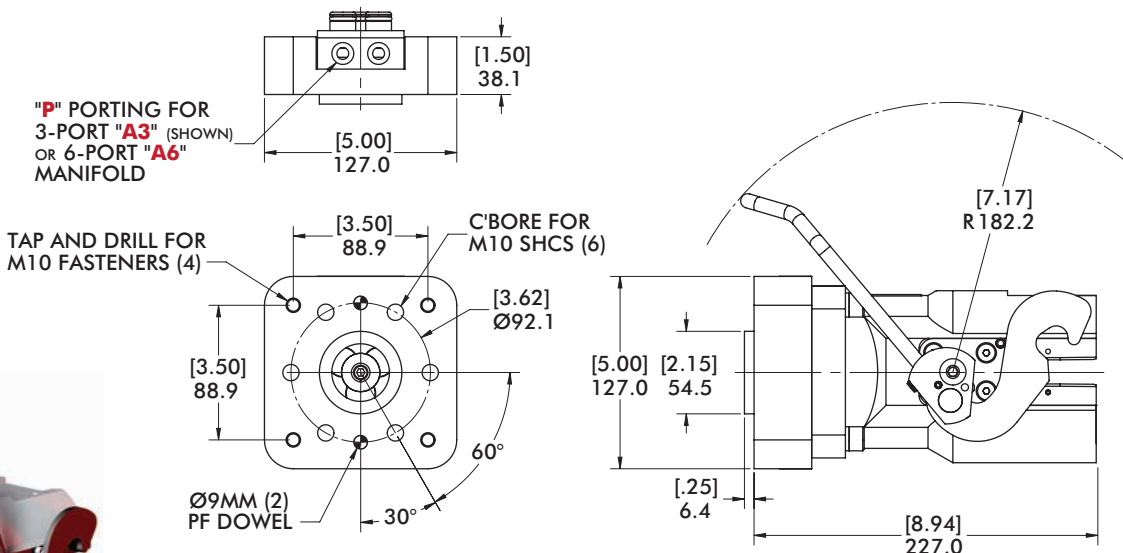
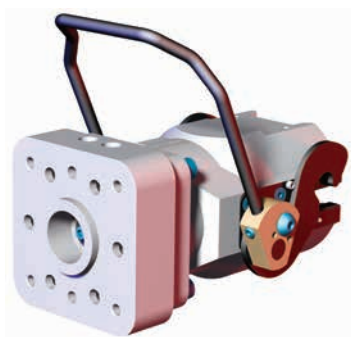
Style 02 - FA500 90° Robot Adaptor (Ø90mm Bolt Circle)



MODEL NUMBER	WEIGHT
CPI-FA500-90-RD25-A36	3.98 kg [8.77 lb]

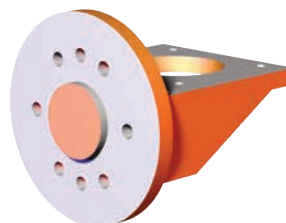
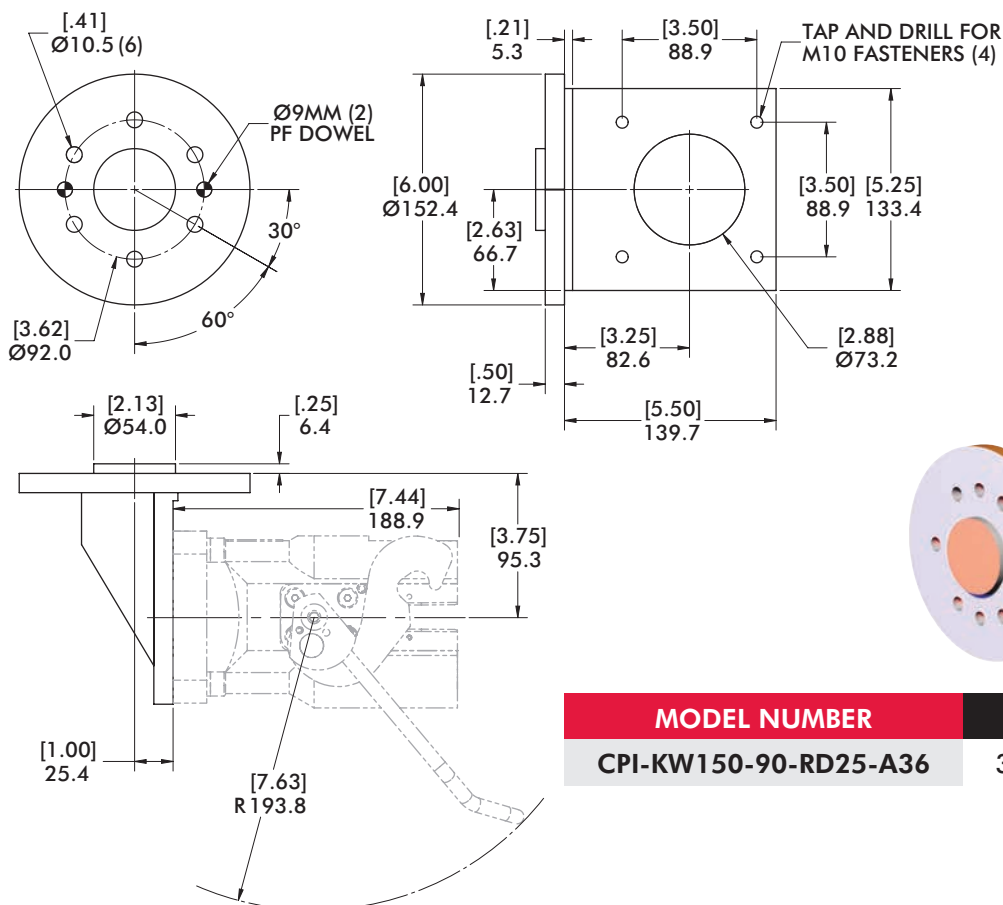
Style 03 - KW150 90° Robot Adaptor (Ø92mm Bolt Circle)

Models Supported:
 KAWASAKI UX100
 KAWASAKI UX120
 KAWASAKI UX150



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-KW150-DM-RD25-A3	3/8 NPT	3 (2/1)	1.45 kg [3.19 lb]
CPI-KW150-DM-RD25-A6	1/8 NPT	6 (3/3)	1.49 kg [3.28 lb]

Style 03 - KW150 90° Robot Adaptor (Ø92mm Bolt Circle)



MODEL NUMBER	WEIGHT
CPI-KW150-90-RD25-A36	3.63 kg [8.01 lb]

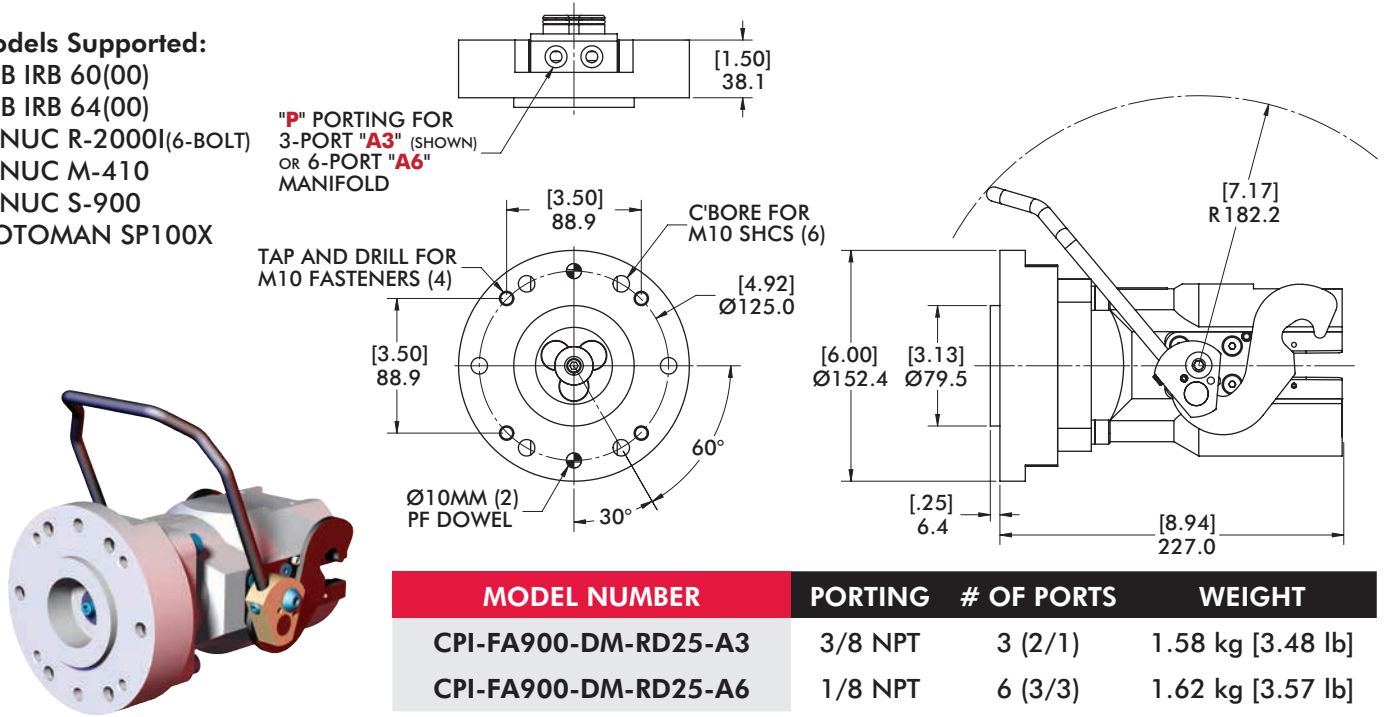
FA900

Robot Automation Adaptors | Dimensions

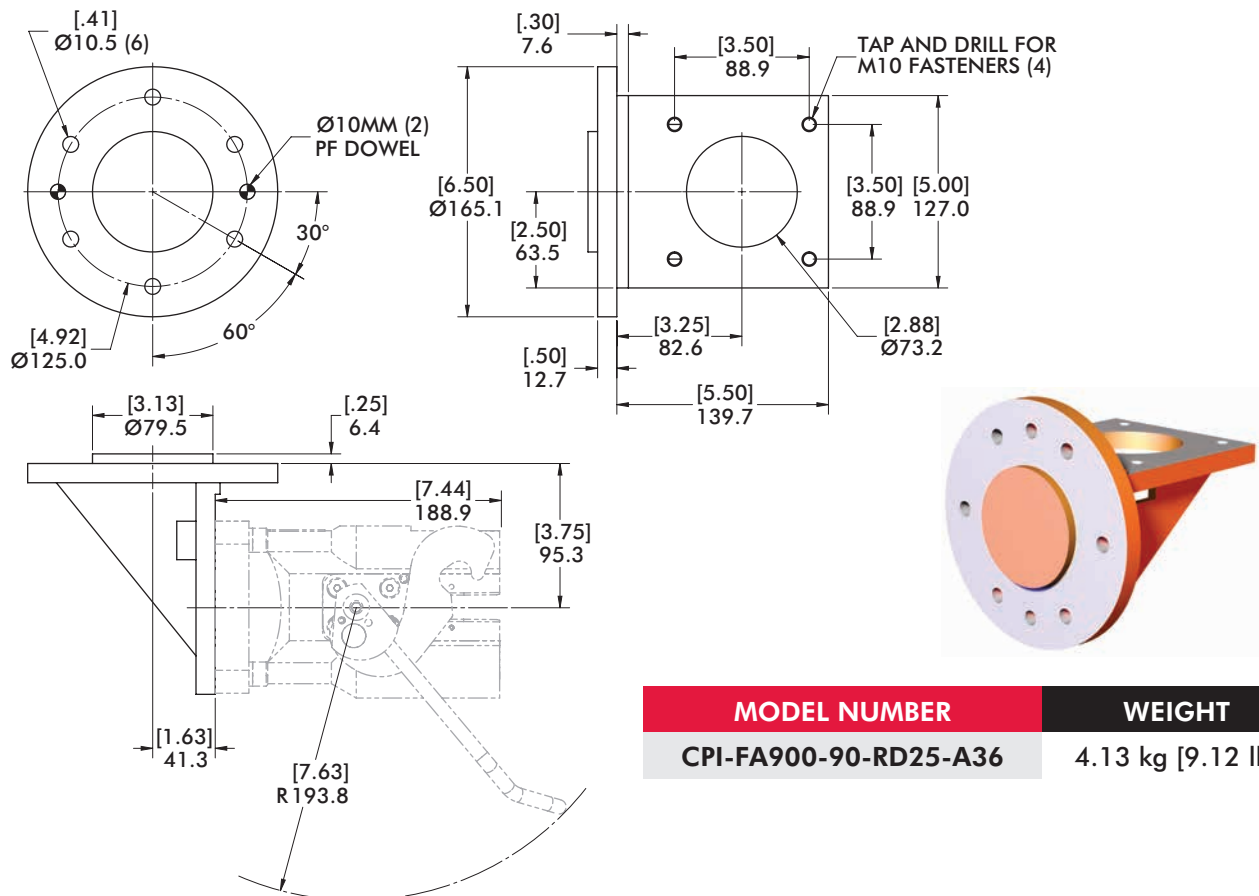
Style 04 - FA900 Direct Mount Adaptor (Ø125mm Bolt Circle)

Models Supported:

- ABB IRB 60(00)
- ABB IRB 64(00)
- FANUC R-2000I(6-BOLT)
- FANUC M-410
- FANUC S-900
- MOTOMAN SP100X



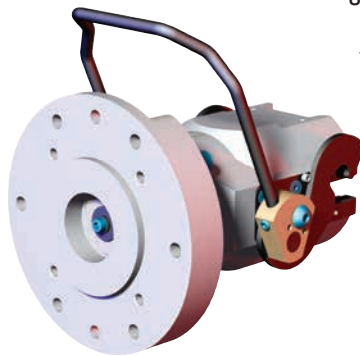
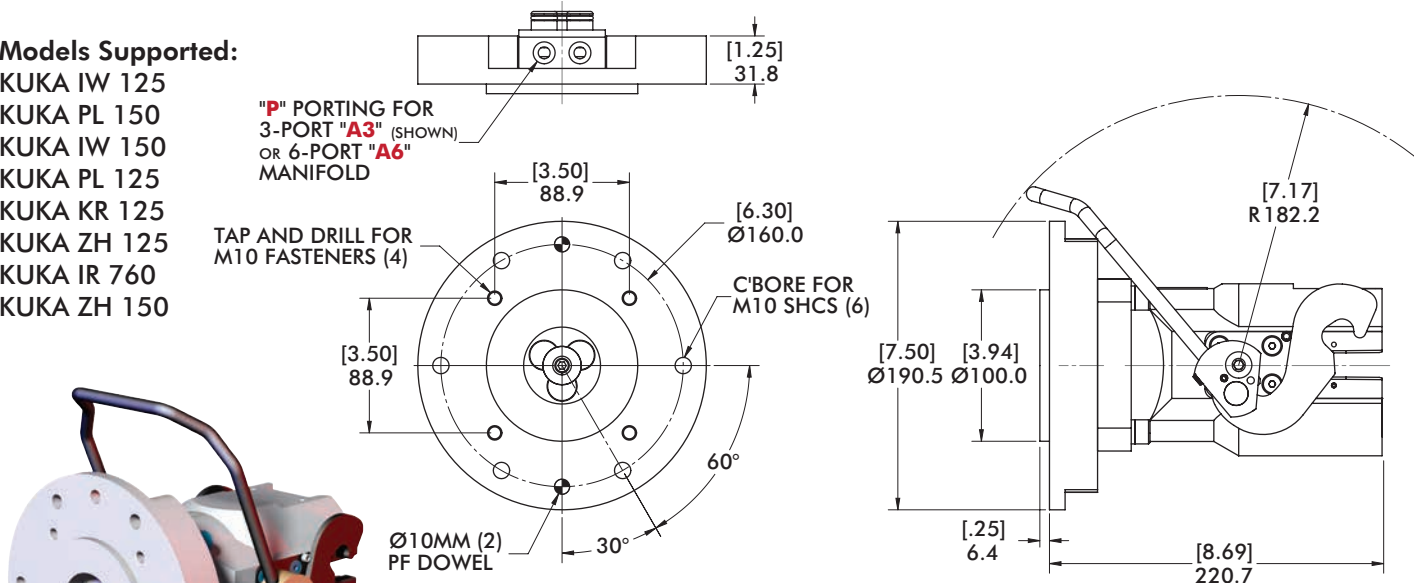
Style 04 - FA900 90° Robot Adaptor (Ø125mm Bolt Circle)



Style 05 - KA760 Direct Mount Adaptor (Ø160mm Bolt Circle)

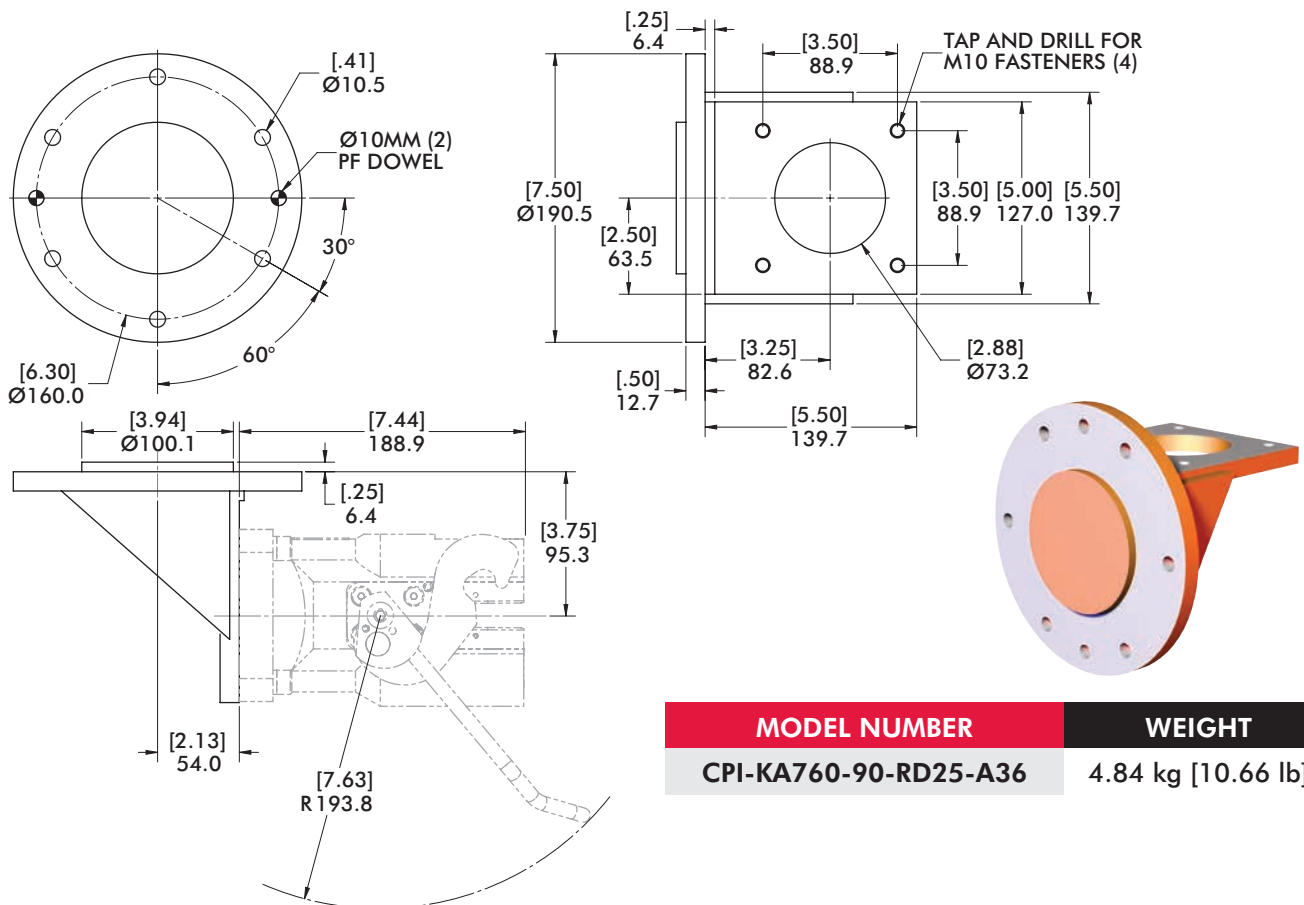
Models Supported:

KUKA IW 125
 KUKA PL 150
 KUKA IW 150
 KUKA PL 125
 KUKA KR 125
 KUKA ZH 125
 KUKA IR 760
 KUKA ZH 150



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-KA760-DM-RD25-A3	3/8 NPT	3 (2/1)	2.12 kg [4.66 lb]
CPI-KA760-DM-RD25-A6	1/8 NPT	6 (3/3)	2.15 kg [4.75 lb]

Style 05 - KA760 90° Robot Adaptor (Ø160mm Bolt Circle)



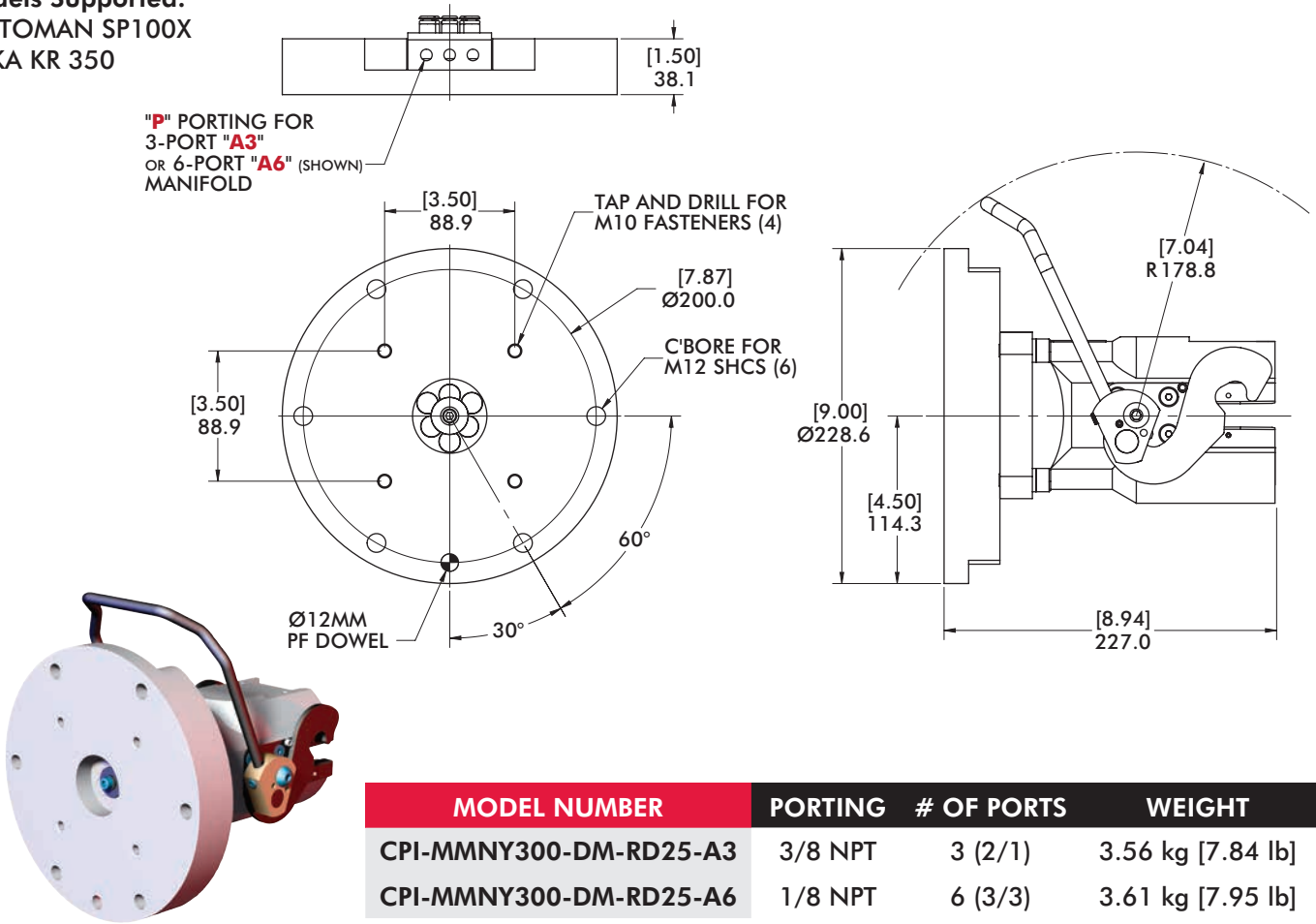
MODEL NUMBER	WEIGHT
CPI-KA760-90-RD25-A36	4.84 kg [10.66 lb]

MMNY300

Robot Automation Adaptors | Dimensions

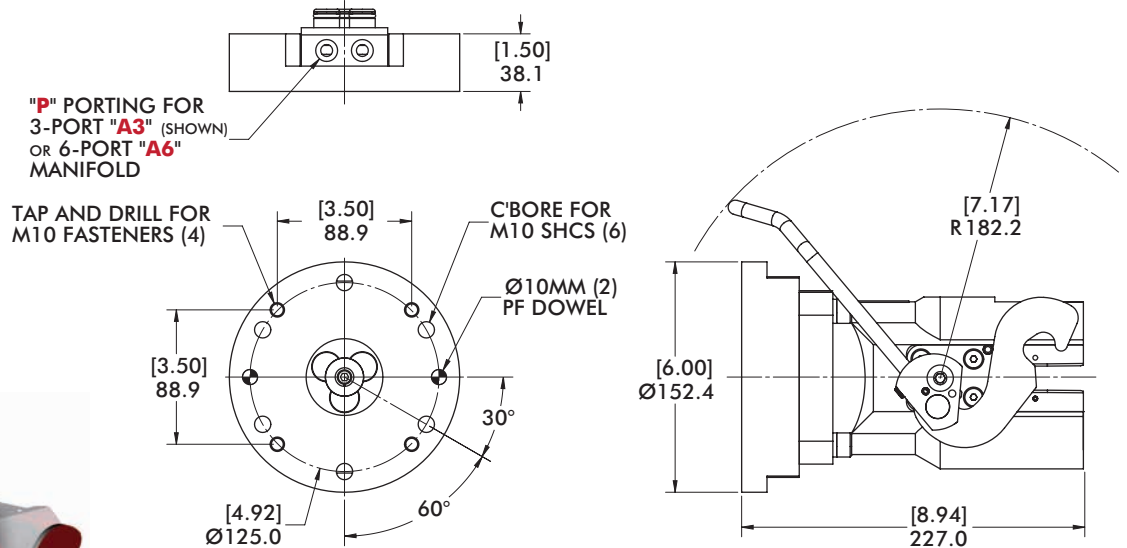
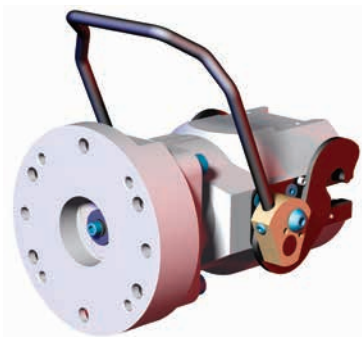
Style 06 - **MMNY300** Direct Mount Adaptor (Ø200mm Bolt Circle)

Models Supported:
MOTOMAN SP100X
KUKA KR 350



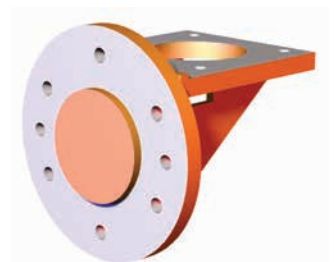
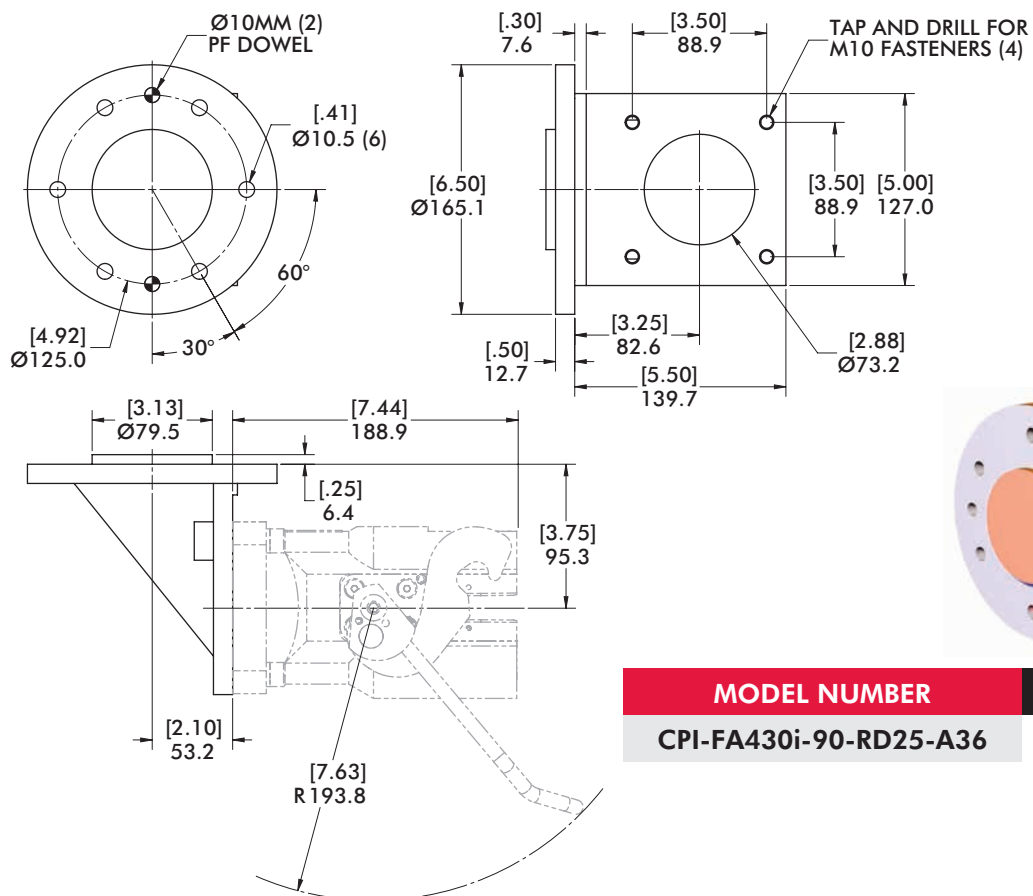
Style 07 - FA430i Direct Mount Adaptor (Ø125mm Bolt Circle)

Models Supported:
FANUC S430i



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-FA430i-DM-RD25-A3	3/8 NPT	3 (2/1)	1.52 kg [3.36 lb]
CPI-FA430i-DM-RD25-A6	1/8 NPT	6 (3/3)	1.56 kg [3.44 lb]

Style 07 - FA430i 90° Robot Adaptor (Ø125mm Bolt Circle)



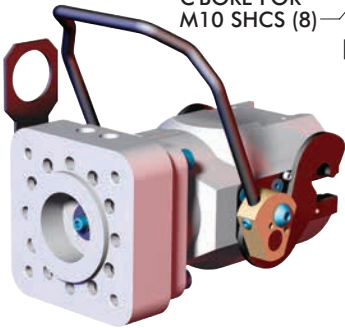
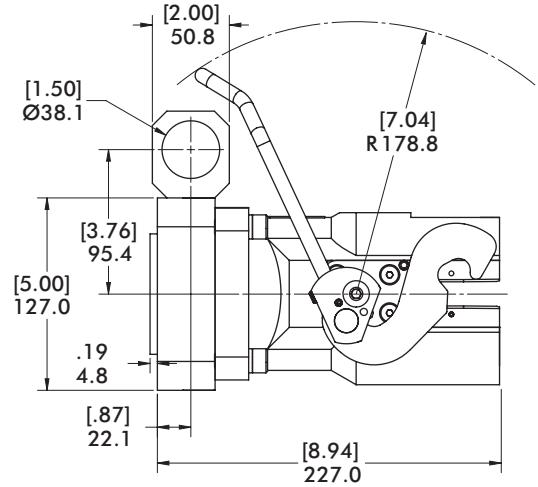
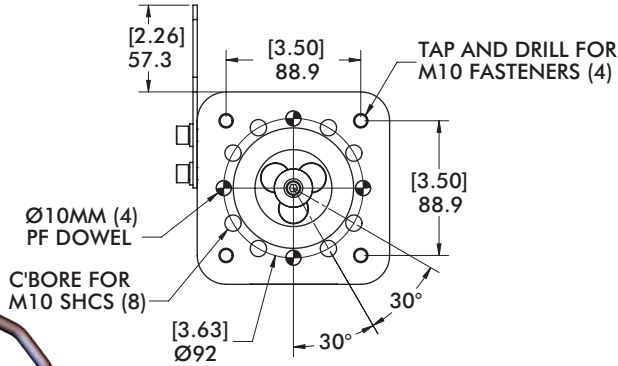
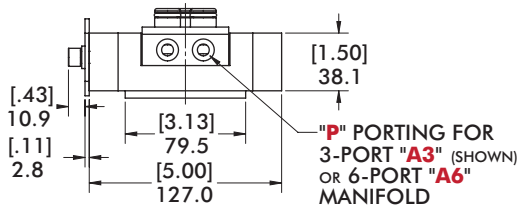
MODEL NUMBER	WEIGHT
CPI-FA430i-90-RD25-A36	4.13 kg [9.12 lb]

FA420

Robot Automation Adaptors | Dimensions

Style 08 - FA420 Direct Mount Adaptor (Ø92mm Bolt Circle)

Models Supported:
FANUC S420 (WITH
SPECIAL FLANGE)

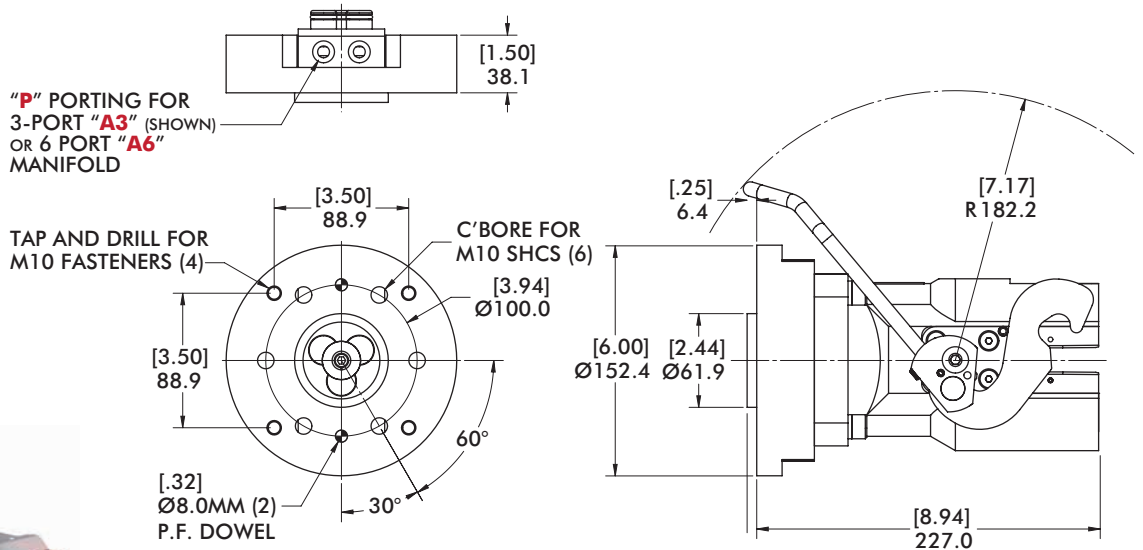


MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-FA420-DM-RD25-A3-SPC	3/8 NPT	3 (2/1)	1.48 kg [3.27 lb]
CPI-FA420-DM-RD25-A6-SPC	1/8 NPT	6 (3/3)	1.52 kg [3.35 lb]

Style 09 - ABB44 Direct Mount Adaptor (Ø100mm Bolt Circle)

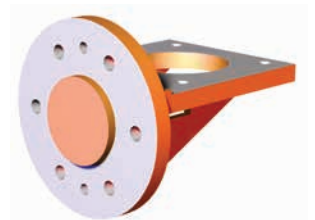
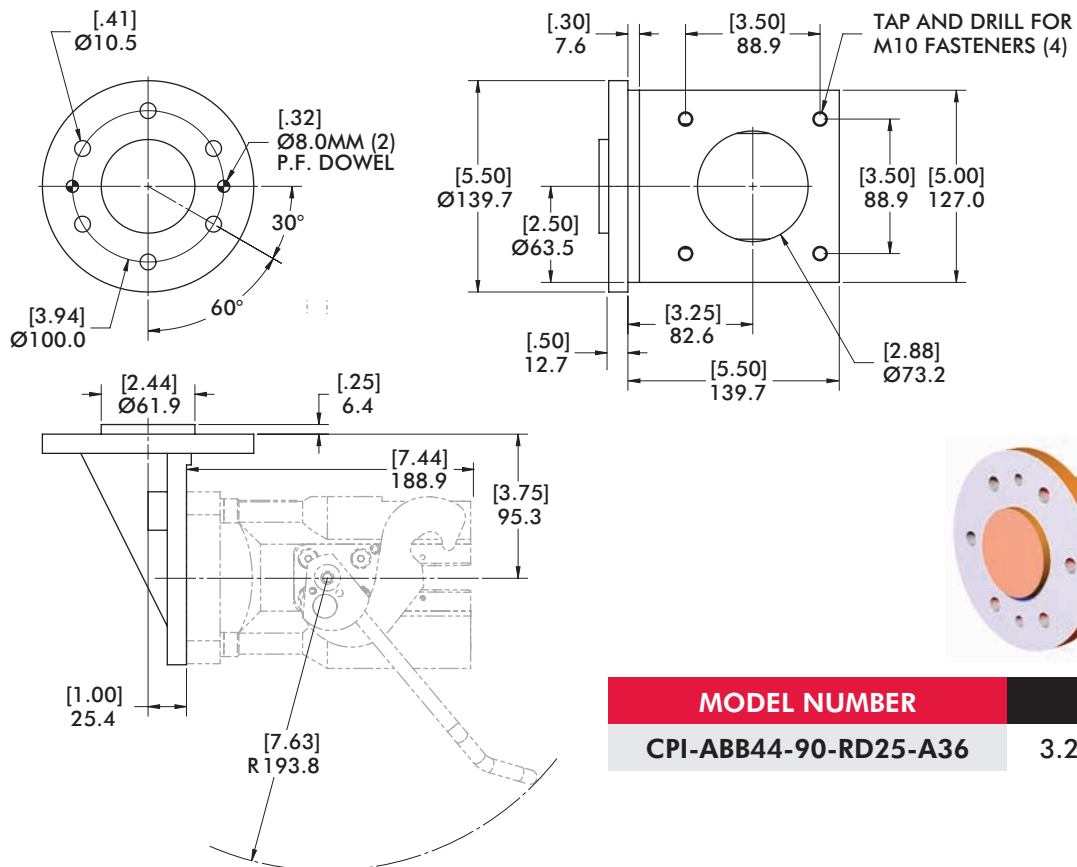
Models Supported:

- ABB IRB 4400/S
- ABB IRB 4400/60
- ABB IRB 4400/45
- ABB IRB 4400/L30



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-ABB44-DM-RD25-A3	3/8 NPT	3 (2/1)	1.57 kg [3.47 lb]
CPI-ABB44-DM-RD25-A6	1/8 NPT	6 (3/3)	1.61 kg [3.55 lb]

Style 09 - ABB44 90° Robot Adaptor (Ø100mm Bolt Circle)



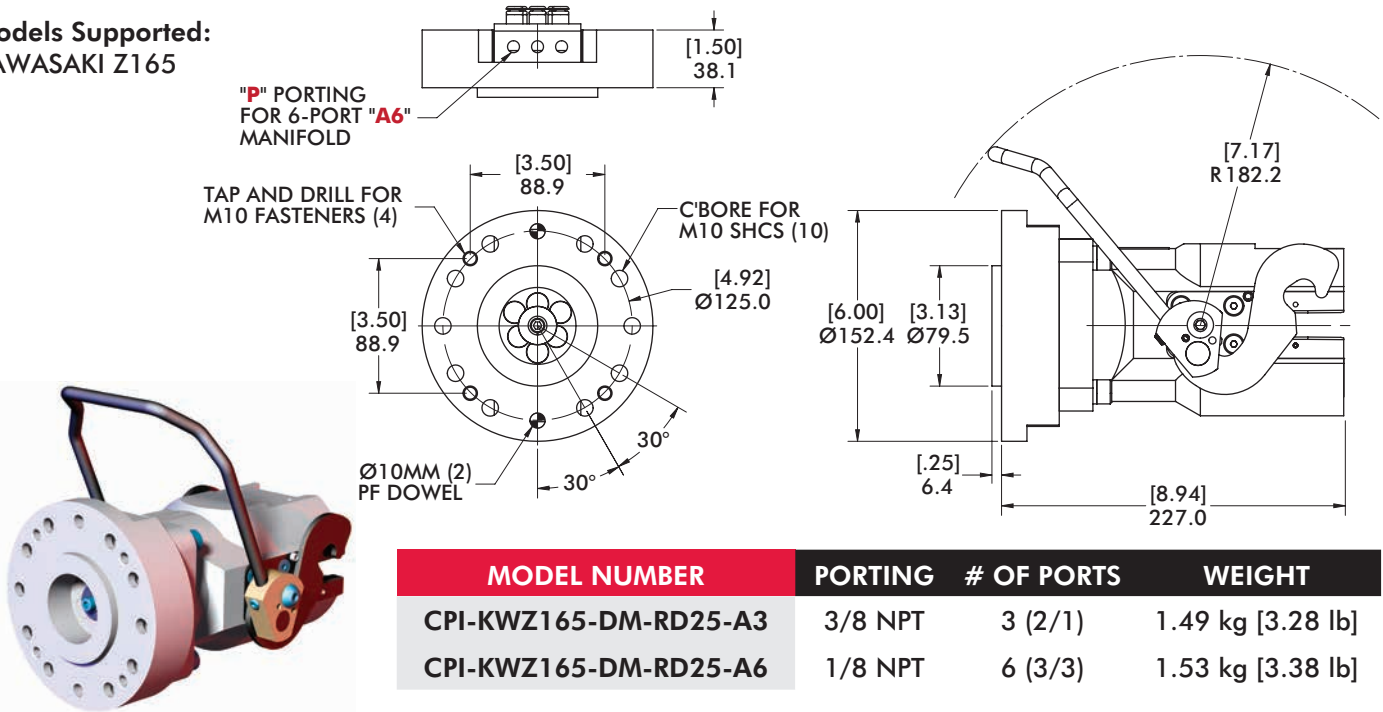
MODEL NUMBER	WEIGHT
CPI-ABB44-90-RD25-A36	3.24 kg [7.15 lb]

KWZ165

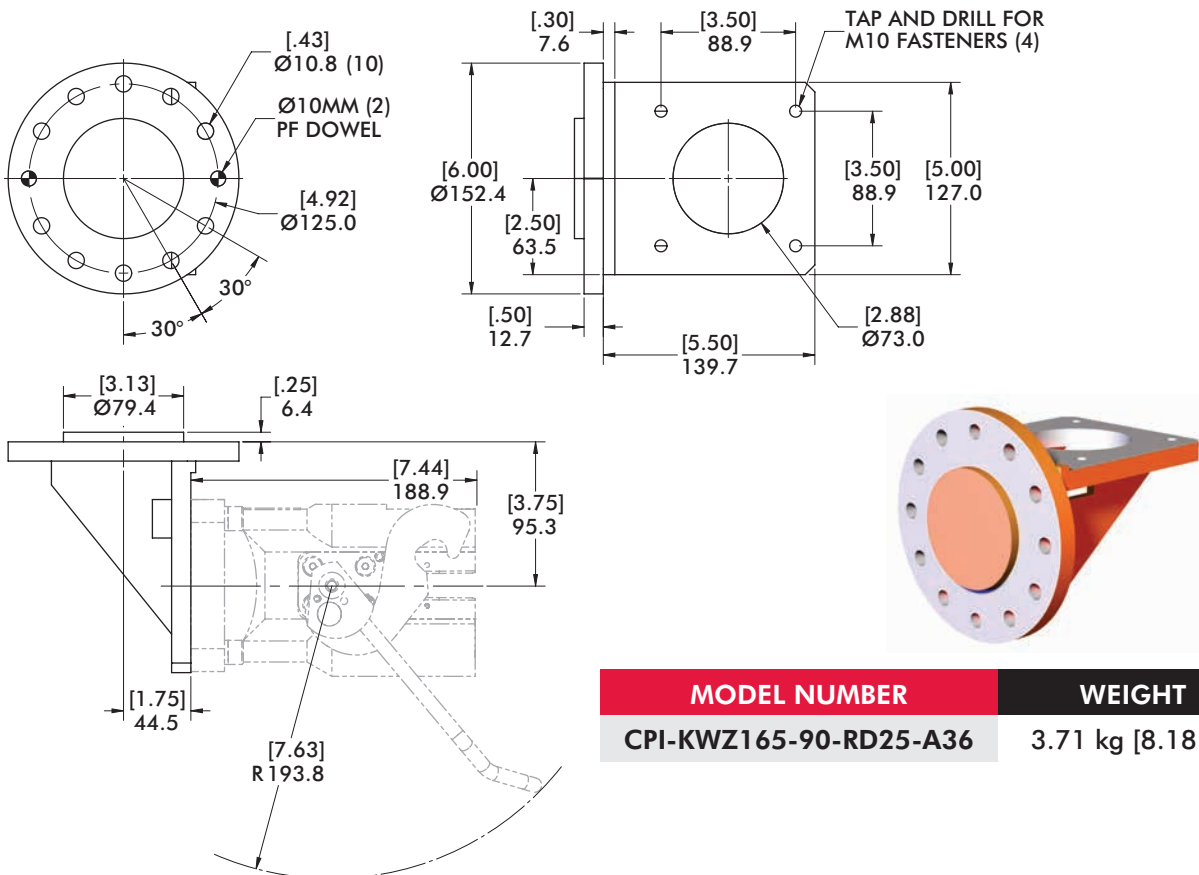
Robot Automation Adaptors | Dimensions

Style 10 - KWZ165 Direct Mount Adaptor (Ø125mm Bolt Circle)

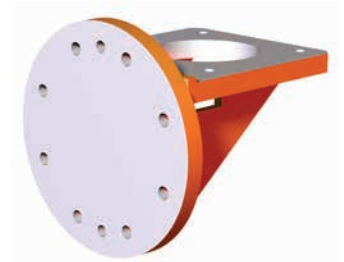
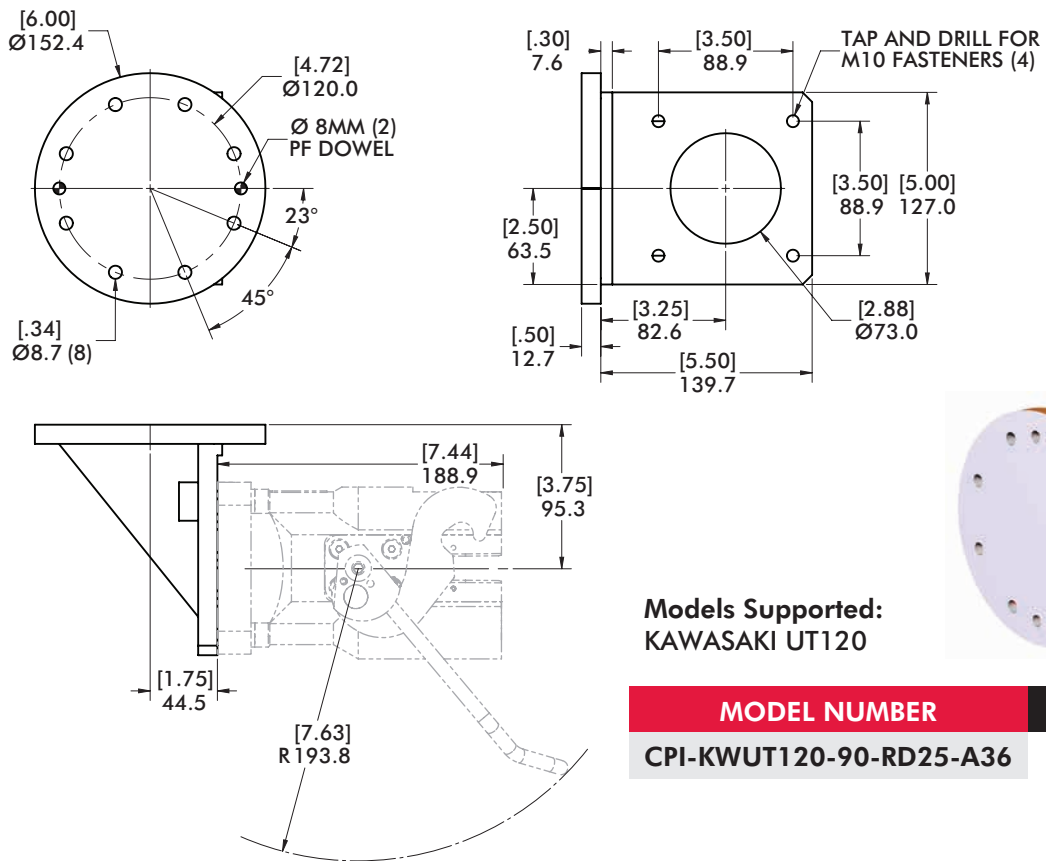
Models Supported:
KAWASAKI Z165



Style 10 - KWZ165 90° Robot Adaptor (Ø125mm Bolt Circle)



Style 11 - KWUT120 90° Adaptor (Ø120mm Bolt Circle)



Models Supported:
KAWASAKI UT120

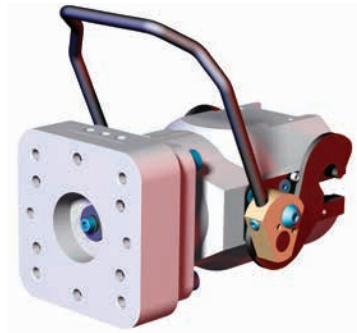
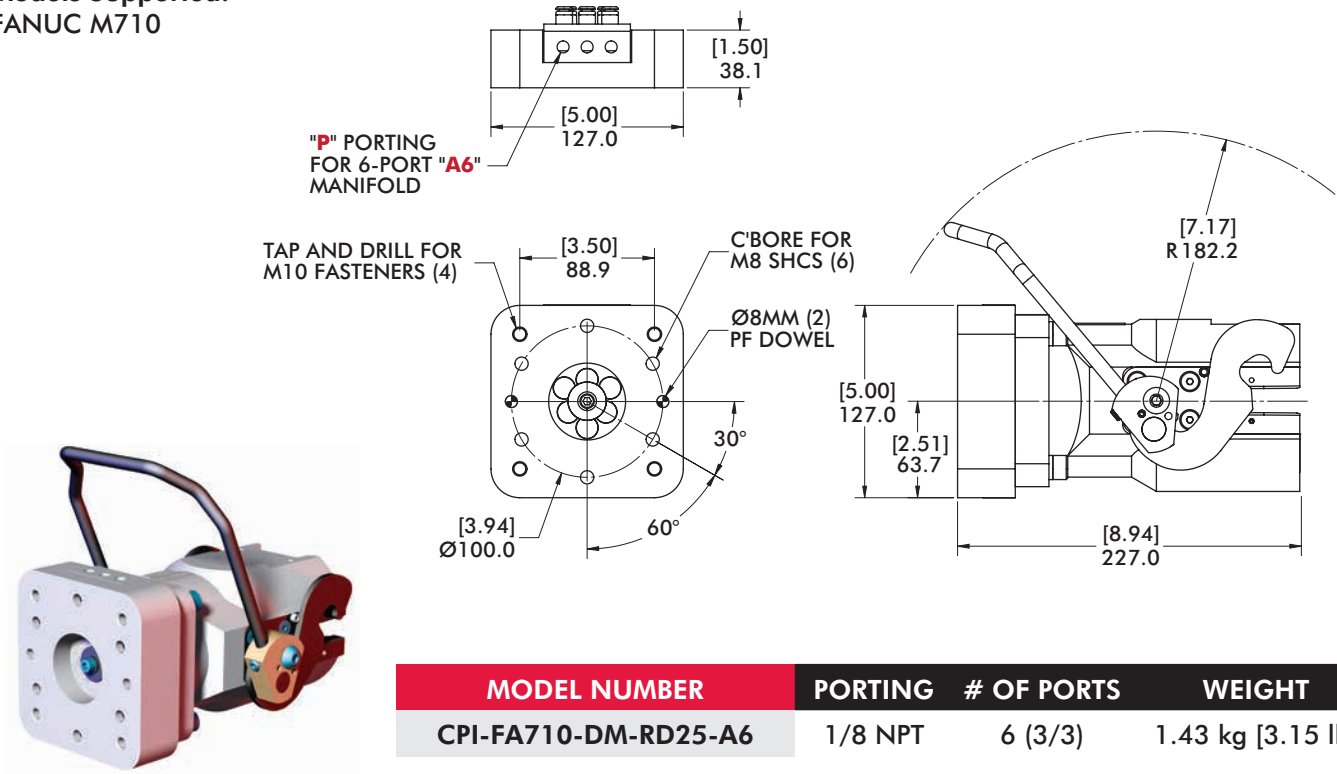
MODEL NUMBER	WEIGHT
CPI-KWUT120-90-RD25-A36	3.58 kg [7.90 lb]

FA710

Robot Automation Adaptors | Dimensions

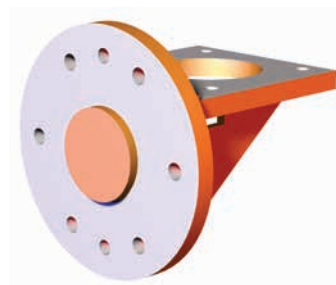
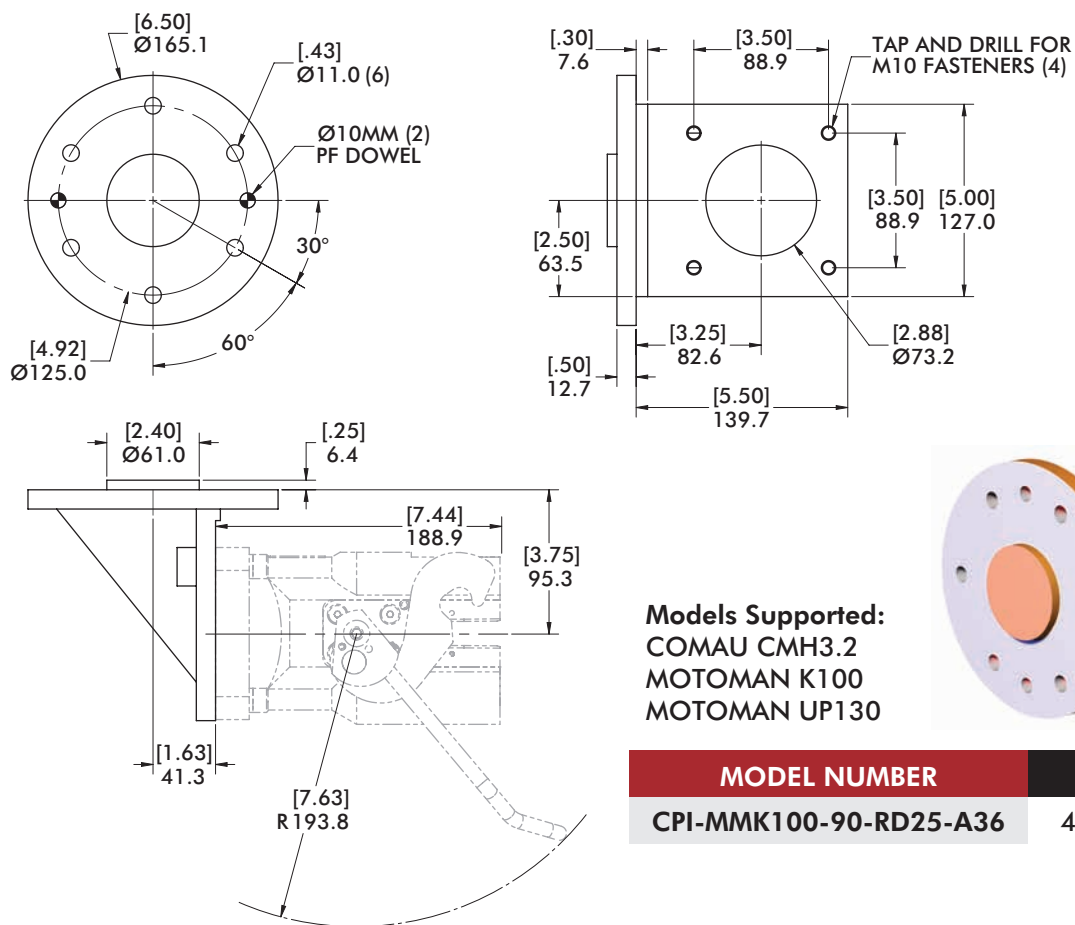
Style 12 - FA710 Direct Mount Adaptor (Ø100mm Bolt Circle)

Models Supported:
FANUC M710



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-FA710-DM-RD25-A6	1/8 NPT	6 (3/3)	1.43 kg [3.15 lb]

Style 14 - MMK100 90° Adaptor (Ø125mm Bolt Circle)



Models Supported:
 COMAU CMH3.2
 MOTOMAN K100
 MOTOMAN UP130

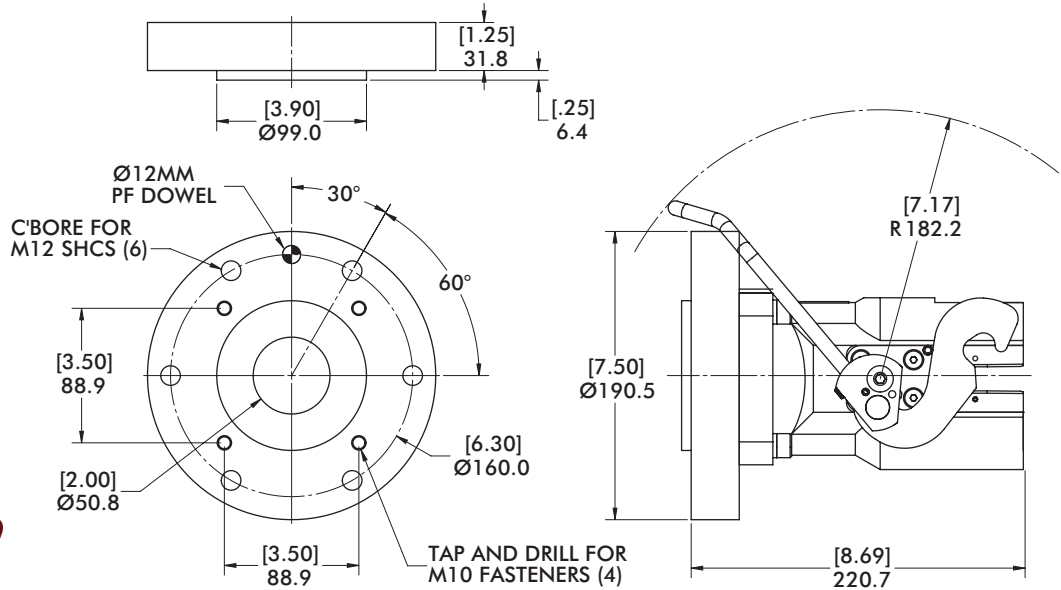
MODEL NUMBER	WEIGHT
CPI-MMK100-90-RD25-A36	4.03 kg [8.88 lb]

KA660

Robot Automation Adaptors | Dimensions

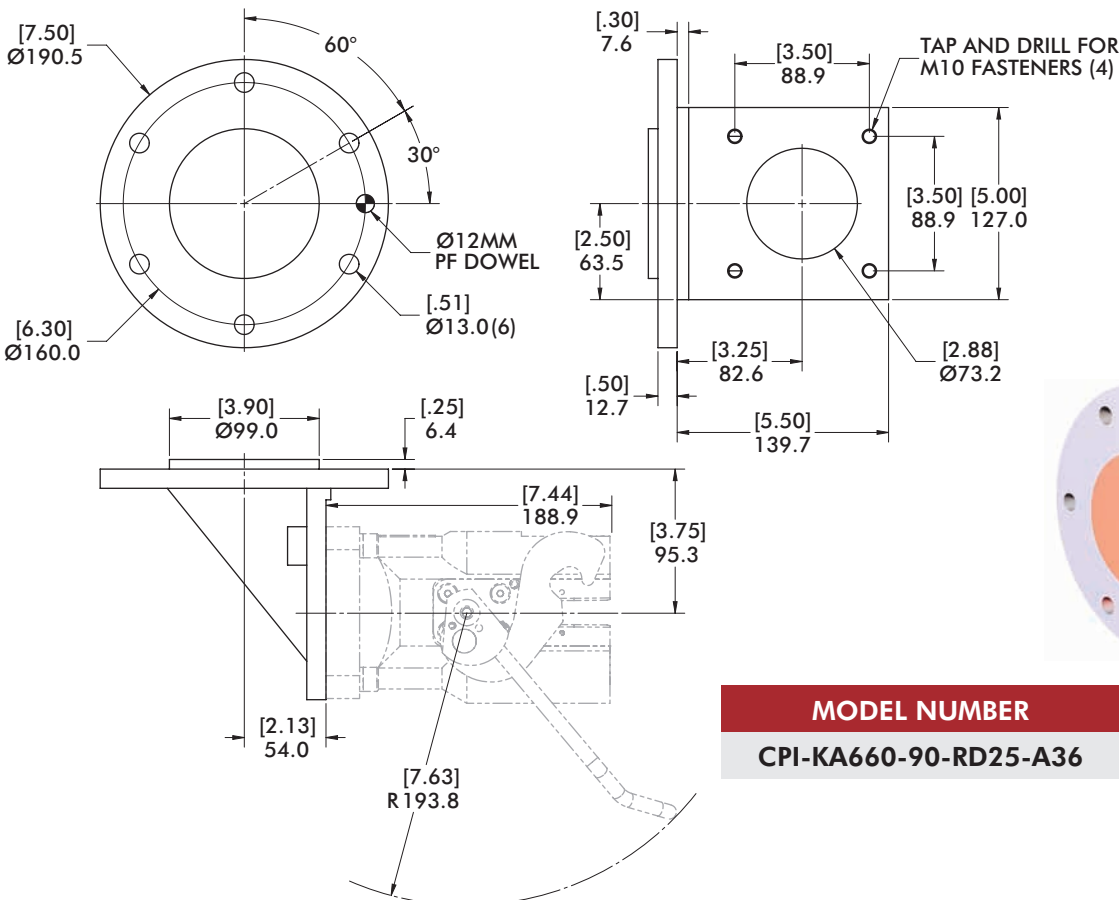
Style 15 - KA660 Direct Mount Adaptor (Ø160mm Bolt Circle)

Models Supported:
KUKA 660



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-KA660-DM-RD25-00	N/A	N/A	2.23 kg [4.92 lb]

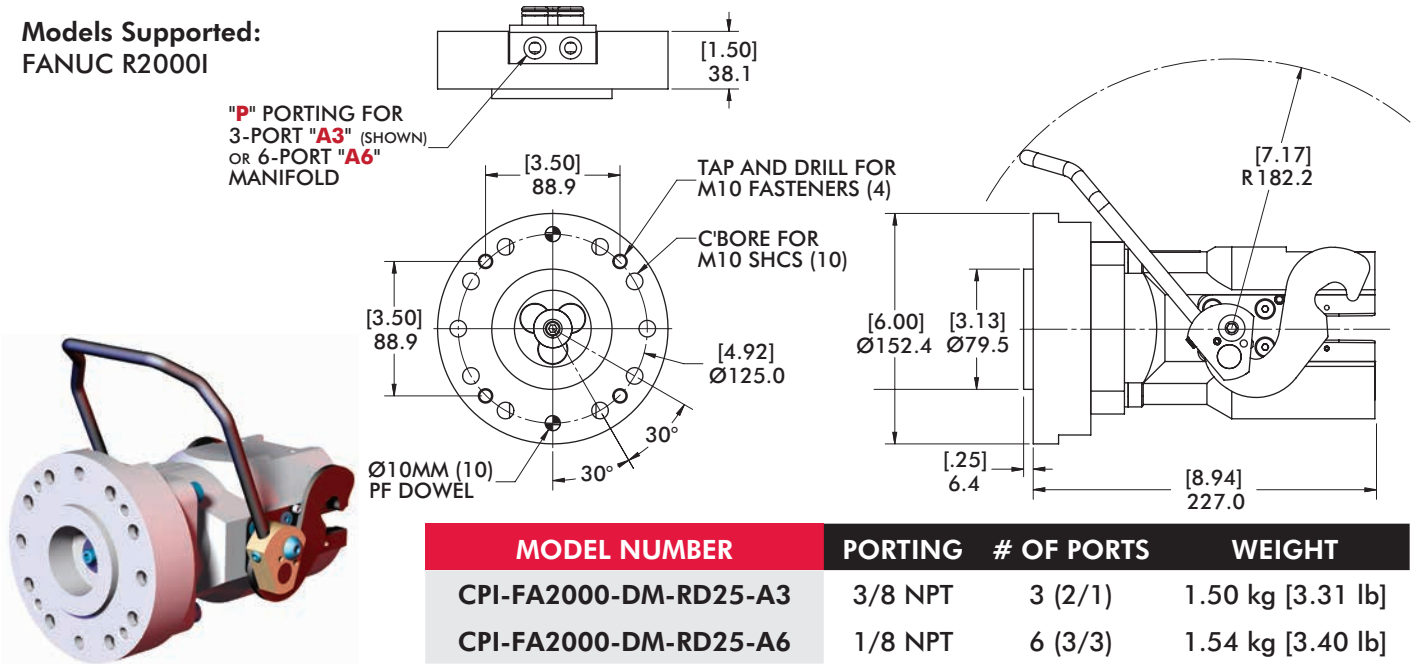
Style 15 - KA660 90° Robot Adaptor (Ø160mm Bolt Circle)



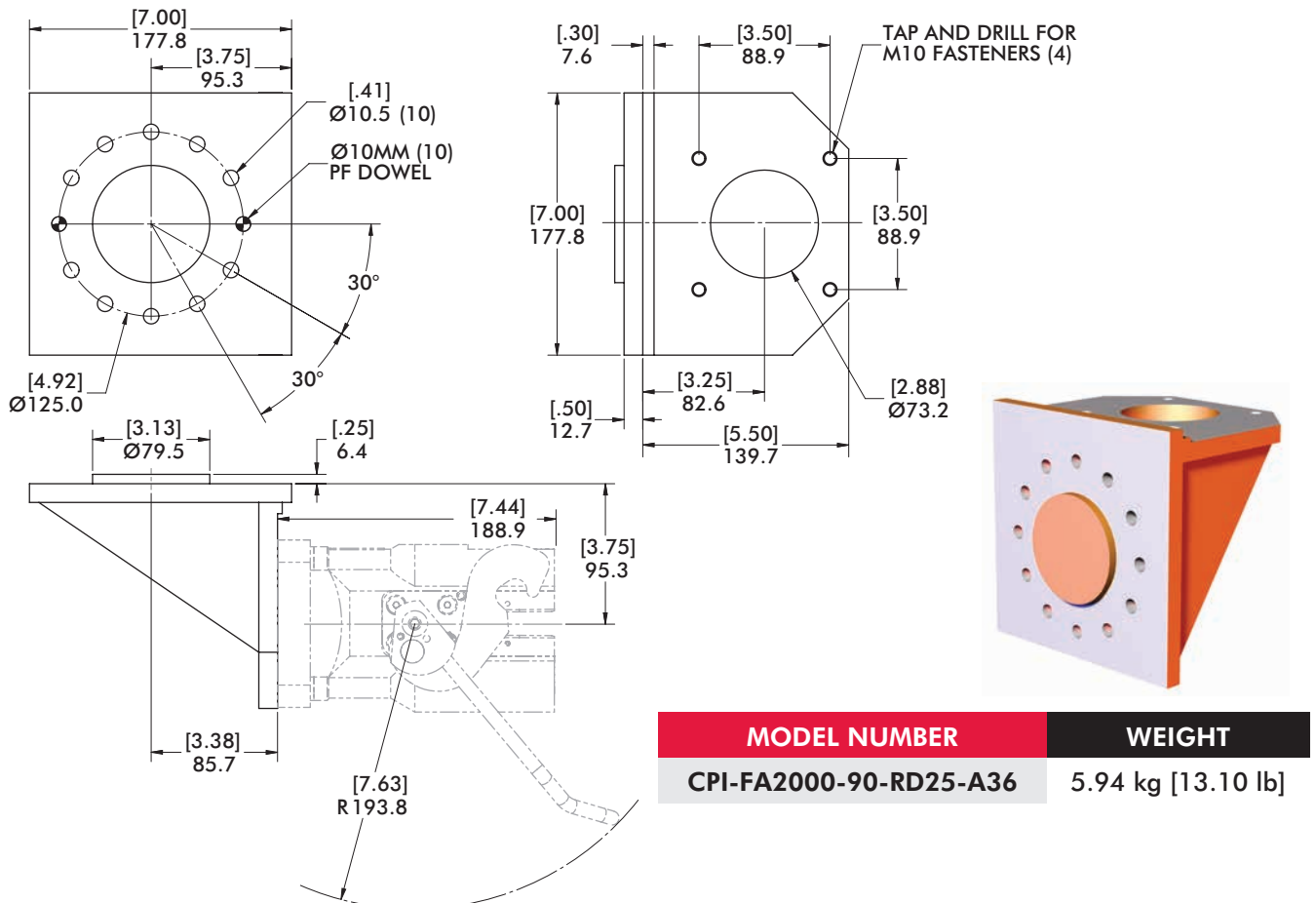
MODEL NUMBER	WEIGHT
CPI-KA660-90-RD25-A36	4.95 kg [10.91 lb]

Style 16 - FA2000 Direct Mount Adaptor (Ø125mm Bolt Circle)

Models Supported:
FANUC R2000I



Style 16 - FA2000 90° Robot Adaptor (Ø125mm Bolt Circle)

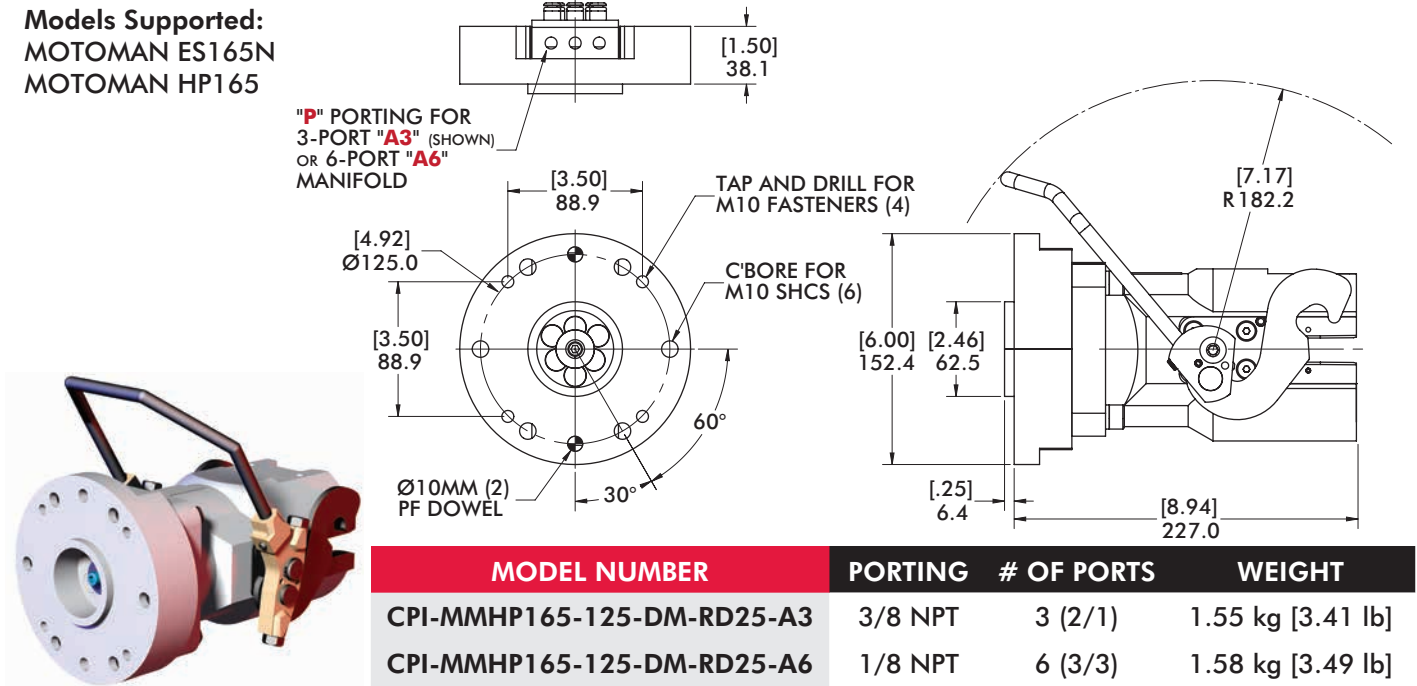


MMHP165

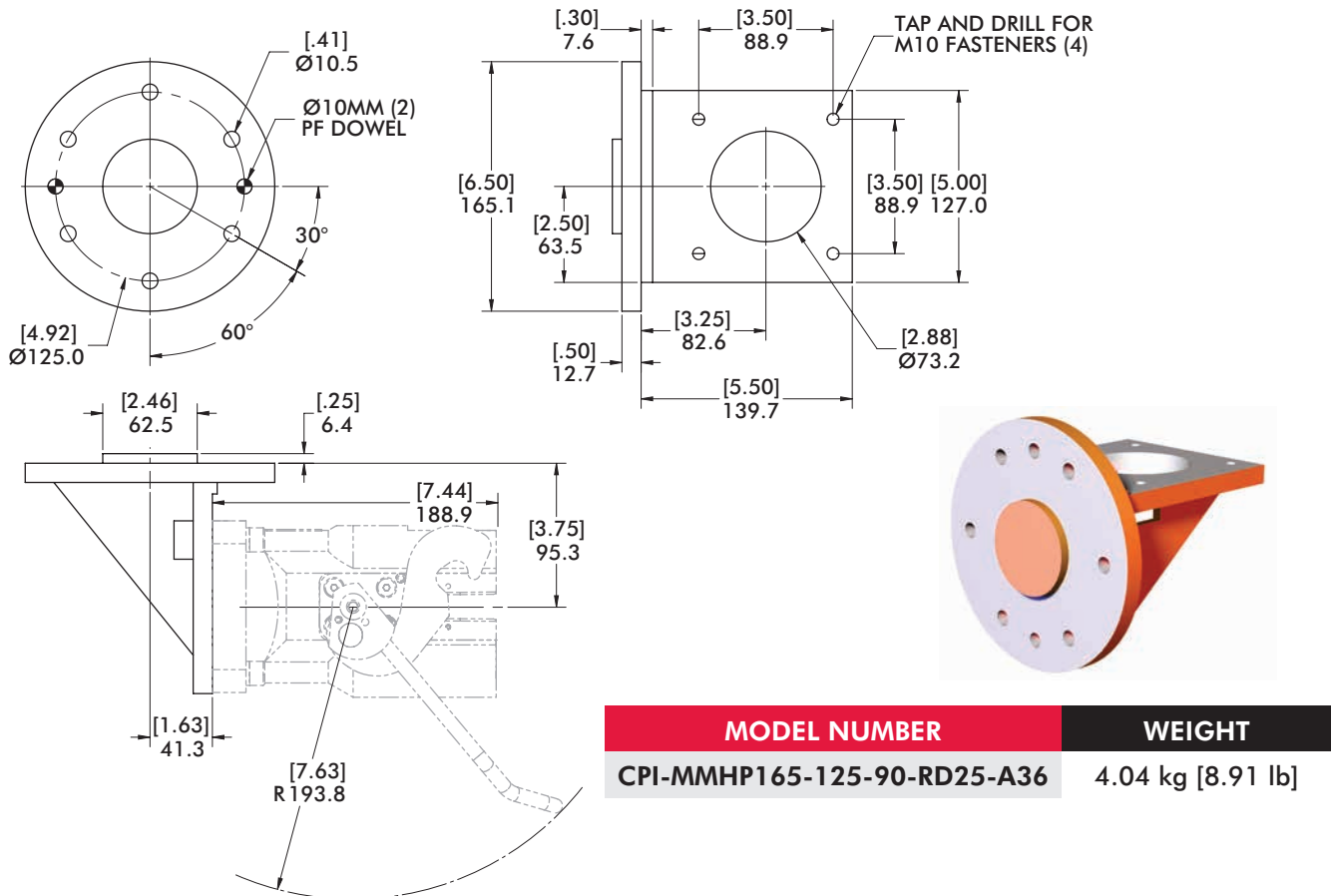
Robot Automation Adaptors | Dimensions

Style 15 - KA660 Direct Mount Adaptor (Ø160mm Bolt Circle)

Models Supported:
MOTOMAN ES165N
MOTOMAN HP165



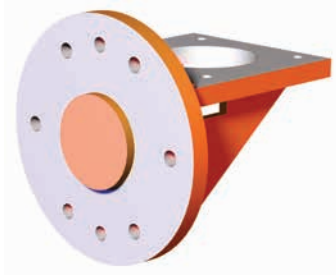
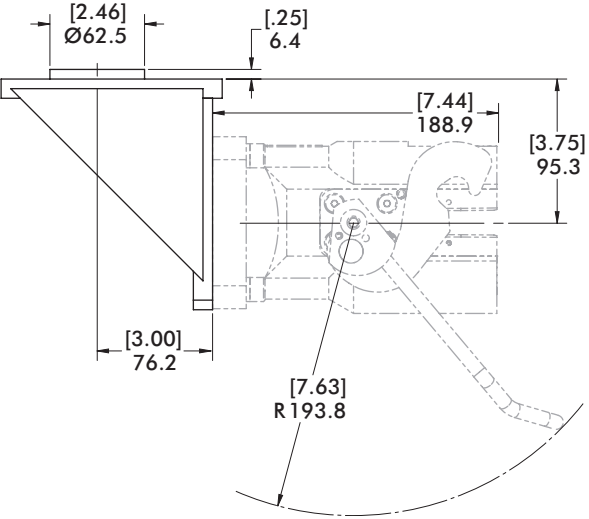
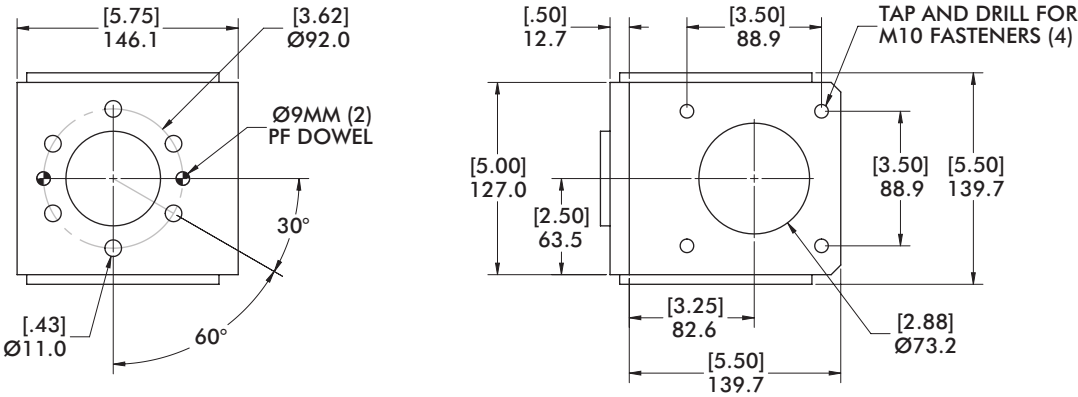
Style 15 - KA660 90° Robot Adaptor (Ø125mm Bolt Circle)



MMHP165

Robot Automation Adaptors | Dimensions

Style 19 - MMHP165 90° Adaptor (Ø92mm Bolt Circle)



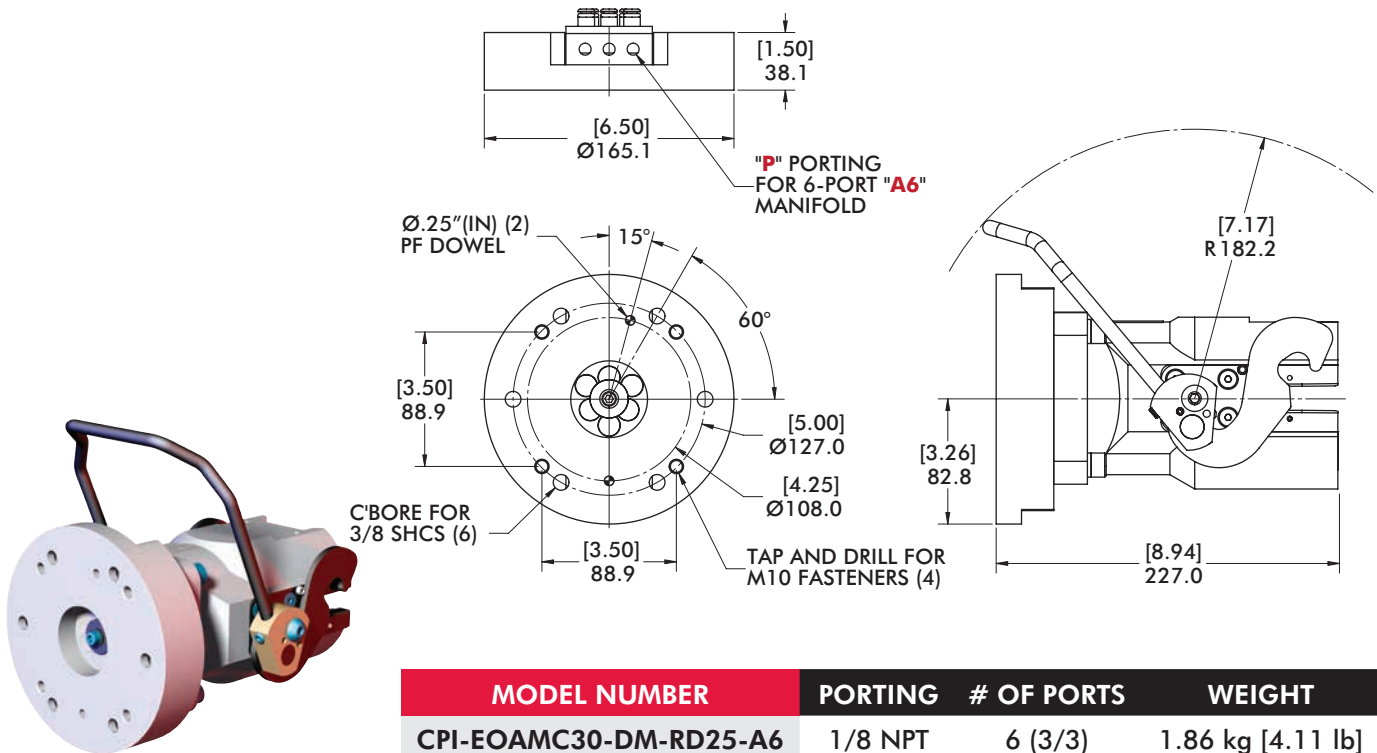
Models Supported:
 HP165
 ES165N

MODEL NUMBER	WEIGHT
CPI-MMHP165-92-90-RD25-A36	4.03 kg [8.89 lb]

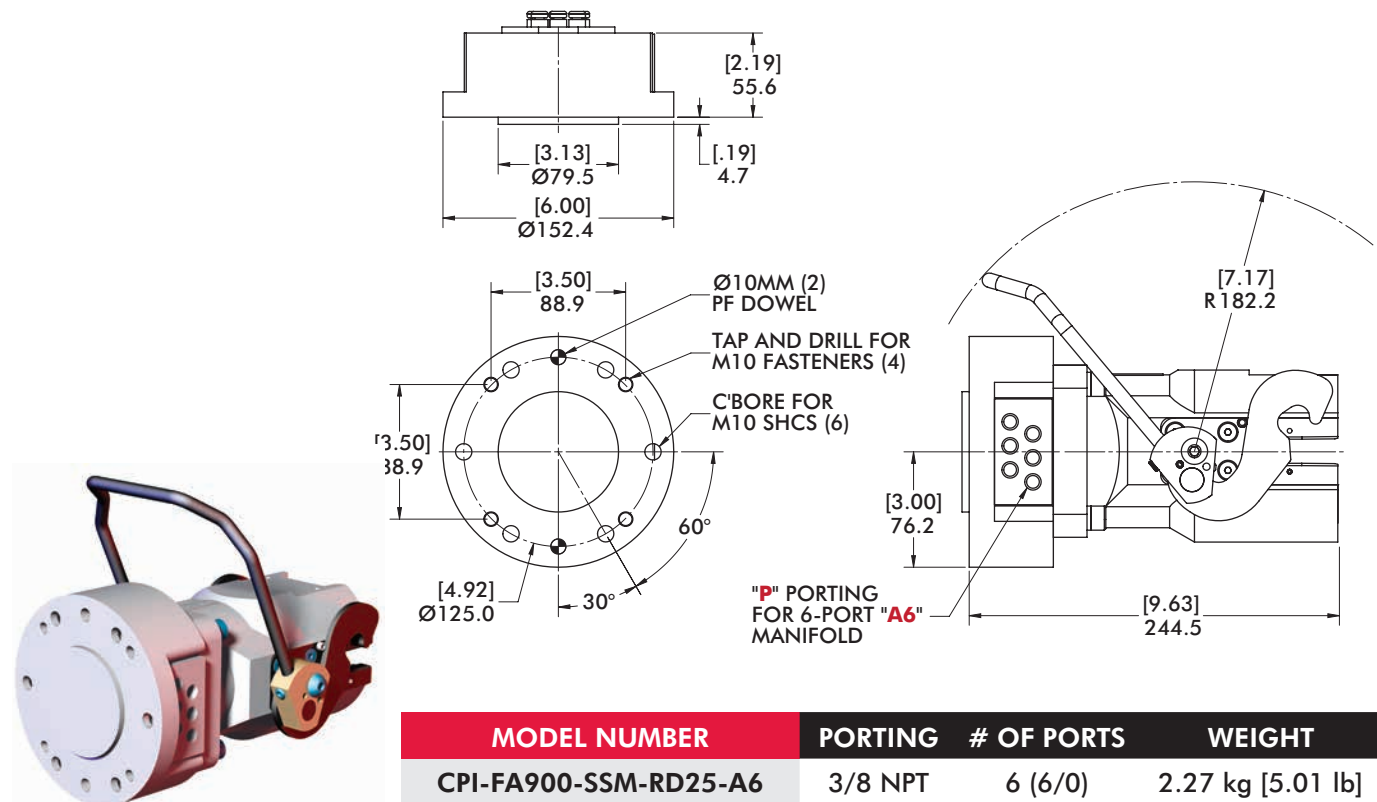
EOAMC30, FA900-SSM

Robot Automation Adaptors | Dimensions

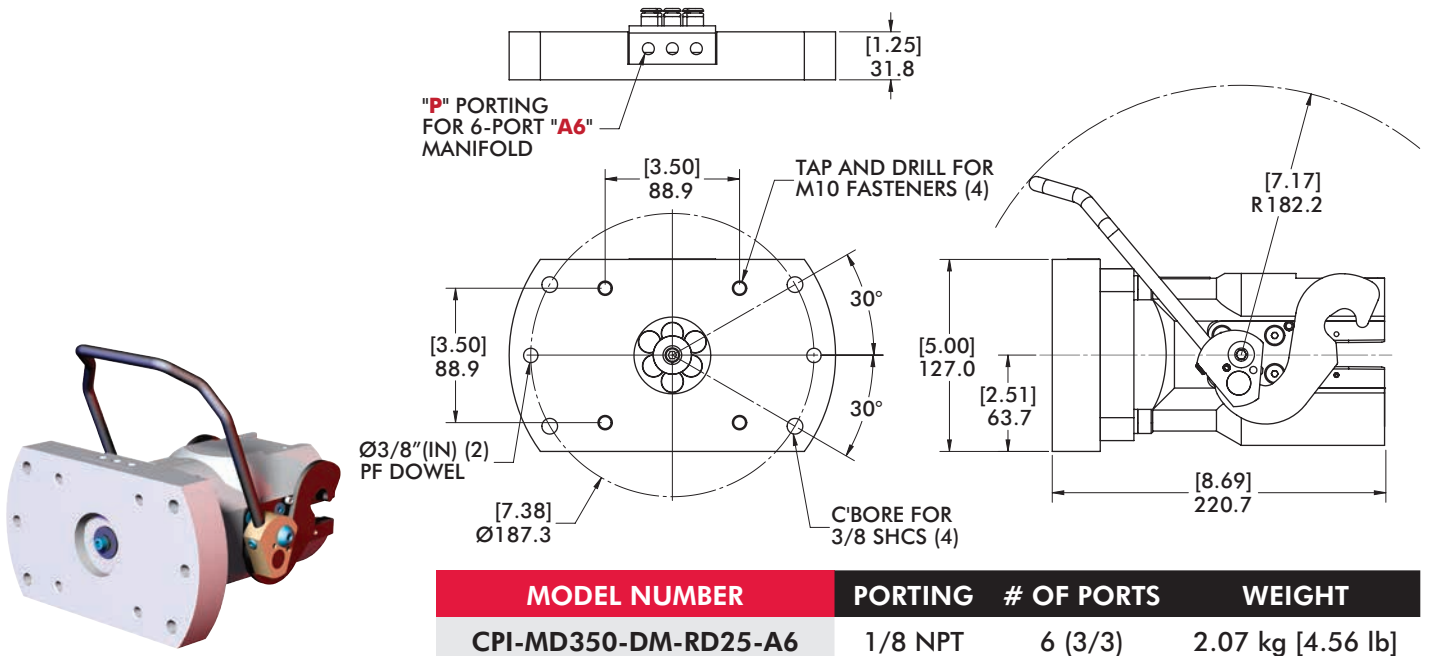
Style 21 - EOAMC30 Direct Mount Adaptor (Ø127mm Bolt Circle/Ø108mm Dowel Circle)



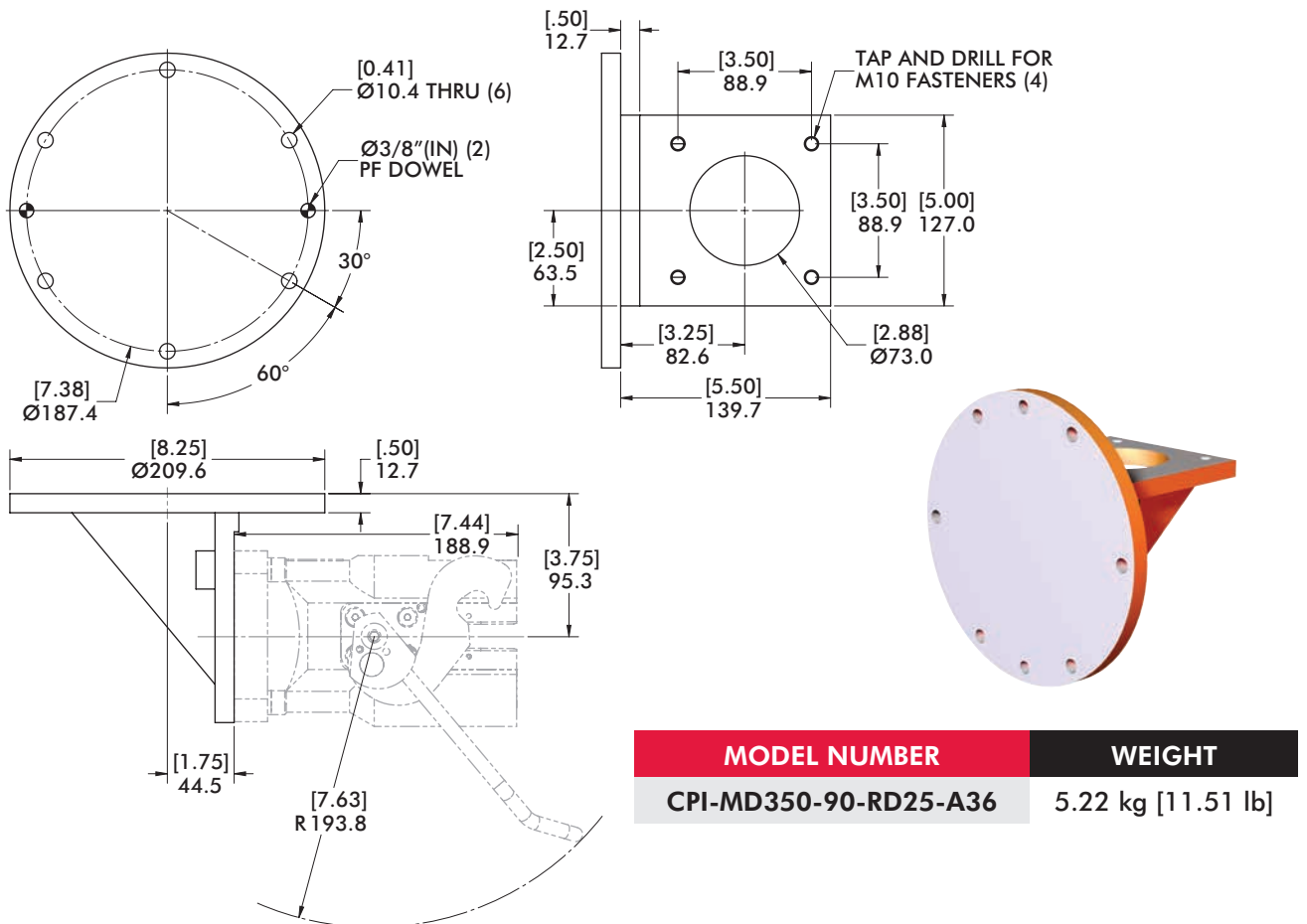
Style 22 - FA900-SSM Direct Mount Adaptor (Ø125mm Bolt Circle)



Style 23 - MD350 Direct Mount Adaptor - Ø187.3mm Bolt Circle



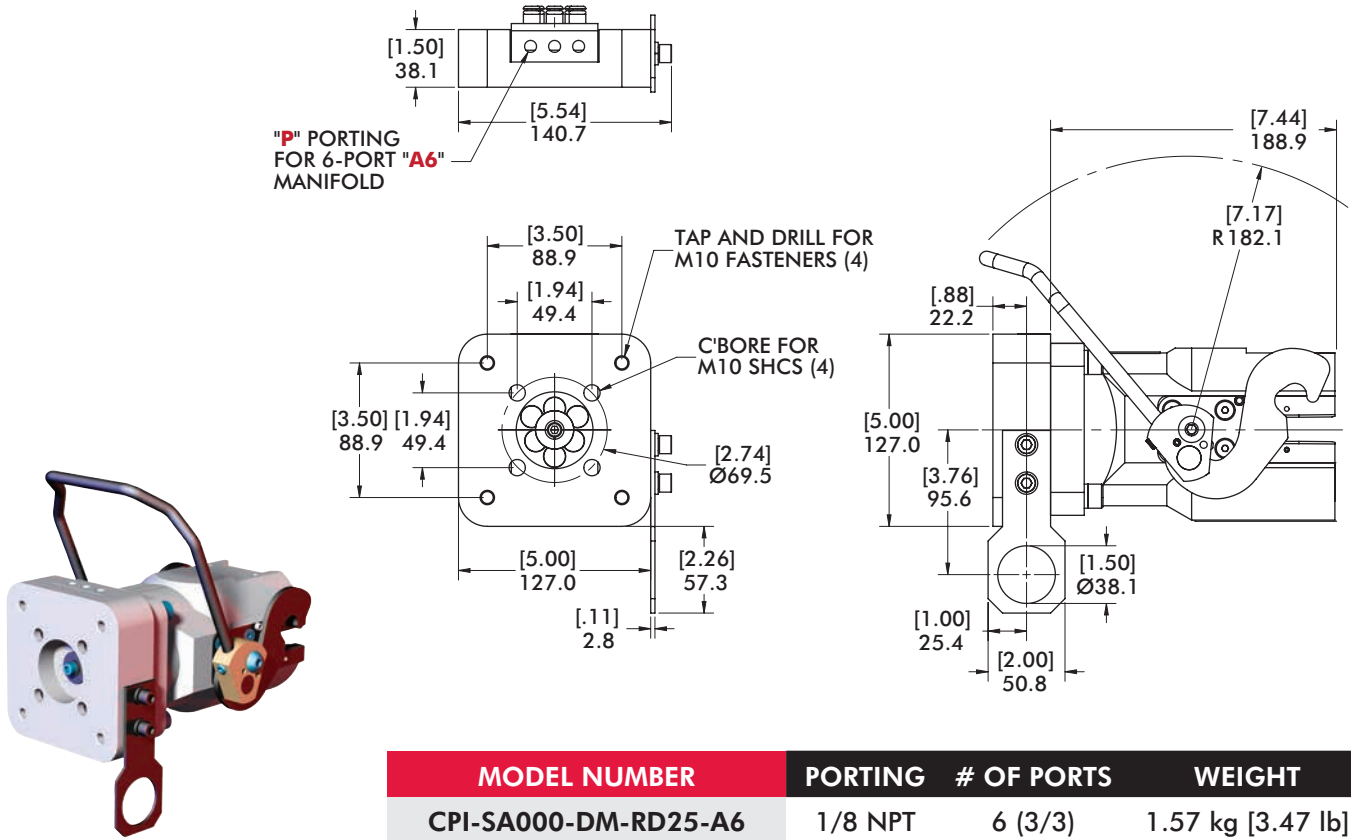
Style 23 - MD350 90° Robot Adaptor



SA000

Robot Automation Adaptors | Dimensions

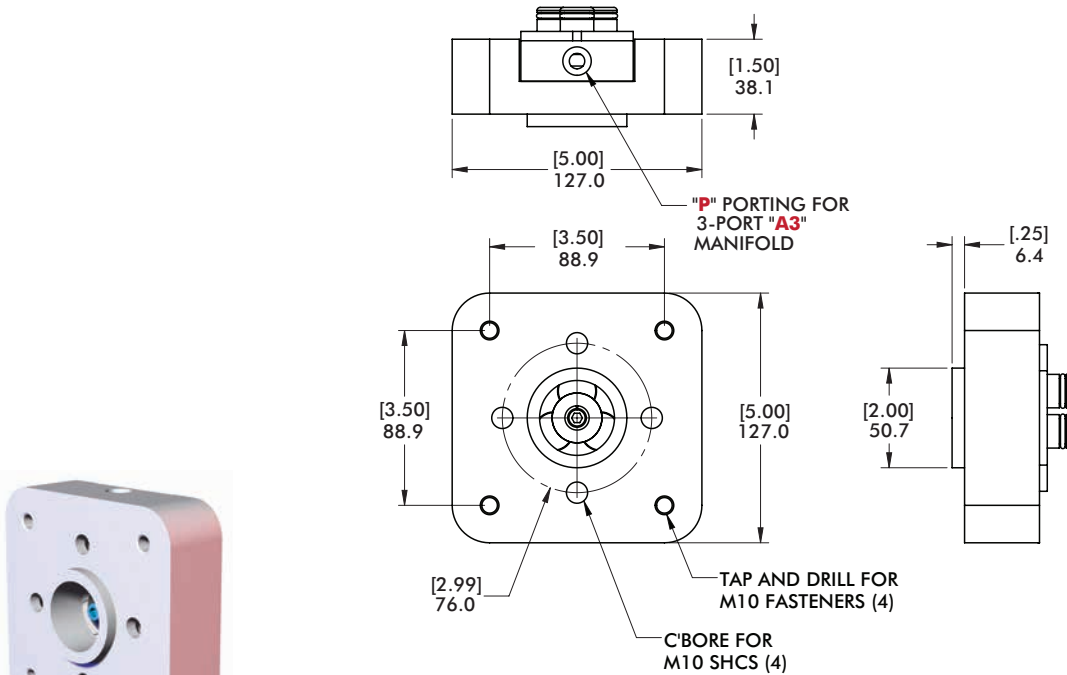
Style 24 - SA000 Direct Mount Adaptor - Ø69.5mm Bolt Circle



CM975XL, CHM32

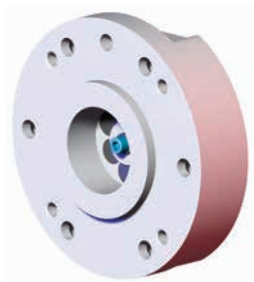
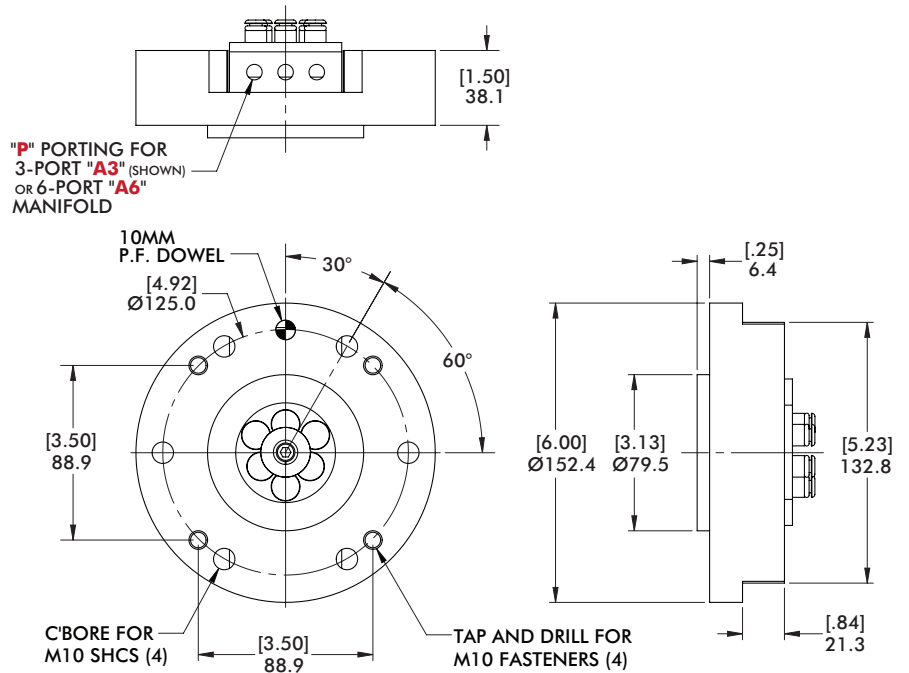
Robot Automation Adaptors | Dimensions

CM975XL Direct Mount Adaptor - Ø76mm Bolt Circle



MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-CM675XL-DM-RD25-A3	3/8 NPT	3 (2/1)	1.47 kg [3.24 lb]

CHM32 Direct Mount Adaptor - Ø125mm Bolt Circle

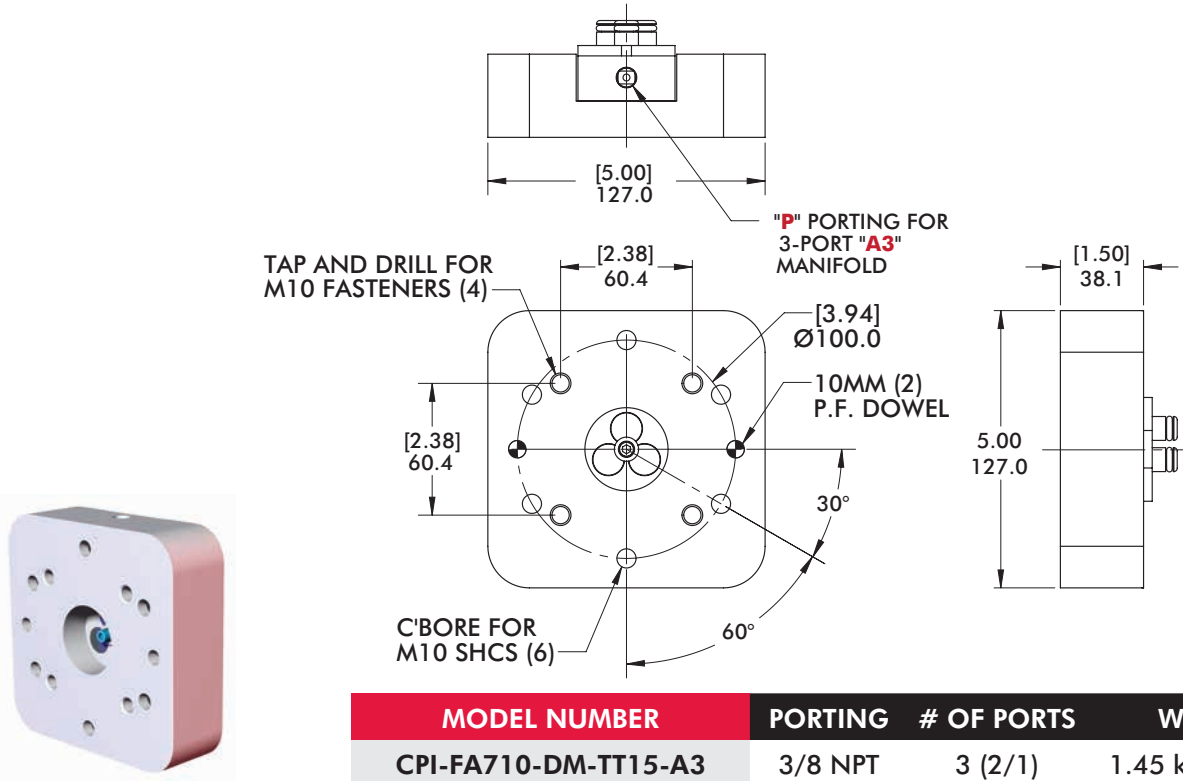


MODEL NUMBER	PORTING	# OF PORTS	WEIGHT
CPI-CHM32-DM-RD25-A3	3/8 NPT	3 (2/1)	2.38 kg [5.25 lb]
CPI-CHM32-DM-RD25-A6	1/8 NPT	6 (3/3)	2.42 kg [5.34 lb]

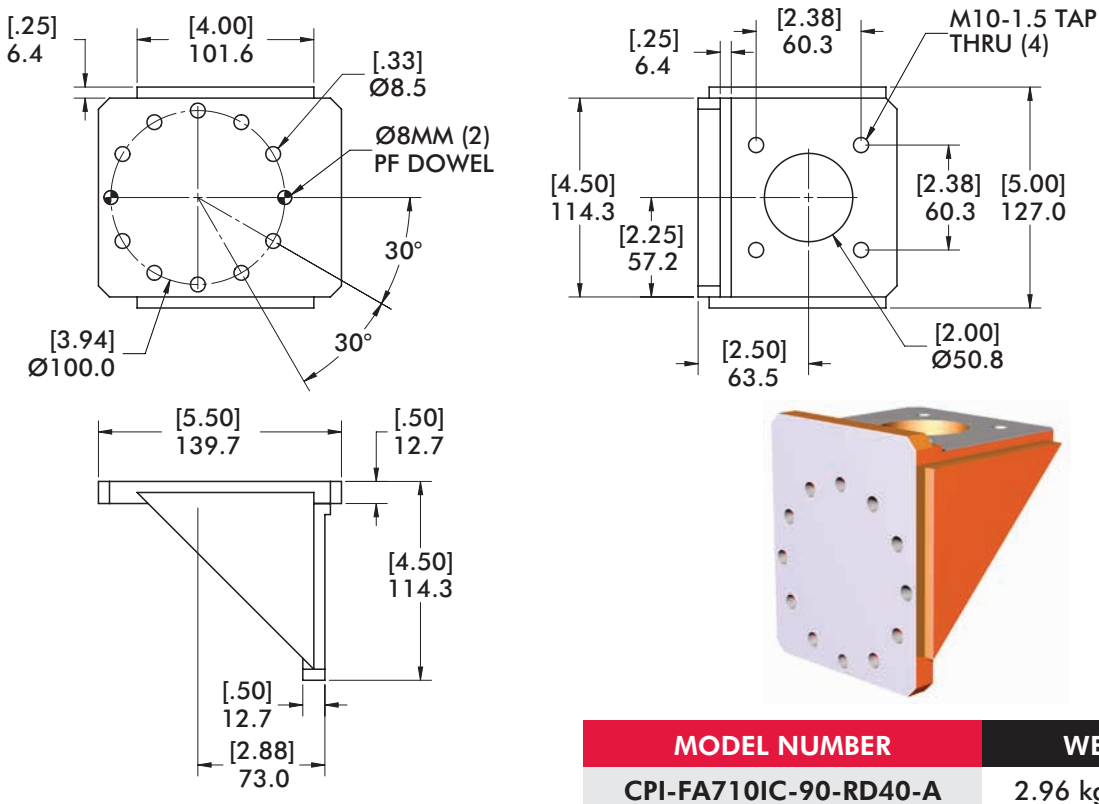
FA710, FA710IC

Robot Automation Adaptors | Dimensions

FA710IC 90° Robot Adaptor - Ø100mm Bolt Circle



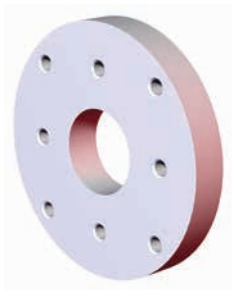
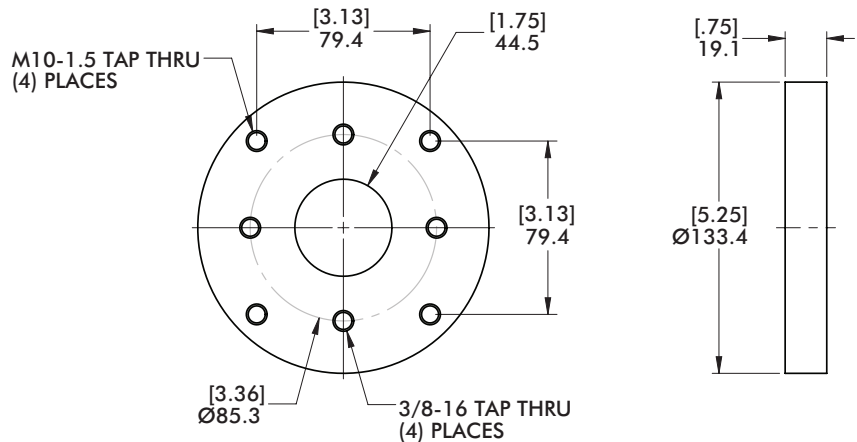
FA710IC 90° Robot Adaptor - Ø100mm Bolt Circle



TDA-150F, TDA-250F

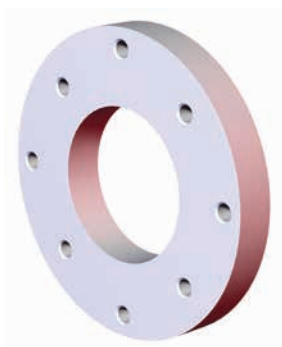
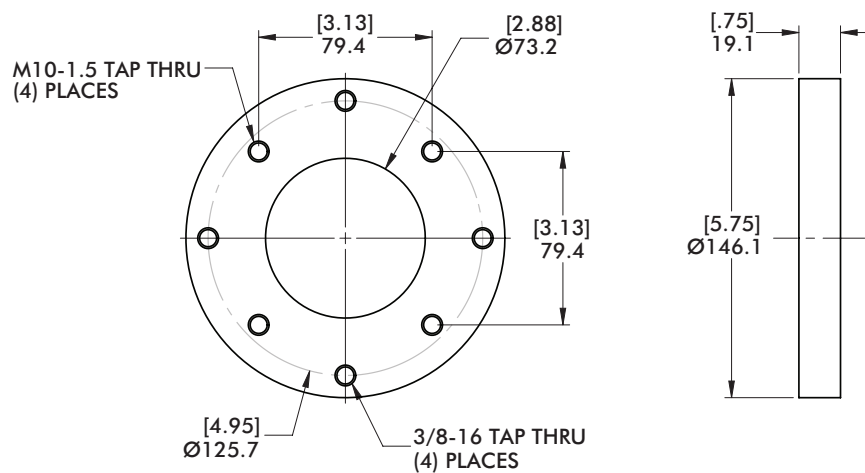
Robot Automation Adaptors | Dimensions

TDA-150F Direct Mount Adaptor Plate - Ø85mm Bolt Circle



MODEL NUMBER	WEIGHT
CPI-TDA-150F-312F	.62 kg [1.36 lb]

TDA-250F Direct Mount Adaptor Plate - Ø125mm Bolt Circle

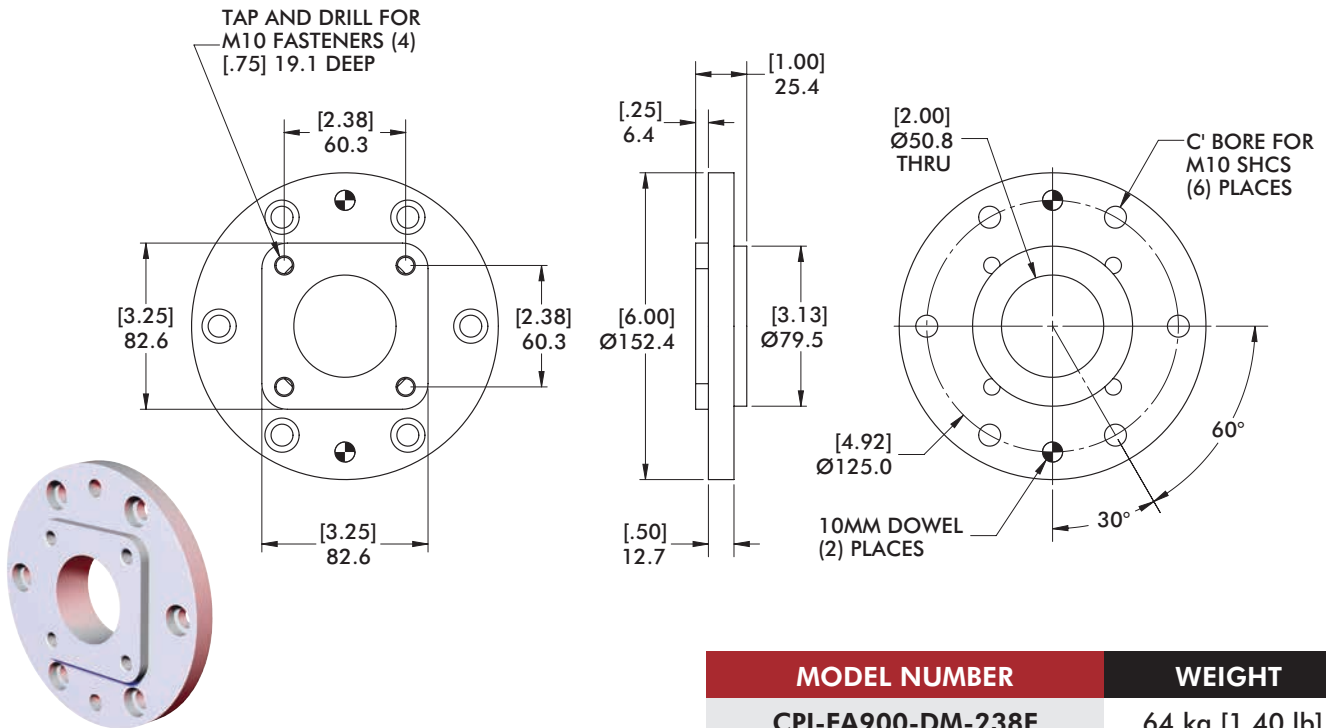


MODEL NUMBER	WEIGHT
CPI-TDA-250F-312F	.63 kg [1.38 lb]

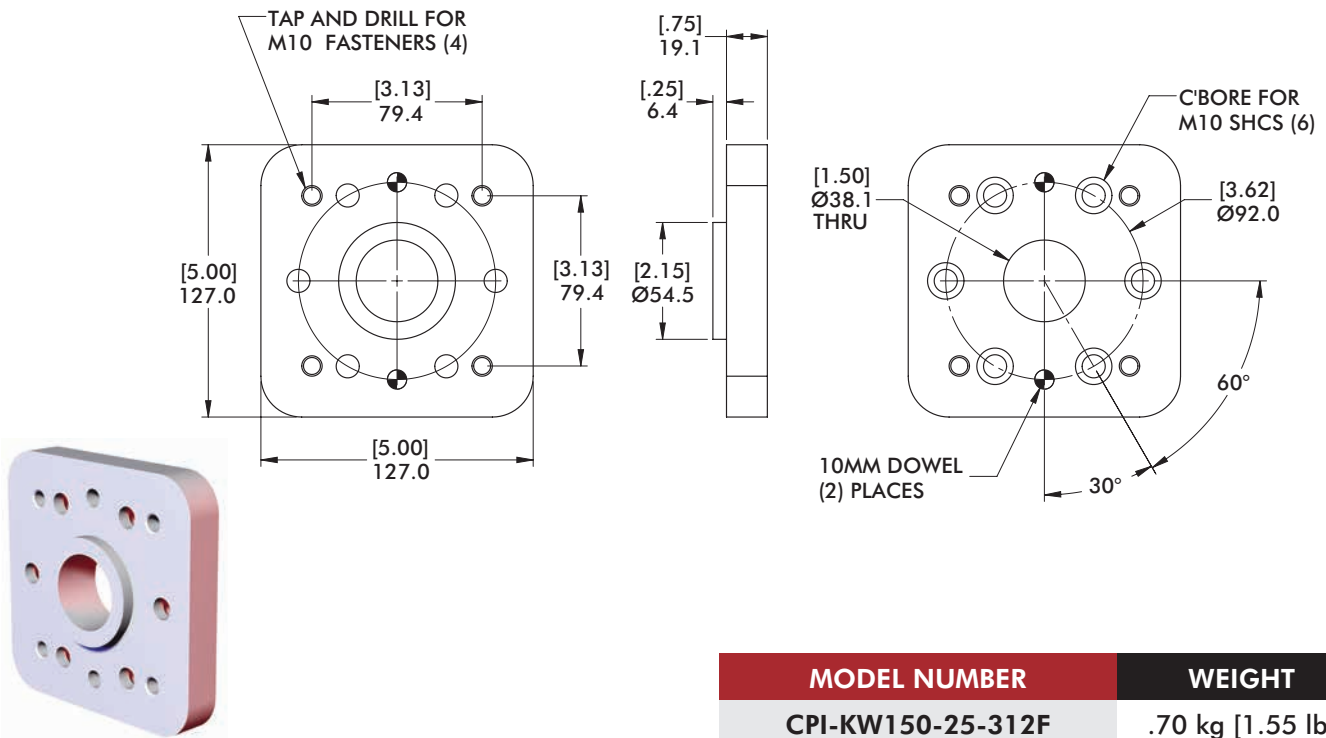
FA900, KW150

Robot Automation Adaptors | Dimensions

FA900 Direct Mount Adaptor Plate - Ø125mm Bolt Circle



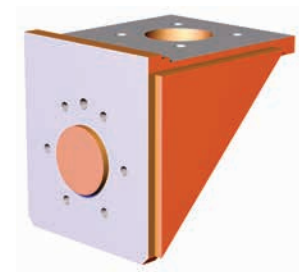
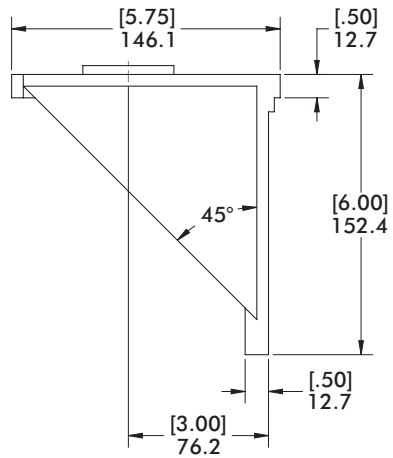
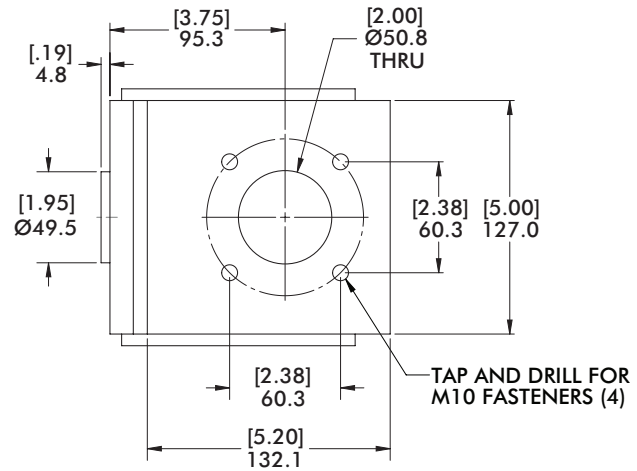
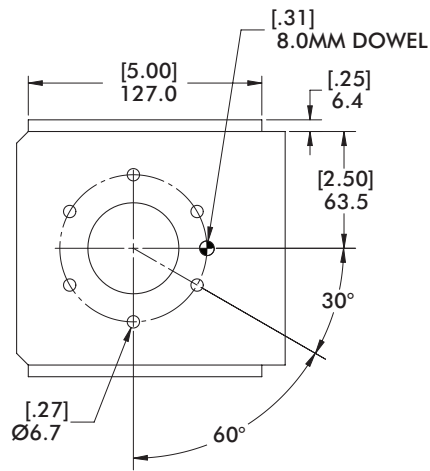
KW150 Direct Mount Adaptor Plate - Ø92mm Bolt Circle



KWFS45N

Robot Automation Adaptors | Dimensions

90° Degree Robot Adaptor to 40mm Disk

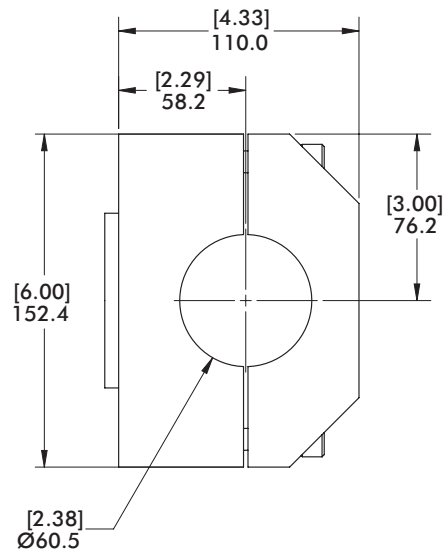
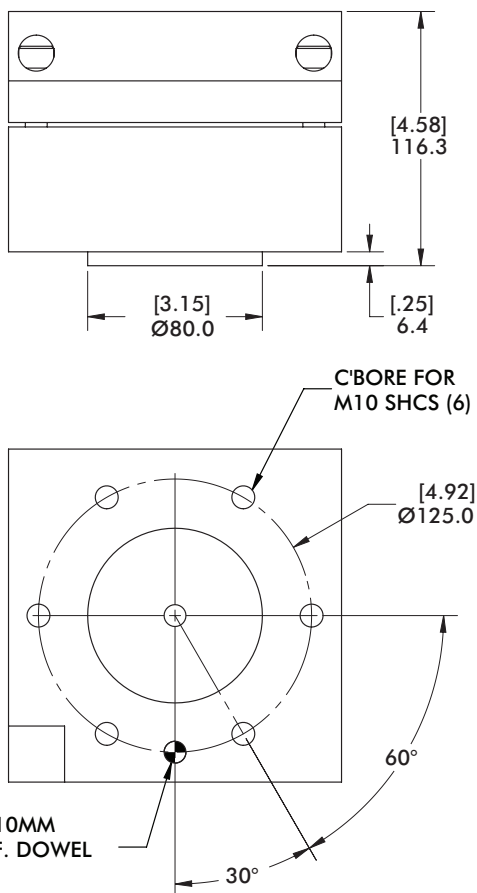
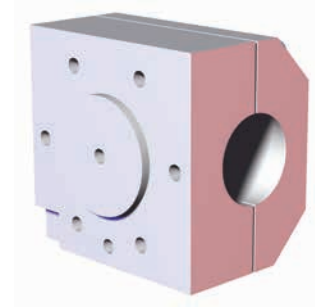
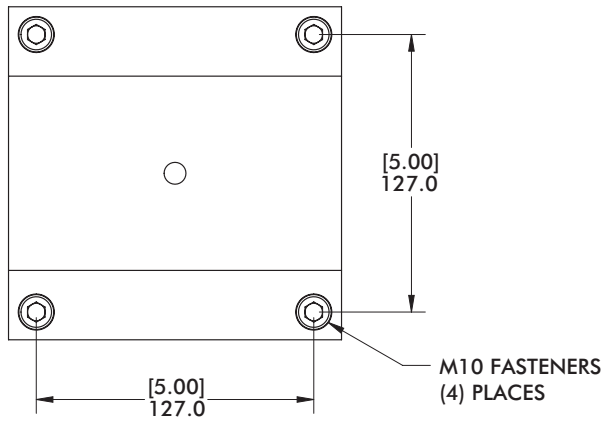


MODEL NUMBER	WEIGHT
CPI-KWFS45N-90-TTN40-A3	4.24 kg [9.34 lb]

CL-LAN

Robot Automation Adaptors | Dimensions

Ø125mm Bolt Circle



MODEL NUMBER

WEIGHT

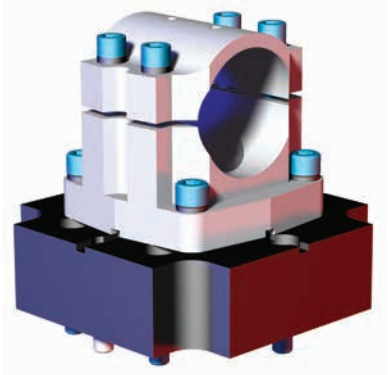
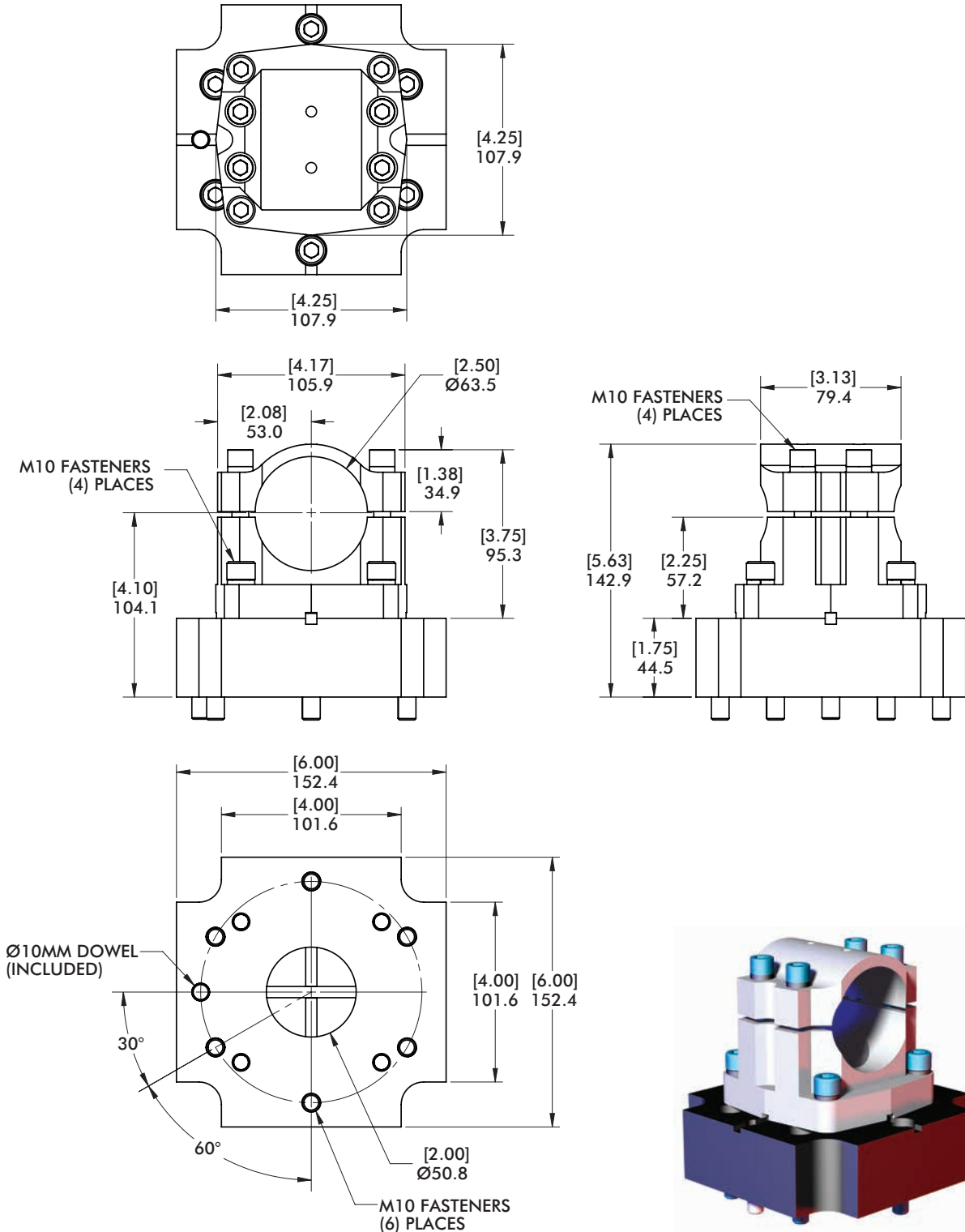
CPI-CL-LAN-EOL

5.25 kg [11.58 lb]

ATI-151

Robot Automation Adaptors | Dimensions

90° Medium Duty - Ø125mm Bolt Circle

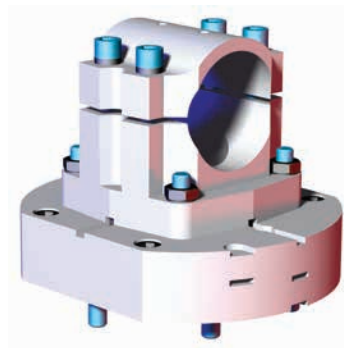
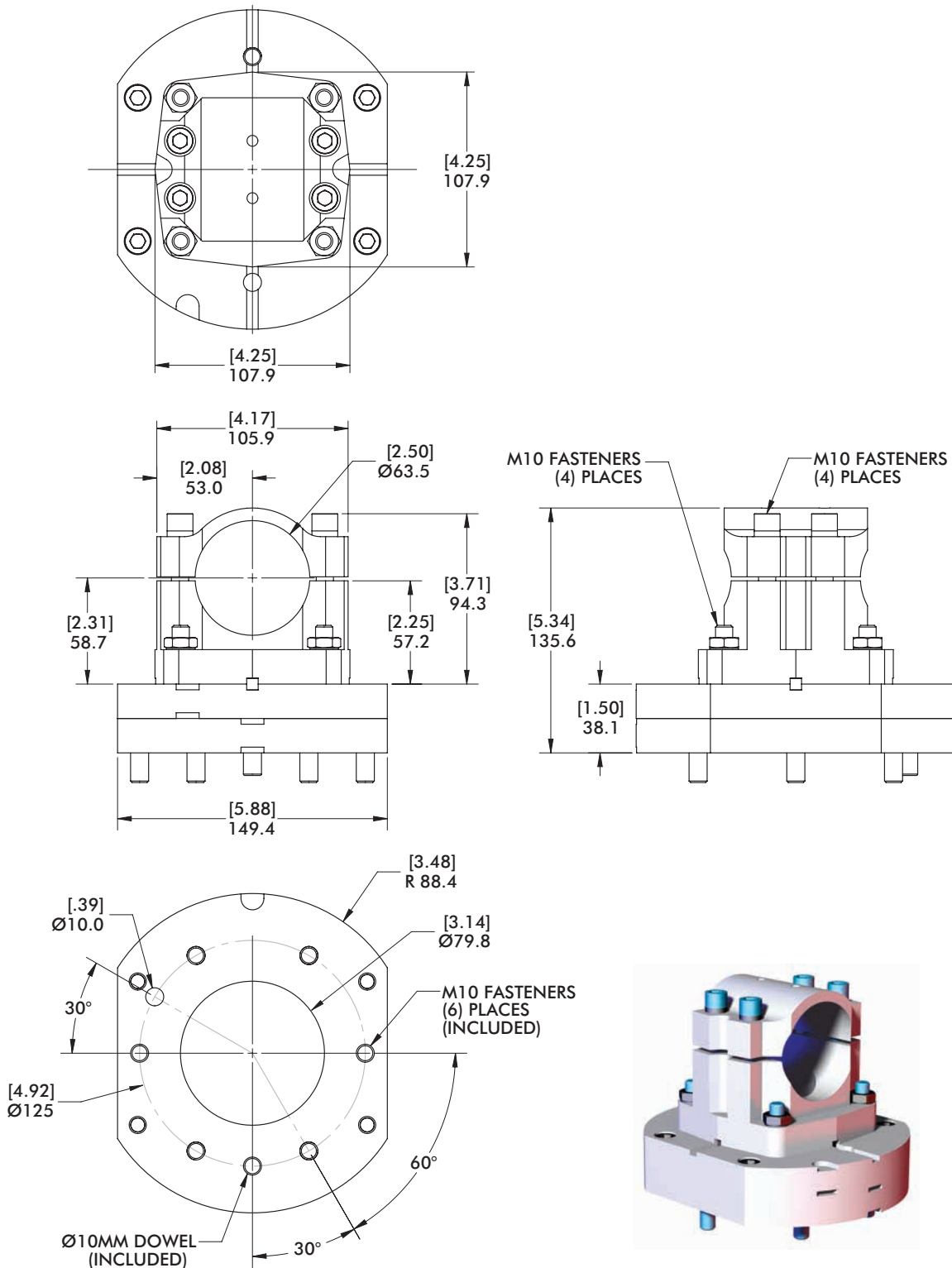


MODEL NUMBER	WEIGHT
CPI-ATI-151-90-WT	3.64 kg [8.03 lb]

ATI-90

Robot Automation Adaptors | Dimensions

Light Duty - Ø125mm Bolt Circle



MODEL NUMBER

WEIGHT

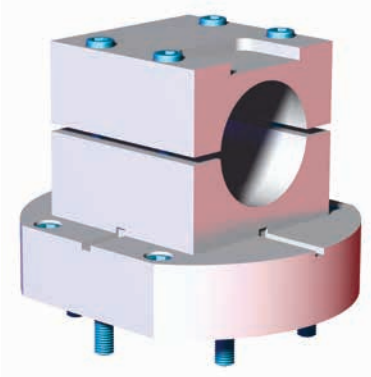
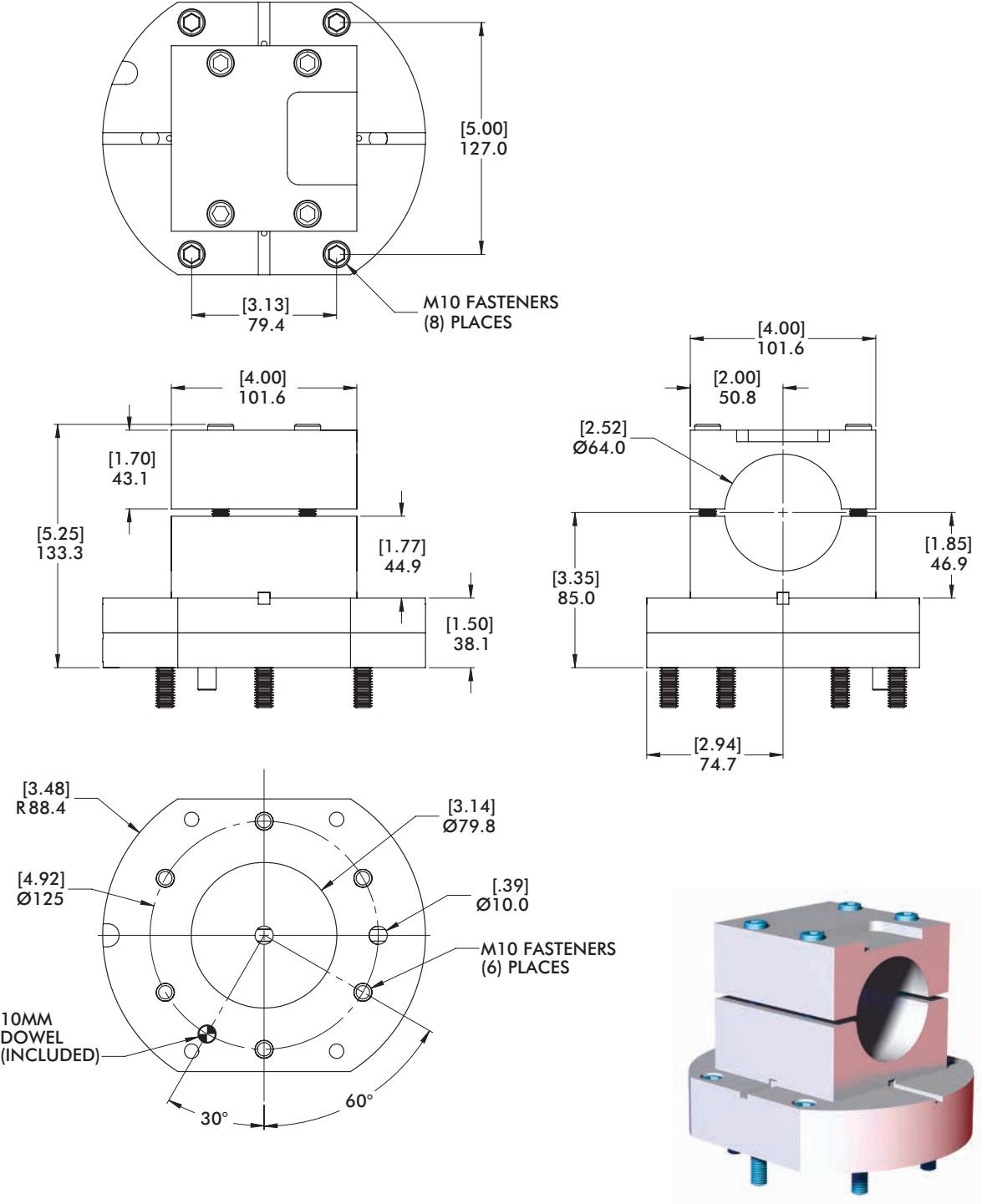
CPI-ATI-90

3.55 kg [7.82 lb]

ATI-90-SP

Robot Automation Adaptors | Dimensions

90° Light Duty - Ø125mm Bolt Circle

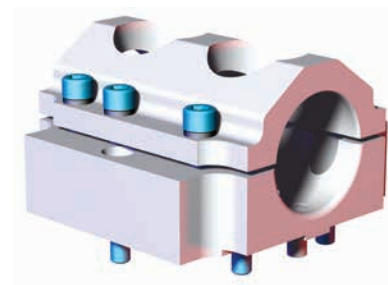
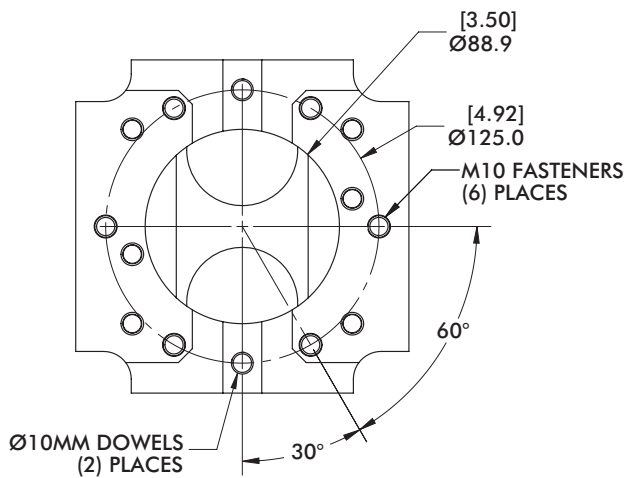
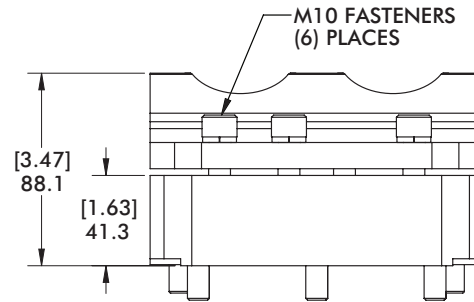
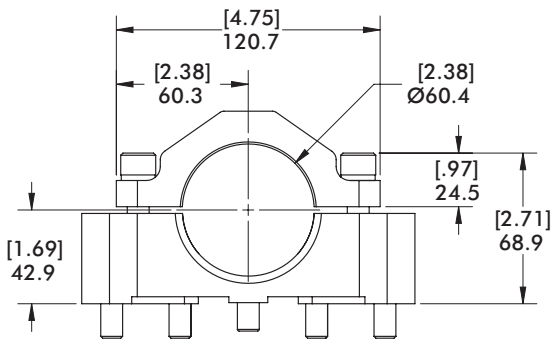
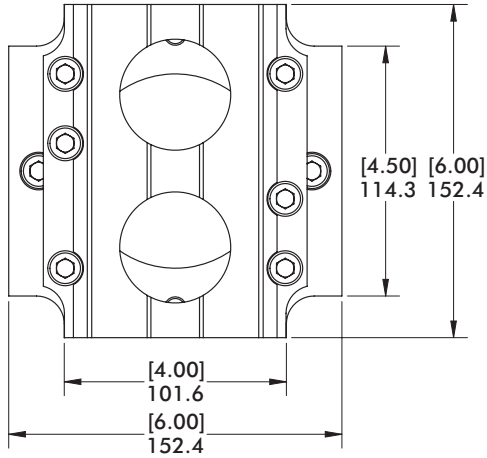


MODEL NUMBER	WEIGHT
CPI-ATI-90-SP	3.64 kg [8.03 lb]

ATI-201-60

Robot Automation Adaptors | Dimensions

Ø125mm Bolt Circle



MODEL NUMBER

WEIGHT

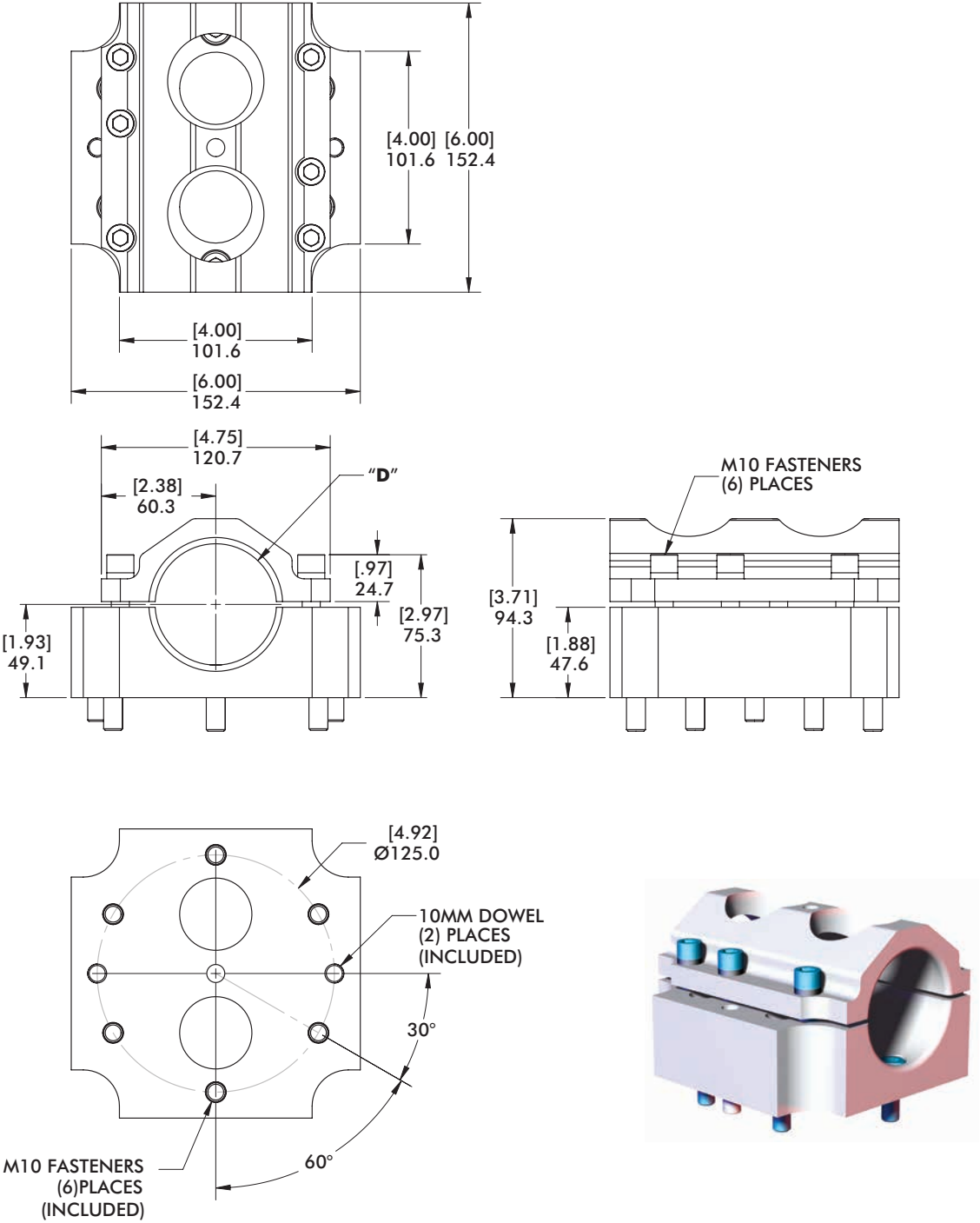
CPI-ATI-201-60

2.29 kg [5.06 lb]

ATI-201-XXX-90

Robot Automation Adaptors | Dimensions

Ø125mm Bolt Circle Dowels

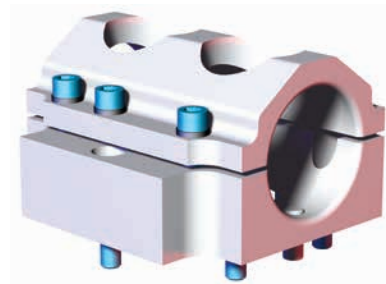
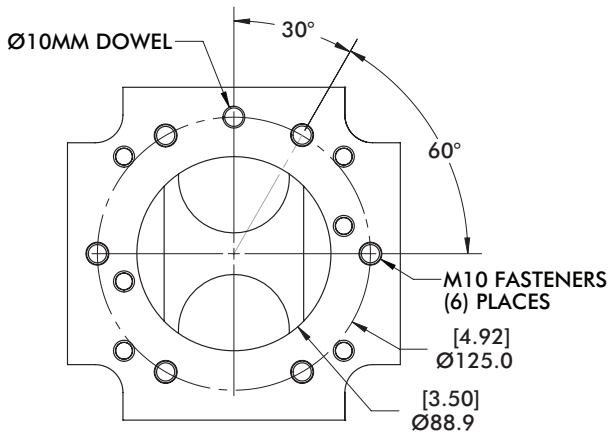
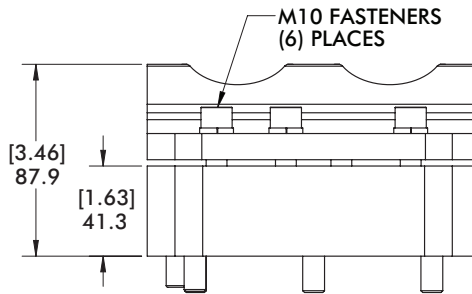
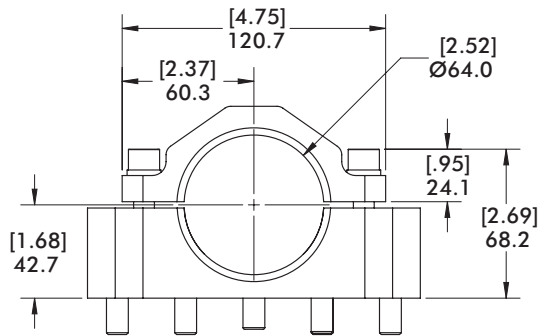
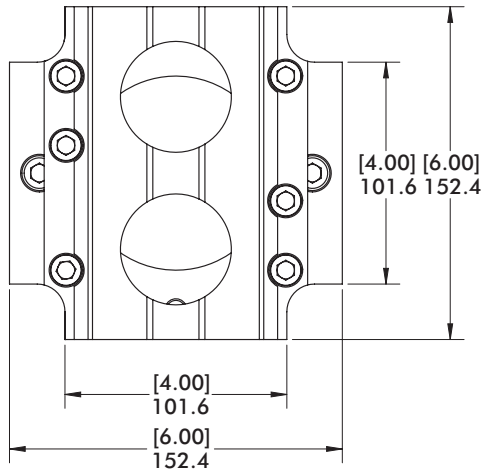


MODEL NUMBER	(Ø) "D"	(Ø) ACTUAL	WEIGHT
CPI-ATI-201-60-90	60mm	60.45±.08 [2.380±.003]	1.27 kg [2.80 lb]
CPI-ATI-201-250-90	2.50"(in)	63.96±.08 [2.518±.003]	1.27 kg [2.80 lb]

ATI-201-90-HD

Robot Automation Adaptors | Dimensions

Ø125mm Bolt Circle



MODEL NUMBER

WEIGHT

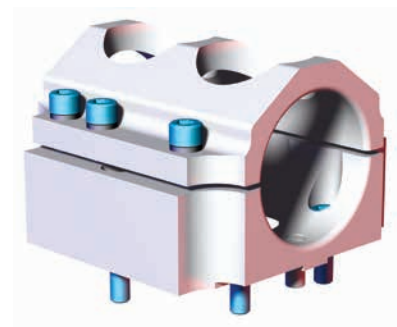
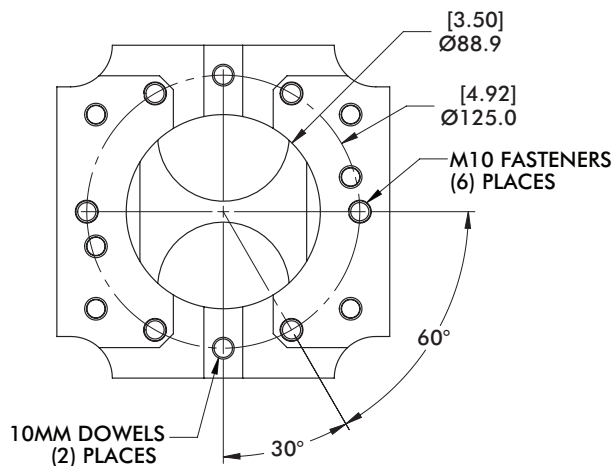
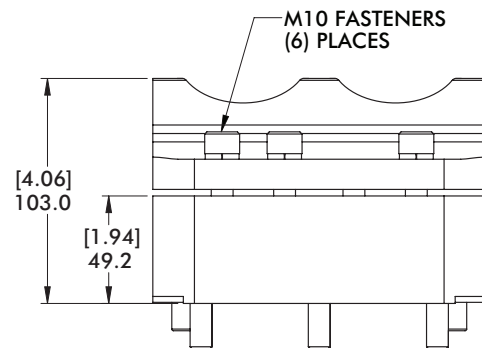
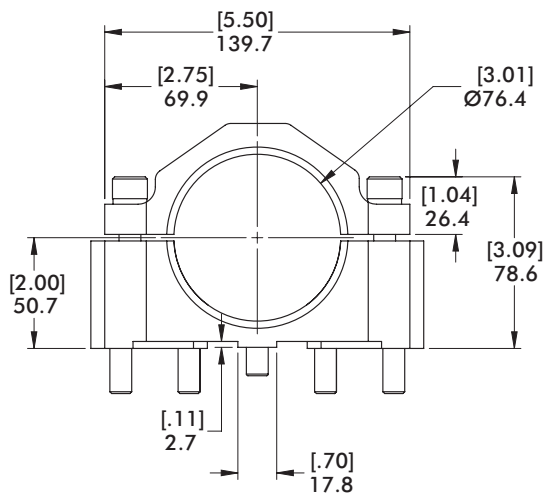
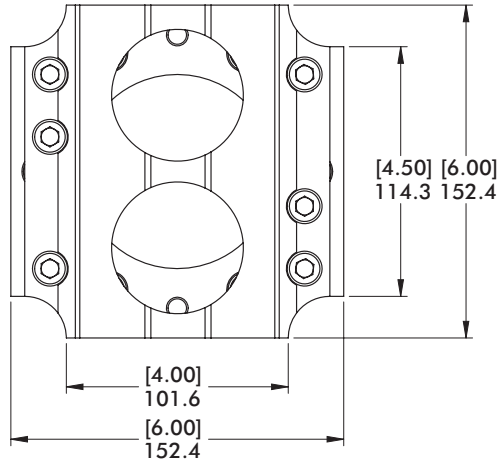
CPI-ATI-201-90-HD

2.17 kg [4.77 lb]

ATI-150-90-3HD

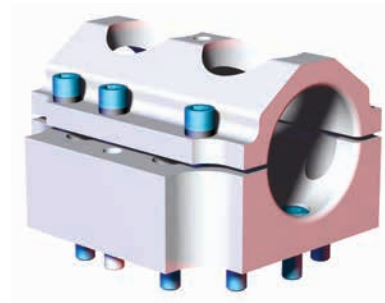
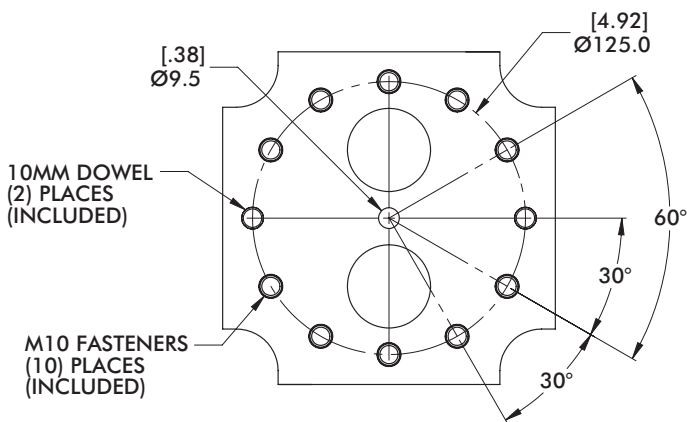
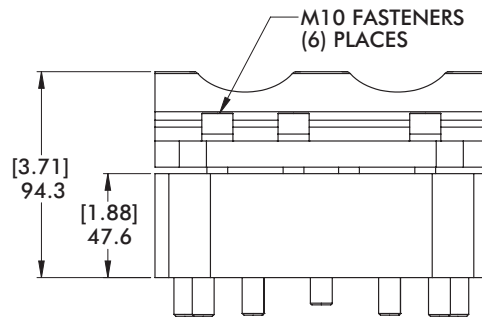
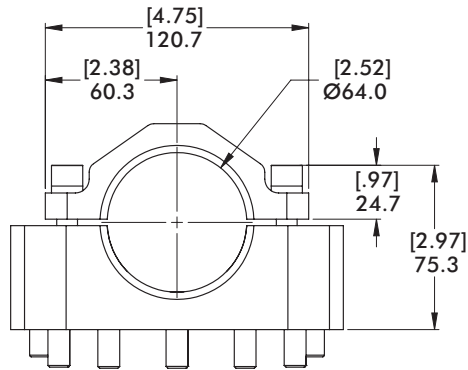
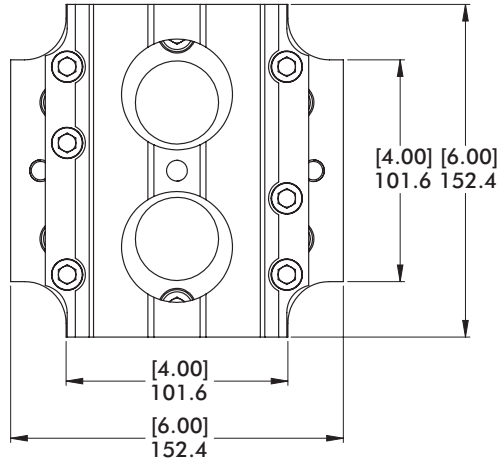
Robot Automation Adaptors | Dimensions

Ø125mm Bolt Circle



MODEL NUMBER	WEIGHT
CPI-ATI-201-90-3HD	2.50 kg [5.52 lb]

90° World Tool Assembly - Ø125mm Bolt Circle



MODEL NUMBER

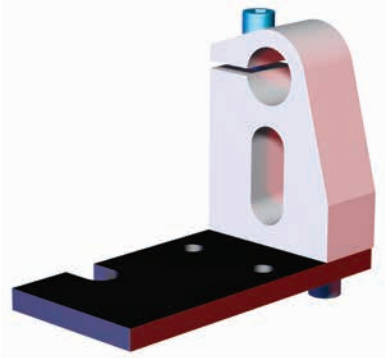
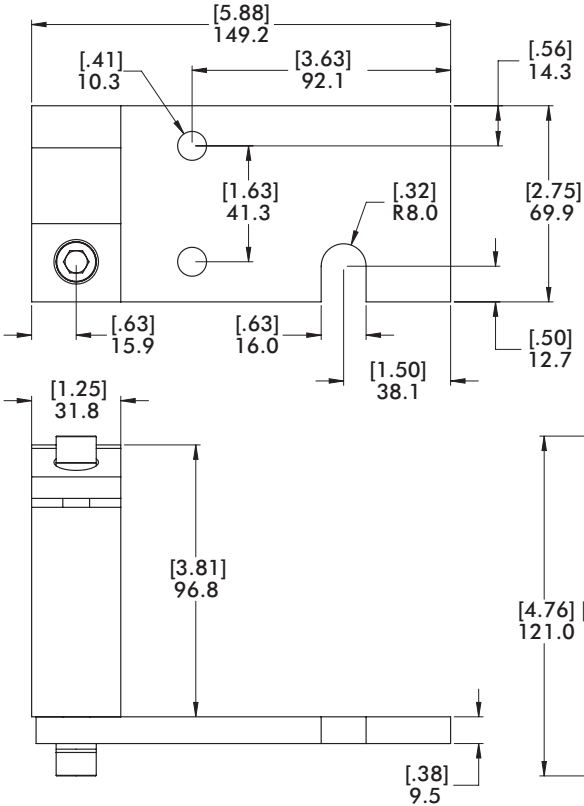
WEIGHT

CPI-ATI-201-250-90-10S

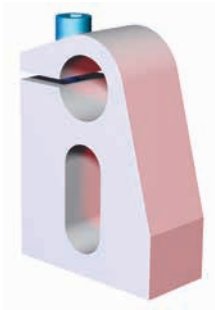
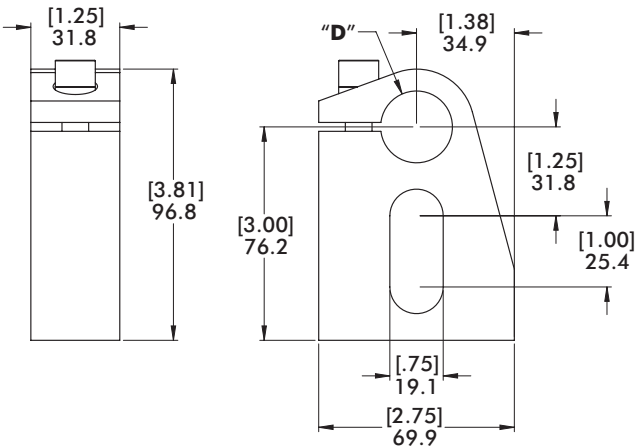
2.17 kg [4.77 lb]

CPI-NAV-XX-XX

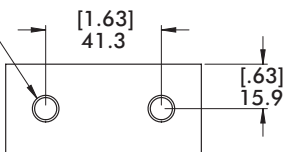
Robot Automation Adaptors | Dimensions



MODEL NUMBER	(Ø) "D"	(Ø) ACTUAL	WEIGHT
CPI-NAV-25-CM	25mm	25.25±.08 [0.994±.003]	[2.60 lb]
CPI-NAV-100-CM	1.00"(in)	25.65±.08 [1.010±.003]	1.18 kg



DRILL AND TAP FOR
M10-1.50 .75 DEEP (2)



MODEL NUMBER	(Ø) "D"	(Ø) ACTUAL	WEIGHT
CPI-NAV-25-BL	25mm	25.25±.08 [0.994±.003]	[.89 lb]
CPI-NAV-100-BL	1.00"(in)	25.65±.08 [1.010±.003]	.40 kg












ACCELERATE® TOOLING COLLECTION

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ACCELERATE[®] TOOLING COLLECTION

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WORLD TOOL COMPOSITE BOOM - WTCB SERIES

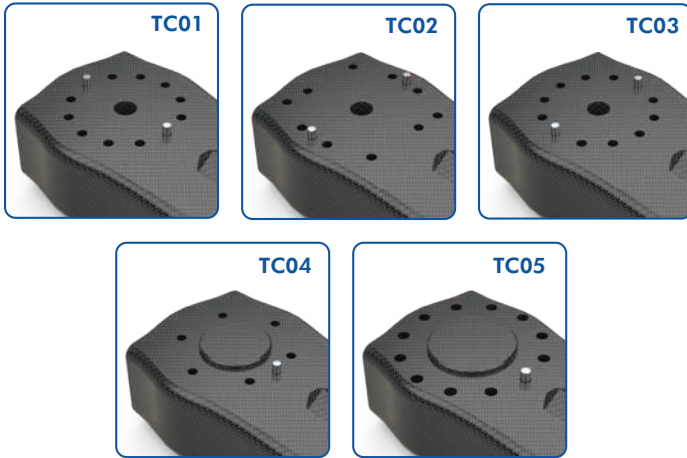
Accelerate® Tooling Collection | Ordering Information

WTCB - TC01 - 90T - 1700 - 4R2T

Robot, Tool Changer or Adapter Plate Mounting

- TC01** 125mm BCD per ISO 9409-1-125-10-M10 (e.g. RTP-800, RTP-1200, ATI-QC-160, ATI-QC-210 or Kawasaki ZT130)
- TC02** Adapter Plate for 11-59D 323327 VKR 125-210 & 11-59D 323330 F.EE Manual Tool Changer
- TC03** 125mm BCD Rotated 90° per ISO 9409-1-125-10-M10 (e.g. RTP-800, RTP-1200, ATI-QC-160, ATI-QC-210 or Kawasaki ZT130)
- TC04** 125mm BCD with Pilot for ISO 9409-1-A125 ABB IRB 6400 or Kawasaki ZT130 L
- TC05** 160mm BCD with Pilot per ISO 9409-1:2004 (e.g. ABB IRB 6650 & IRB 6650S)

See page 7 for more information.



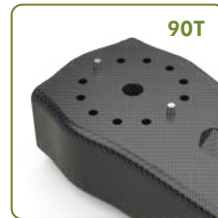
Dowels pins shown for location. Not included.

Tool Branches

- 2R2T** 2 Tool Branch Mounting Locations (End Mount Configurations only)
- 4R2T** 4 Tool Branch Mounting Locations*
*excludes 1094 Boom Length.

Mounting Orientation

- 90C** Center Mount
- 90T** End Mount



Boom Length

End Mount Configurations

- 1094** 1000mm Length*
- 1500** 1700mm Length
- 1703** 2400mm Length
- *2R2T Tool Branch only.

Center Mount Configurations

- 1000** 1000mm Length
- 1700** 1700mm Length
- 2400** 2400mm Length



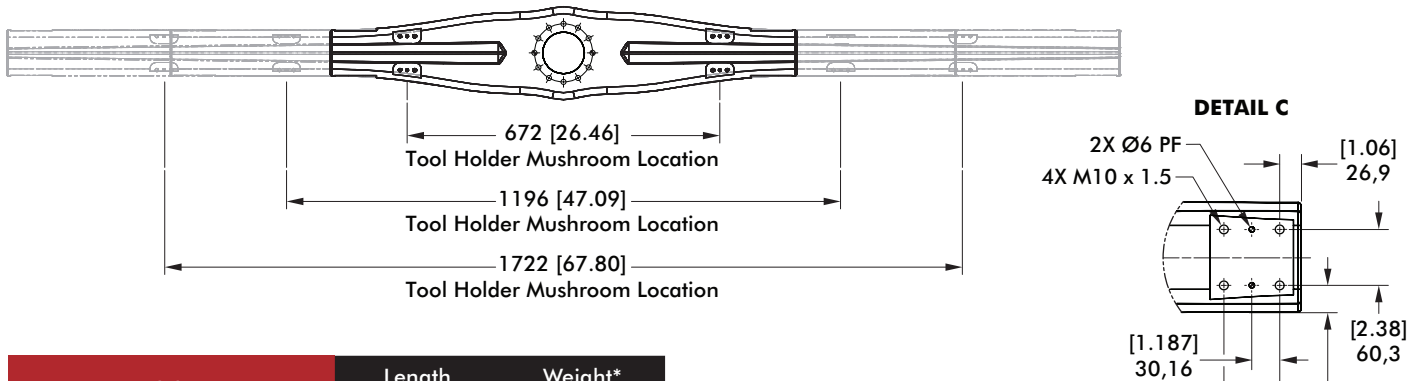
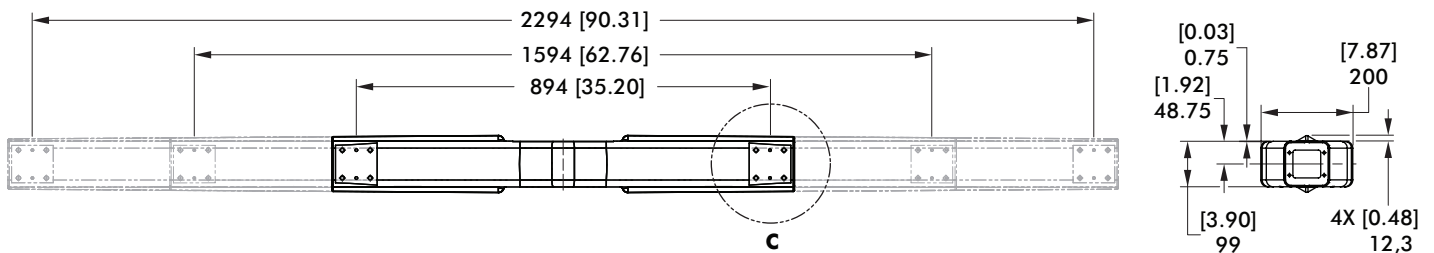
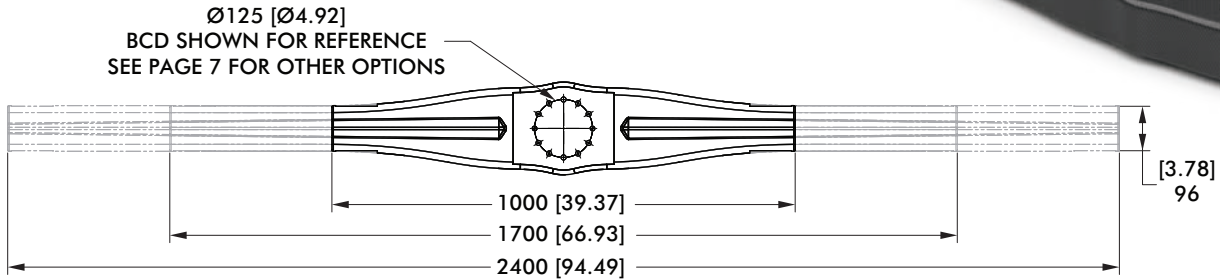
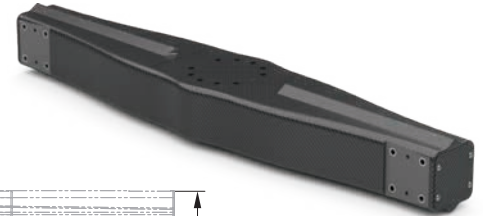
Center Mount shown with RTP-1200 Tool Plate, 4X RDN-40 Manual Tool Changers and THM Mushroom Mounts (order separately)

End Mount shown with RTP-1200 Tool Plate, 2X RDN-40 Manual Tool Changers and THM Mushroom Mounts (order separately)

WORLD TOOL COMPOSITE BOOM - WTCB SERIES

Accelerate® Tooling Collection | Dimensions and Specifications

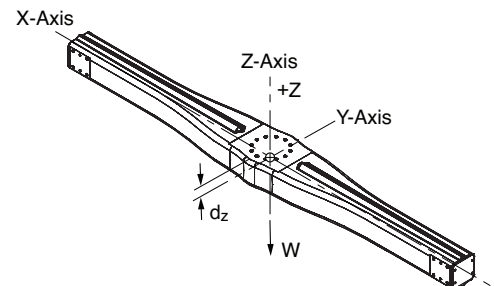
Center Mount with 4 Branches



Model No.	Length mm [in]	Weight* kg [lbs]
WTCB-TCXX-90C-1000-4R2T	1000 [39.37]	9,18 [20.24]
WTCB-TCXX-90C-1700-4R2T	1700 [66.93]	10,79 [23.79]
WTCB-TCXX-90C-2400-4R2T	2400 [94.49]	13,45 [29.65]

*Boom only.

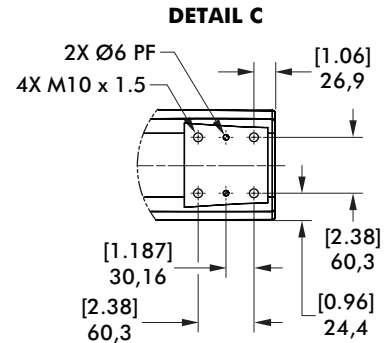
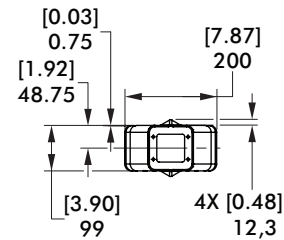
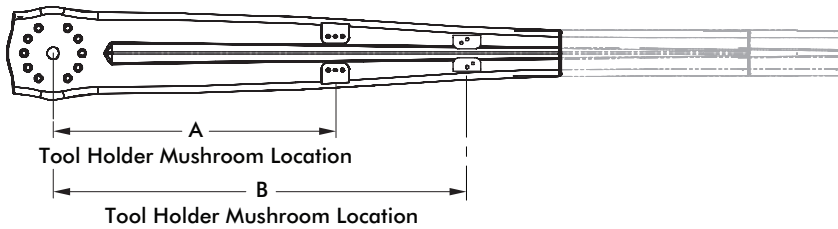
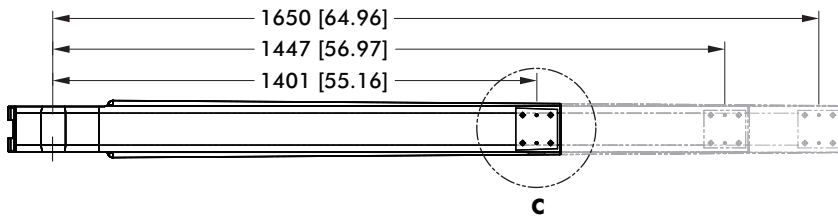
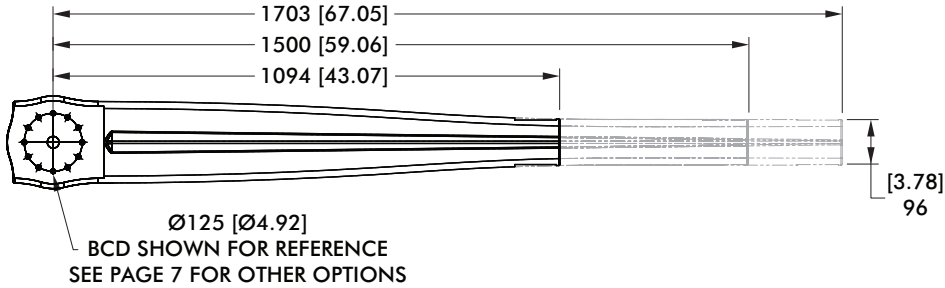
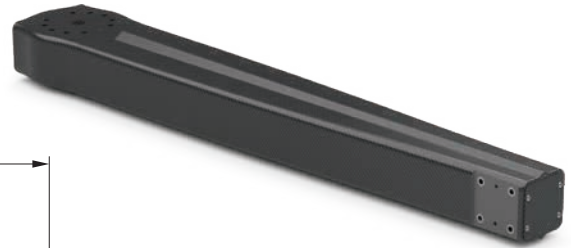
Description	Designation	Units	1000mm	1700mm	2400mm
Mass (Composite Boom Only)	W	[lb] kg	[20.24] 9.18	[23.79] 10.79	[29.65] 13.45
Center of Mass Location X-Axis	d_x		0	0	0
Center of Mass Location Y-Axis	d_y	[in] mm	0	0	0
Center of Mass Location Z-Axis	d_z		[-1.96] -49.8	[1.96] -49.7	[1.94] -49.2
Moment of Inertia at Center of Gravity	L_{xx}		[0.95] 0.04	[1.04] 0.044	[12.58] 0.53
	L_{yy}	[lb-ft ²] kg-m ²	[14.43] 0.608	[42.93] 1.809	[93.59] 3.944
	L_{zz}		[14.78] 0.623	[43.28] 1.824	[94.00] 3.961



WORLD TOOL COMPOSITE BOOM - WTCB SERIES

Accelerate® Tooling Collection | Dimensions and Specifications

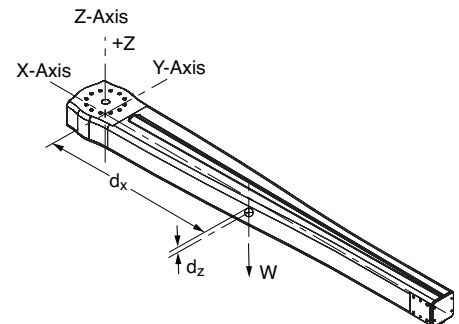
End Mount with 2 Branches



Model No.	A	B	Length mm [in]	Weight* kg [lbs]
WTCB-TCXX-90T-1094-2R2T			1094 [43.07]	9,98 [22.0]
WTCB-TCXX-90T-1500-2R2T	608 [23.94]	1244 [48.98]	1500 [59.06]	11,22 [24.7]
WTCB-TCXX-90T-1703-2R2T	713 [28.07]	1447 [56.97]	1703 [67.05]	11,97 [26.4]

*Boom only.

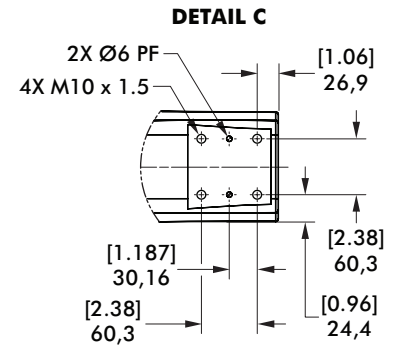
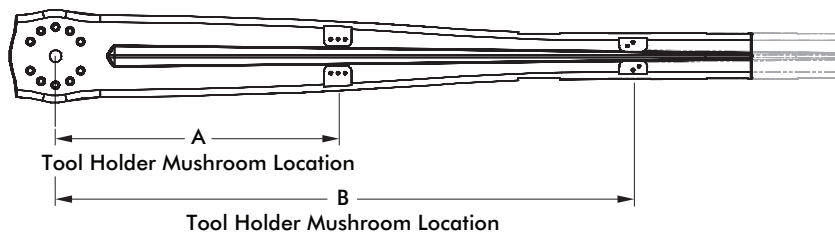
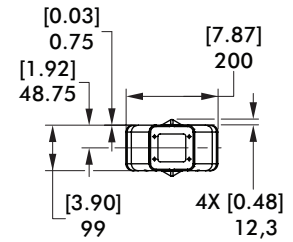
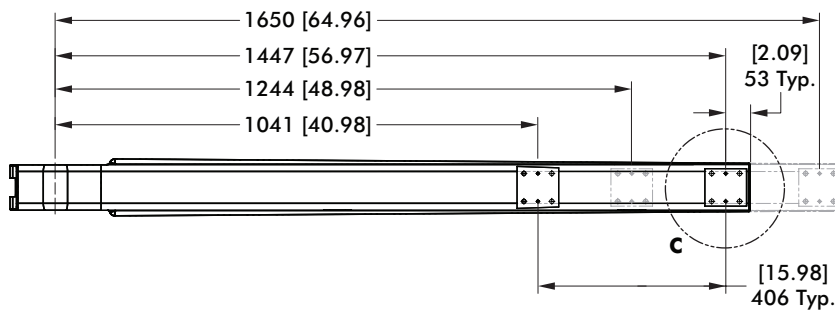
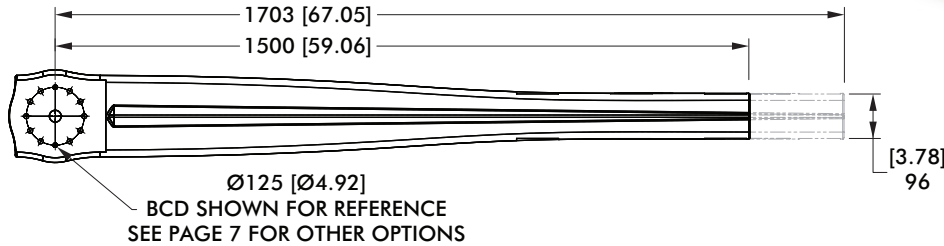
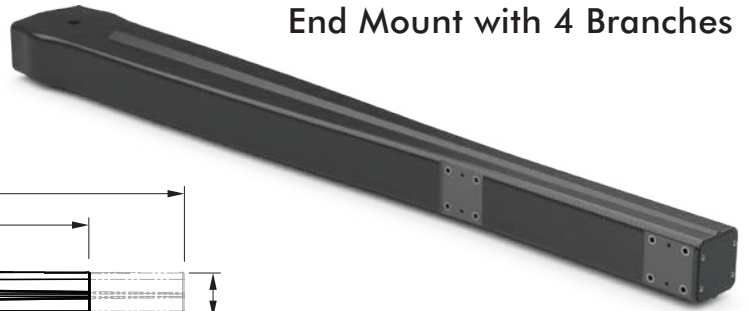
Description	Designation	Units	1094mm	1500mm	1703mm
# of RDN Mount Locations			2	2	2
Mass (Boom Only)	W	[lb] kg	[22.00] 9.98	[24.74] 11.22	[26.39] 11.97
Center of Mass Location	X-Axis	d_x	[14.31] 363.6	[19.41] 486.2	[21.78] 553.3
	Y-Axis	d_y	0	0	0
	Z-Axis	d_z	[-0.0437] -1.111	[-0.0435] -1.104	[-0.0407] -1.033
Moment of Inertia at Center of Gravity	L_{xx}		[1.0204] 0.043	[1.1153] 0.047	[1.1628] 0.049
	L_{yy}	[lb-ft ²] kg-m ²	[29.9477] 1.262	[60.9158] 2.567	[82.9613] 3.496
	L_{zz}		[29.5918] 1.247	[60.5599] 2.552	[82.6054] 3.481



WORLD TOOL COMPOSITE BOOM - WTCB SERIES

Accelerate® Tooling Collection | Dimensions and Specifications

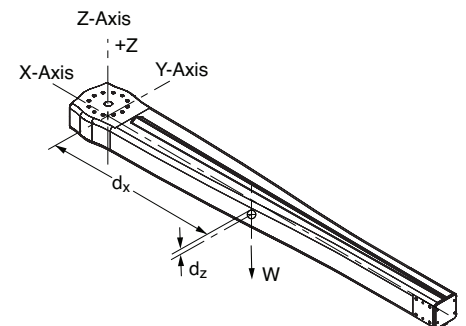
End Mount with 4 Branches



Model No.	A	B	Length mm [in]	Weight* kg [lbs]
WTCB-TCXX-90T-1500-4R2T	608 [23.94]	1244 [48.98]	1500 [59.06]	11,80 [26.0]
WTCB-TCXX-90T-1703-4R2T	713 [28.07]	1447 [56.97]	1703 [67.05]	12,32 [27.2]

*Boom only.

Description	Designation	Units	1500mm	1703mm
# of RDN Mount Locations			4	4
Mass (Boom Only)	W	[lb] kg	[26.01] 11.8	[27.16] 12.32
Center of Mass Location	X-Axis	d_x	[19.94] 506.4	[22.63] 574.9
	Y-Axis	d_y	0	0
	Z-Axis	d_z	[-0.0428] -1.087	[-0.0306] -0.777
Moment of Inertia at Center of Gravity	L_{xx}		[1.1391] 0.048	[1.1865] 0.05
	L_{yy}	[lb-ft ²] kg-m ²	[63.8821] 2.692	[87.1853] 3.674
	L_{zz}		[63.5262] 2.677	[86.8294] 3.659

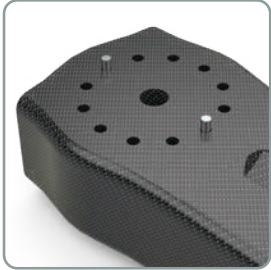


WORLD TOOL COMPOSITE BOOM - WTCB SERIES

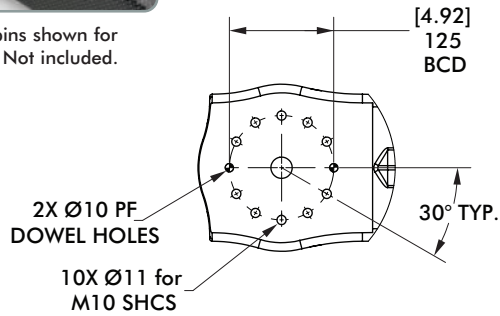
Accelerate® Tooling Collection | Dimensions

Robot or Tool Changer Mounting Patterns

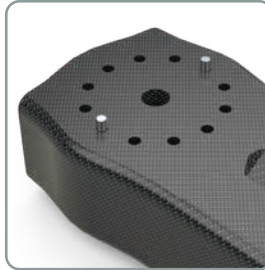
WTCB-TC01



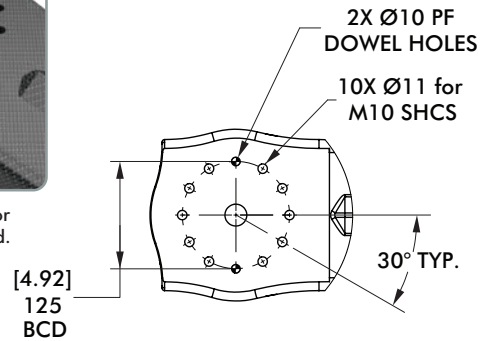
Dowels pins shown for location. Not included.



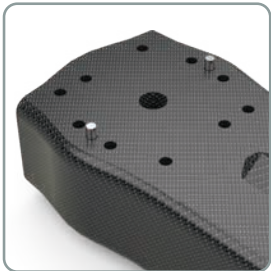
WTCB-TC03



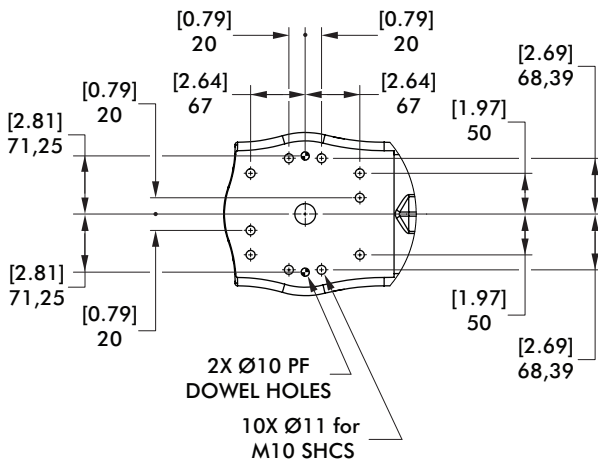
Dowels pins shown for location. Not included.



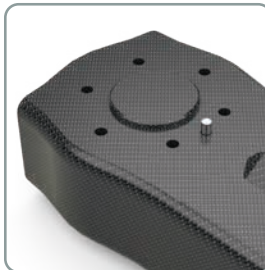
WTCB-TC02



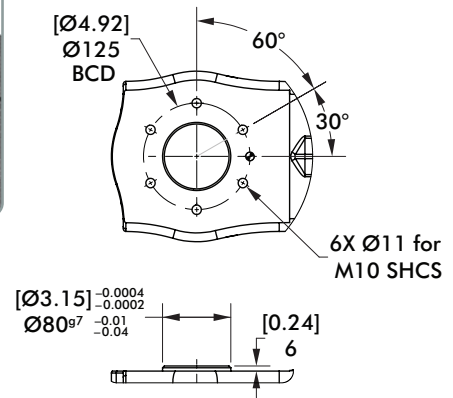
Dowels pins shown for location. Not included.



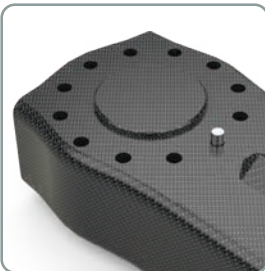
WTCB-TC04



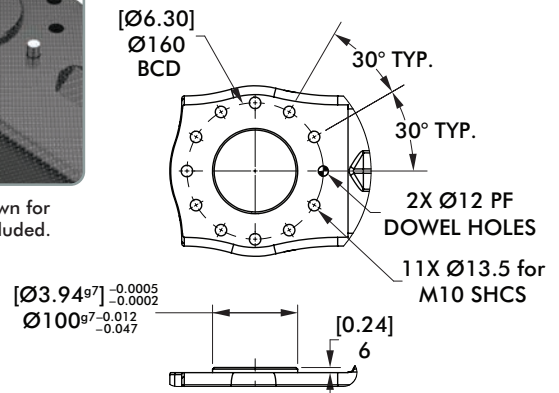
Dowels pins shown for location. Not included.



WTCB-TC05



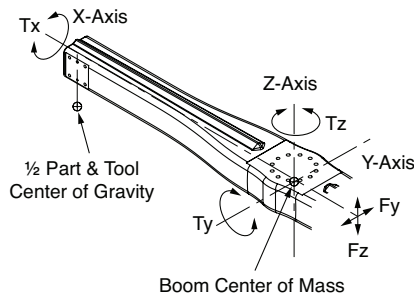
Dowels pins shown for location. Not included.



WORLD TOOL COMPOSITE BOOM - WTCB SERIES

Accelerate® Tooling Collection | Specifications

Center Mount Load Specifications (Max. Loads\Deflections)



CLICK OR SCAN

QR code to open engineering guide for detailed deflection information

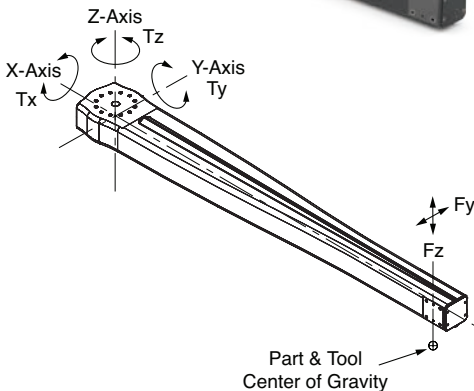


Description	Designation	Units	1000mm	1700mm	2400mm
Boom Maximum Shear Load	F _y	[lbs]	[541]	[494]	[446]
	F _z	N	2405	2196	1983
Static & Dynamic Moment Capacity about X-Axis	T _x	[in-lb]	[5310]	[4647]	[3983]
		Nm	600	525	450
End of Boom Twist @ Moment Capacity about X-Axis			0.8°	2°	2.6°
Static & Dynamic Moment Capacity about Y-Axis	T _y	[in-lb]	[7744]	[12612]	[16374]
		Nm	875	1425	1850
End of Boom Deflection @ Moment Capacity about Y-Axis		[in]	[0.02]	[0.09]	[0.24]
		mm	0.44	2.3	6.18
Static & Dynamic Moment Capacity about Z-Axis	T _z	[in-lb]	[9515]	[15489]	[20135]
		Nm	1075	1750	2275
End of Boom Deflection @ Moment Capacity about Z-Axis		[in]	[0.01]	[0.06]	[0.15]
		mm	0.27	1.41	3.79
Static & Dynamic Moment Capacity Combined about X-Axis plus Z-Axis	T _x	[in-lb]	[5310]	[4647]	[3983]
		Nm	600	525	450
	T _z	[in-lb]	[9515]	[15489]	[20135]
		Nm	1075	1750	2275
End of Boom Deflection @ Combined Moment Capacity about X-Axis plus Z-Axis		[in]	[0.02]	[0.09]	[0.19]
		mm	0.51	2.3	4.92
Fatigue Life Testing		cycles		9,000,000	

Notes:

1. Load specifications and deflection for 1/2 of the boom
2. Load specifications include tool changers, hanger bracket part, tooling and miscellaneous components

End Mount Load Specifications (Max. Loads\Deflections)



CLICK OR SCAN

QR code to open engineering guide for detailed deflection information



Description	Designation	Units	1094mm	1500mm	1703mm
Boom Maximum Shear Load	F _y	[lbs]	[696]	[637]	[634]
	F _z	N	3098	2833	2818
Static & Dynamic Moment Capacity about X-Axis	T _x	[in-lb]	[7966]	[7966]	[7966]
		Nm	900	900	900
End of Boom Twist @ Moment Capacity about X-Axis			1.5°	3°	4°
Static & Dynamic Moment Capacity about Y-Axis	T _y	[in-lb]	[23676]	[30978]	[34960]
		Nm	2675	3500	3950
Deflection @ Moment Capacity about Y-Axis		[in]	[0.21]	[0.53]	[0.78]
		mm	5.34	13.5	19.8
Static & Dynamic Moment Capacity about Z-Axis	T _z	[in-lb]	[28544]	[36288]	[41156]
		Nm	3225	4100	4650
Deflection @ Moment Capacity about Z-Axis		[in]	[0.11]	[0.26]	[0.38]
		mm	2.7	6.63	9.77
Static & Dynamic Moment Capacity Combined about X-Axis plus Z-Axis	T _x	[in-lb]	[7966]	[7966]	[7966]
		Nm	900	900	900
	T _z	[in-lb]	[28544]	[36288]	[41156]
		Nm	3225	4100	4650
Deflection @ Combined Moment Capacity about X-Axis plus Z-Axis		[in]	[0.12]	[0.34]	[0.47]
		mm	3.04	8.73	11.9
Fatigue Life Testing		cycles		9,000,000	

Notes:

1. Load specifications include mass of complimentary components and part & tooling weight

LIGHTWEIGHT TUBING

Accelerate® Tooling Collection | Boom/Tubing Sizes

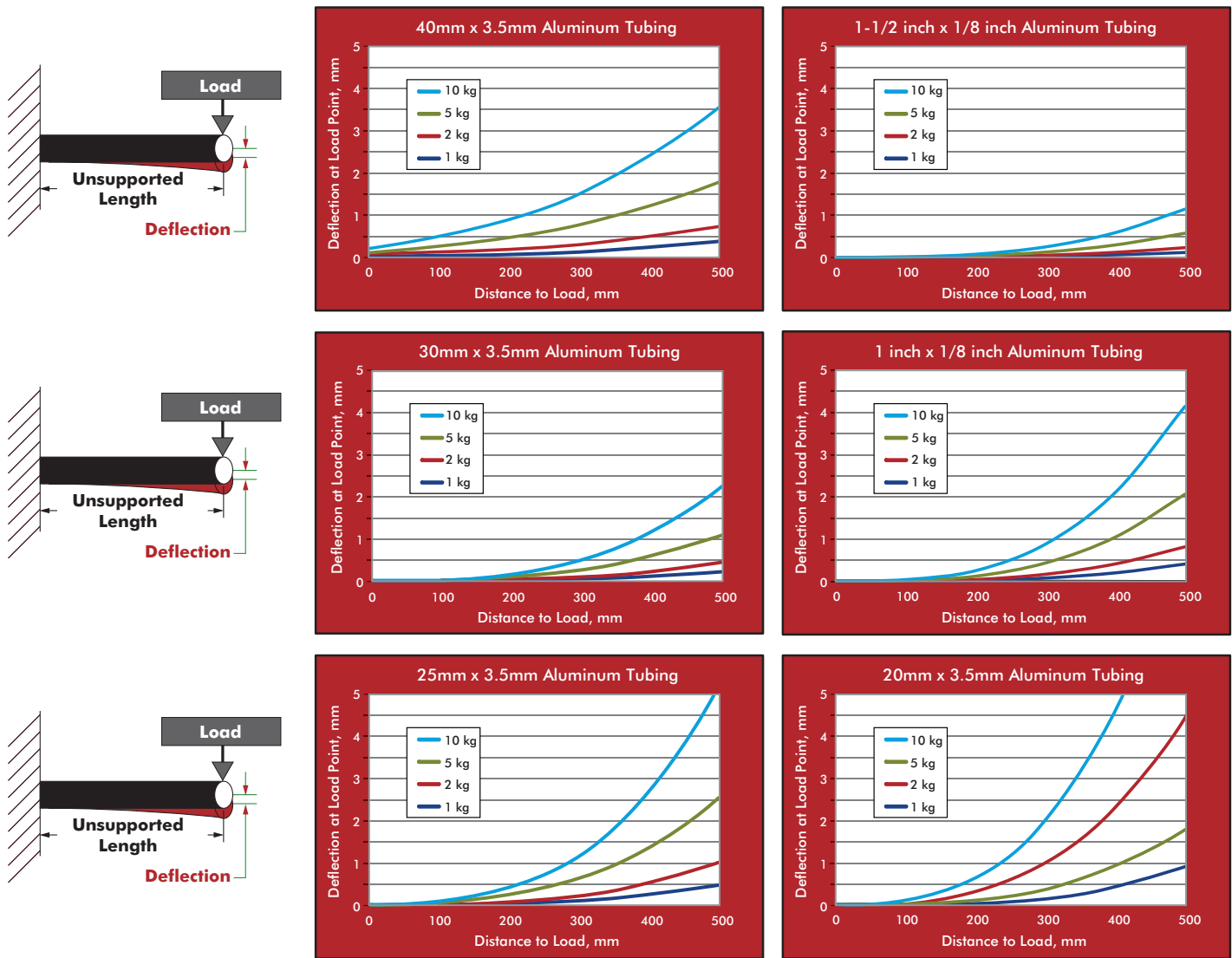
LWT Lightweight Boom/Tube
(3.5 mm or 0.125 in. Wall)



Model Number	(Ø)	Tolerance (mm)	Weight
LWT-40-1000	40mm	±0.14	1080g/m [0.73 lb/ft]
LWT-15E-1000	1.50 in	±0.14	920g/m [0.61 lb/ft]
LWT-30-1000	30mm	+0.08/-0.14	790g/m [0.53 lb/ft]
LWT-10E-1000	1.00 in	+0.05/-0.10	601g/m [0.41 lb/ft]
LWT-25-1000	25mm	+0.08/-0.14	640g/m [0.43 lb/ft]
LWT-20-1000	20mm	±0.08	490g/m [0.33 lb/ft]

Material: High Strength Aluminum

LWT Lightweight Boom Deflection Charts

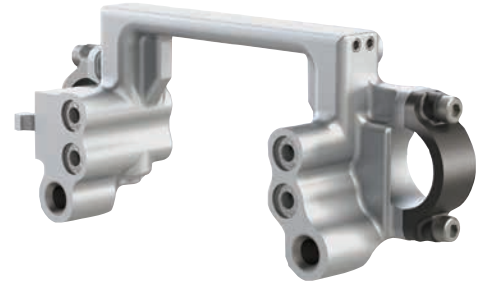
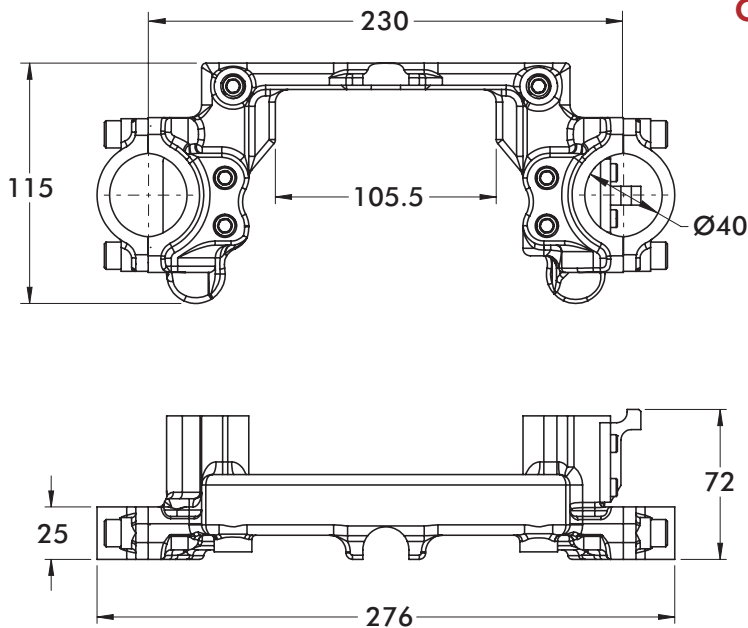


Note: Performance may vary if used with non-DESTACO components

ACCELERATE[®] TOOLING COLLECTION

Accelerate[®] Tooling Collection | Dimensions

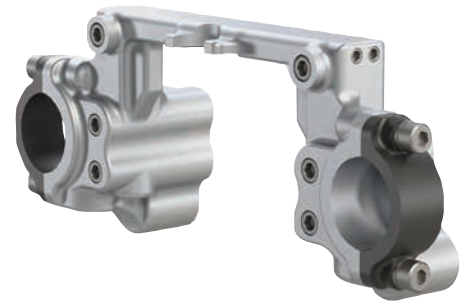
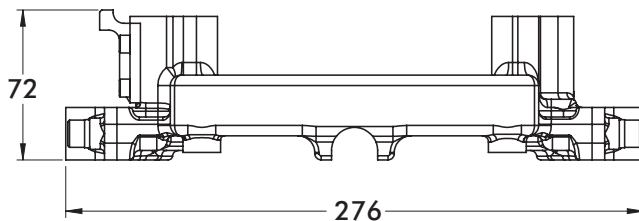
GRS-SD-40 Crossbar Saddle w/Air (Left Hand)



Material: High Strength Aluminum

Model Number	Weight
GRS-SD-40-LHS-A	938g [2.06 lb]

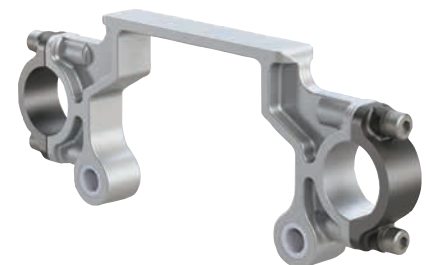
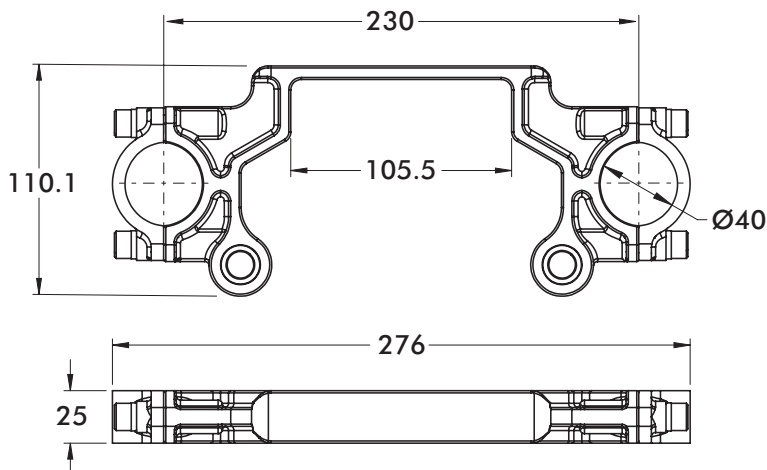
GRS-SD-40 Crossbar Saddle w/Air (Right Hand)



Material: High Strength Aluminum

Model Number	Weight
GRS-SD-40-RHS-A	938g [2.06 lb]

GRS-SD-40 Crossbar Saddle (Idle)



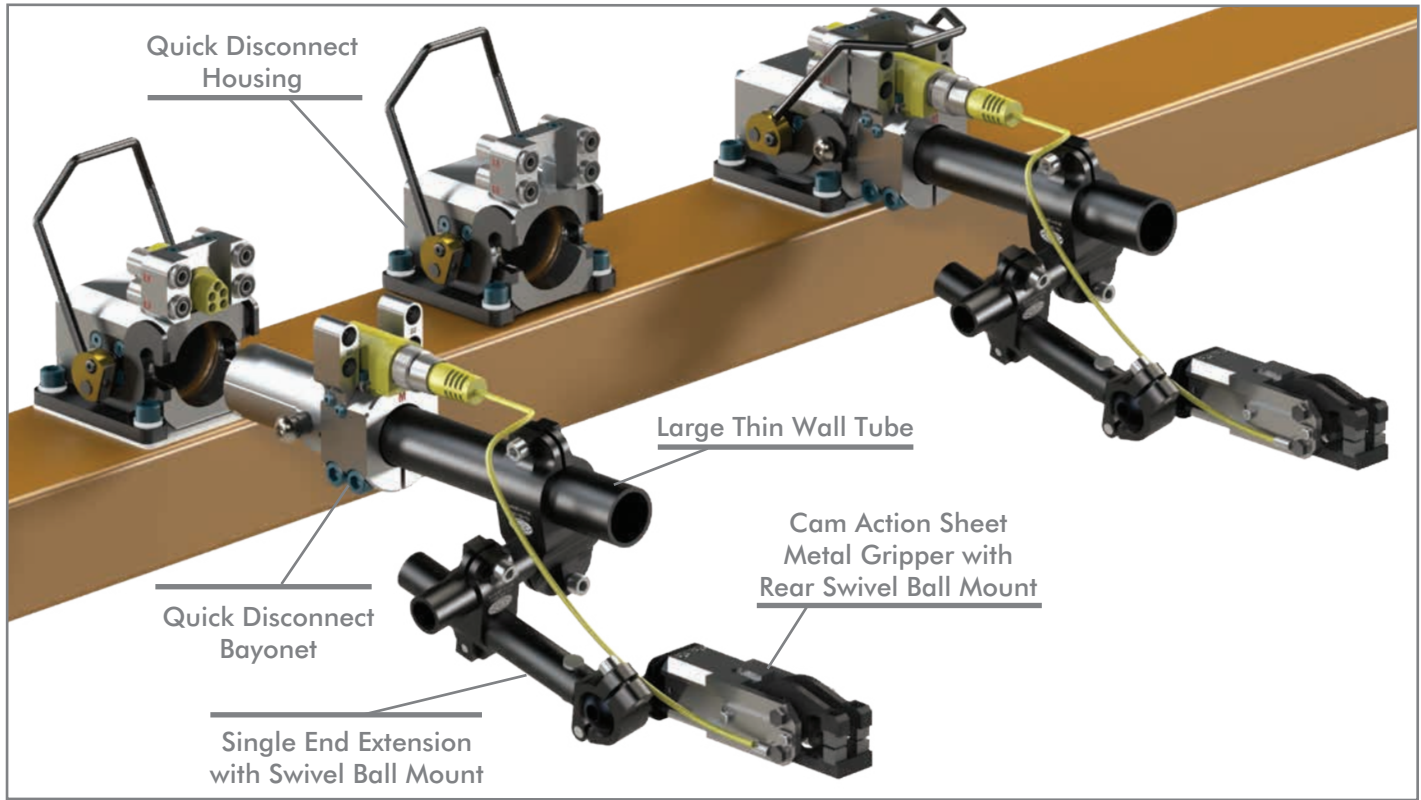
Material: High Strength Aluminum

Model Number	Weight
GRS-SD-40-NA-A	535g [1.18 lb]

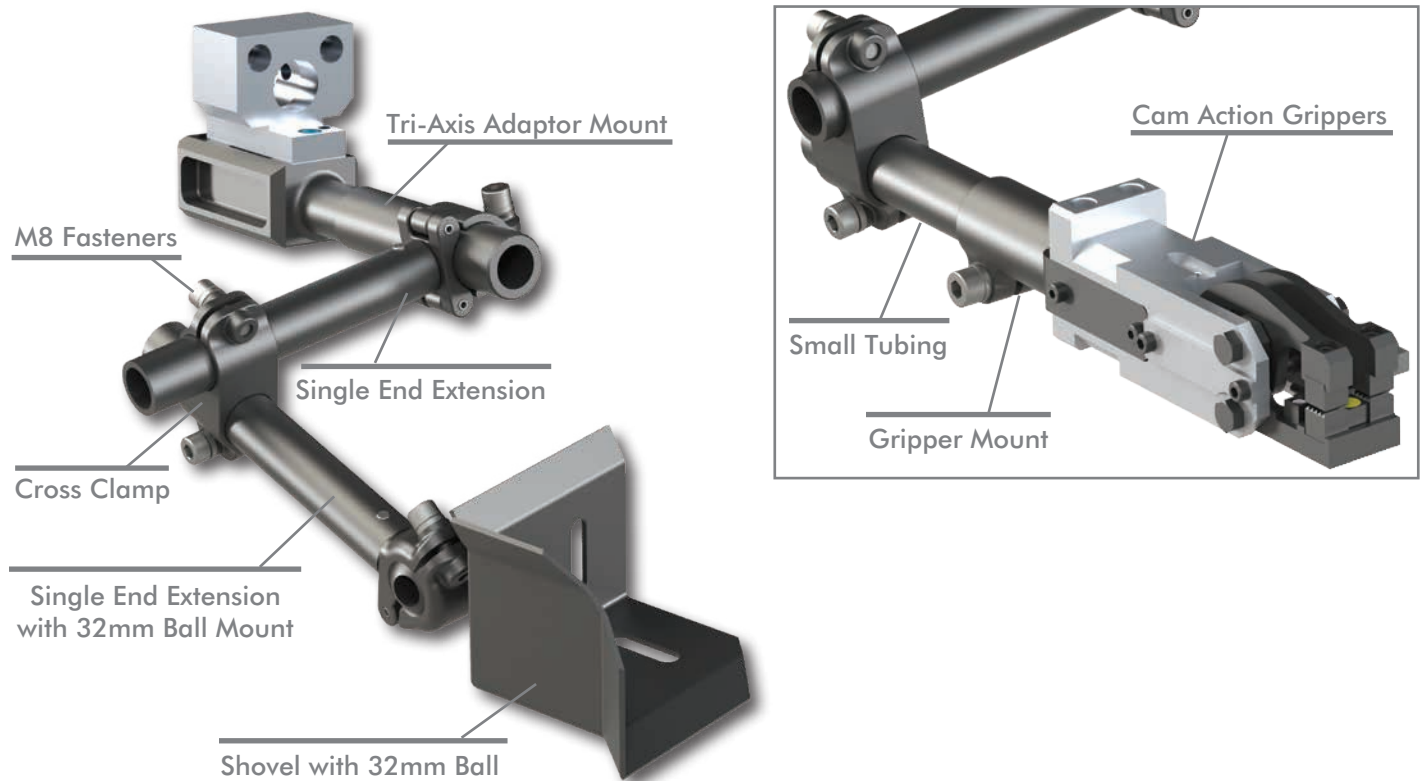
ACCELERATE® TOOLING COLLECTION

Accelerate® Tooling Collection | Tooling Examples

Tri-Axis Rail Tooling Example with Accelerate® Tooling



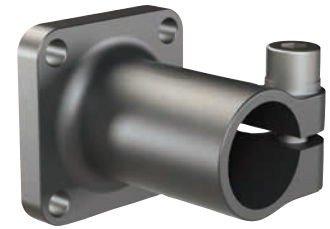
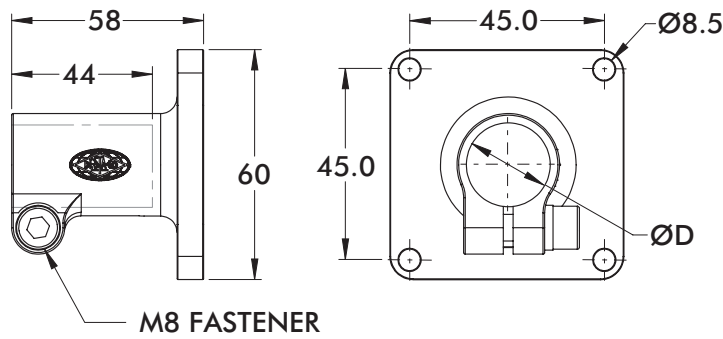
LWT Tri-Axis Tooling Example



TCF, TCA SERIES

Accelerate® Tooling Collection | Dimensions

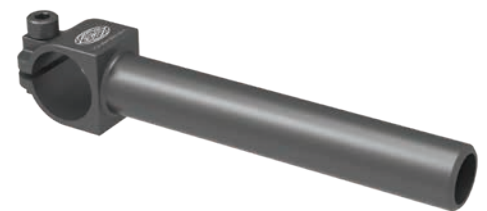
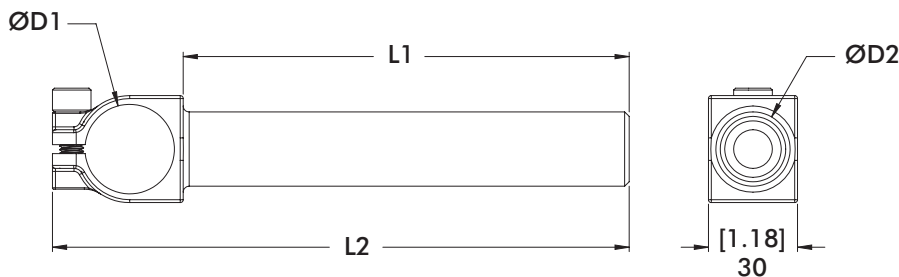
TCF Flange Mount Ø20 & Ø25mm



Material: High Strength Aluminum

Model Number	ØD	Weight
TCF-20M-A	20mm	121g [0.27 lb]
TCF-25M-A	25mm	98g [0.22 lb]

TCA T-Clamp Transition Brackets

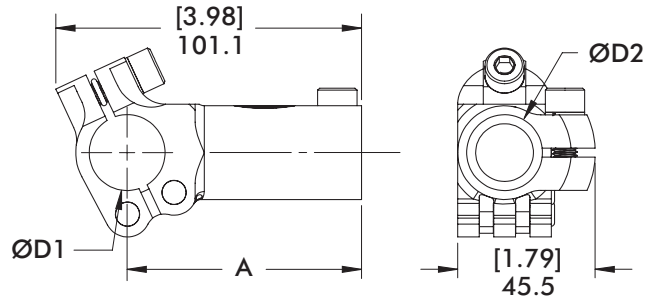


Model Number	ØD1	ØD2	L1	L2	Material	Weight
TCA-25M-25M-150-A	.98 [25]	.98 [25]	150 [5.91]	194 [7.64]	Aluminum	160g [0.35 lb]
TCA-30M-25M-150-A	1.19 [30]	.98 [25]	150 [5.91]	194 [7.64]	Aluminum	162g [0.36 lb]
TCA-20M-20M-400-A	.79 [20]	.79 [20]	400 [15.74]	438 [17.24]	Aluminum	239g [0.53 lb]
TCA-30M-30M-400-A	1.18 [30]	1.18 [30]	400 [15.74]	447 [17.60]	Aluminum	394g [0.87 lb]
TCA-20M-20M-400-S	.79 [20]	.79 [20]	400 [15.74]	438 [17.24]	Steel	384g [0.85 lb]
TCA-30M-30M-400-S	1.18 [30]	1.18 [30]	400 [15.74]	447 [17.60]	Steel	622g [1.37 lb]

TCLD SERIES

Accelerate® Tooling Collection | Dimensions

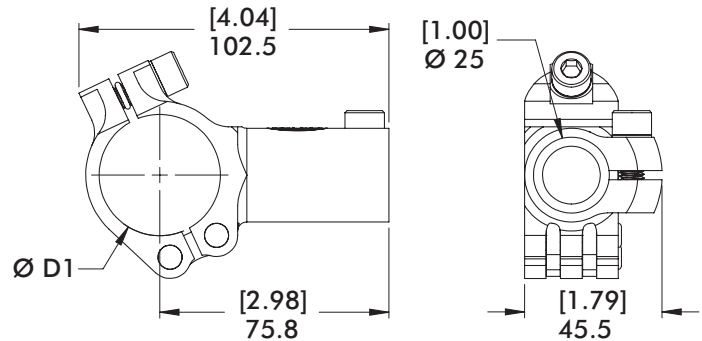
TCLD T-Clamp



Material: High Strength Aluminum

Model Number	ØD1	ØD2	A	B	Weight
TCLD-10E-10E-A	Ø1.00 in	Ø1.00 in	77.5 [3.05]	101.1 [3.98]	194g [0.43 lb]
TCLD-10E-25M-A	Ø1.00 in	Ø25mm	77.5 [3.05]	101.1 [3.98]	194g [0.43 lb]
TCLD-25M-25M-A	Ø25mm	Ø25mm	77.5 [3.05]	101.1 [3.98]	194g [0.43 lb]
TCLD-12E-10E-A	Ø1.25 in	Ø1.00 in	74.5 [2.93]	99.1 [3.90]	186g [0.41 lb]
TCLD-30M-25M-A	Ø30mm	Ø25mm	74.5 [2.93]	99.1 [3.90]	192g [0.42 lb]

TCLD T-Clamp



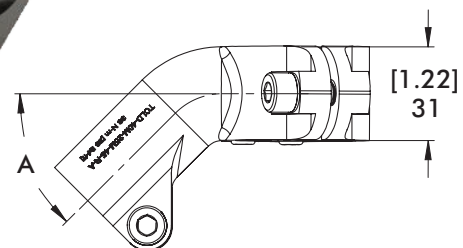
Material: High Strength Aluminum

Model Number	ØD1	ØD2	Weight
TCLD-15E-10E-A	Ø1.50 in	Ø1.00 in	193g [0.43 lb]
TCLD-40M-25M-A	Ø40mm	Ø25mm	191g [0.42 lb]

TCLD Angled T- Clamps

Material: High Strength Aluminum

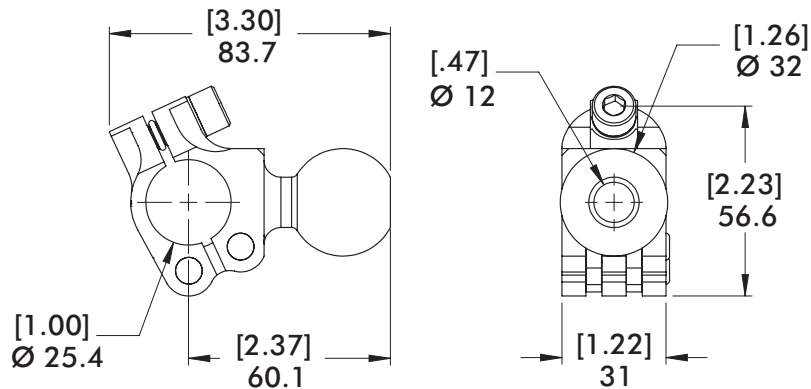
Model Number	A	Weight
TCLD-40M-20M-30-L-A	30°	225g [0.50 lb]
TCLD-40M-20M-30-R-A	30°	225g [0.50 lb]
TCLD-40M-20M-45-L-A	45°	230g [0.51 lb]
TCLD-40M-20M-45-R-A	45°	230g [0.51 lb]
TCLD-40M-25M-30-L-A	30°	201g [0.44 lb]
TCLD-40M-25M-30-R-A	30°	201g [0.44 lb]
TCLD-40M-25M-45-L-A	45°	206g [0.45 lb]
TCLD-40M-25M-45-R-A	45°	206g [0.45 lb]



TCL SERIES

Accelerate® Tooling Collection | Dimensions

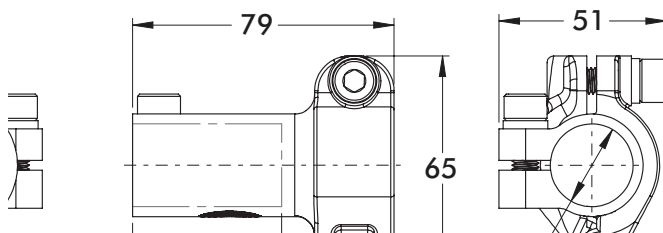
TCL Ball Clamps Ø32



Material: High Strength Aluminum

Model Number	Weight
TCLD-10E-32B-A	166g [0.37 lb]

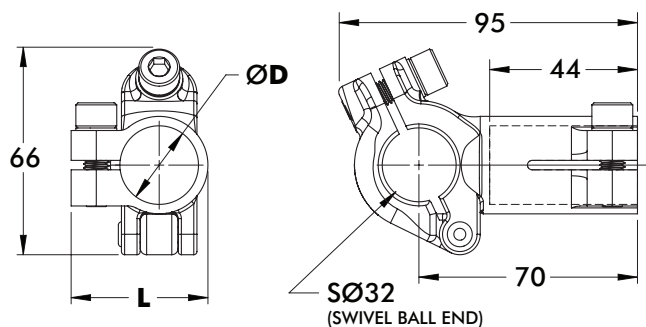
TCL Ø32 Ball to Ø25



Material: High Strength Aluminum

Model Number	ØD	Weight
TCL-32B-25M-90-A	Ø25	145g [0.32 lb]
TCL-32B-20M-90-A	Ø20	157g [0.35 lb]
TCL-32B-10E-90-A	1 in	157g [0.35 lb]

TCL Ø25mm/1 in to Ø32



Material: High Strength Aluminum

Model Number	ØD	Weight
TCL-25M-32B-A	Ø25	147g [0.32 lb]
TCL-20M-32B-A	Ø20	128g [0.28 lb]
TCL-10E-32B-A	1 in	141g [0.31 lb]

SEC SERIES

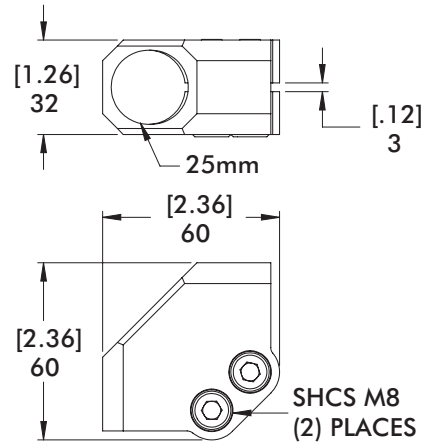
Accelerate® Tooling Collection | Dimensions

SEC Wrist Clamp



Material: Aluminum

Model Number	Weight
SEC-25M-25M-A	[0.10 lb] 47g

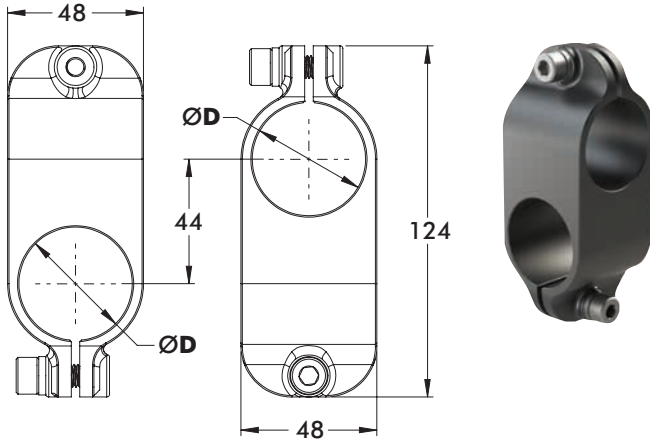


CL SERIES

Accelerate® Tooling Collection | Dimensions

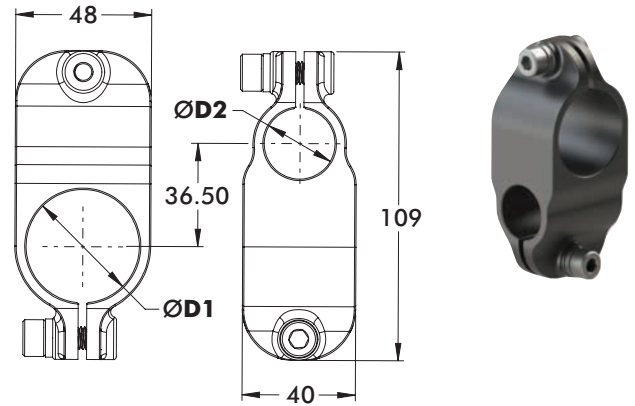
CL Cross Clamps

Material: High Strength Aluminum



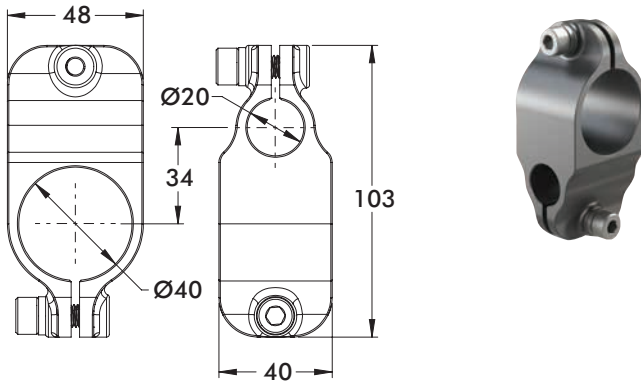
Ø40mm/1.50 in to Ø40mm/1.50 in Cross Clamp

Model Number	ØD	Weight
CL-40M-40M-A	40mm	233g [0.51 lb]
CL-15E-15E-A	1.50 in	283g [0.62 lb]



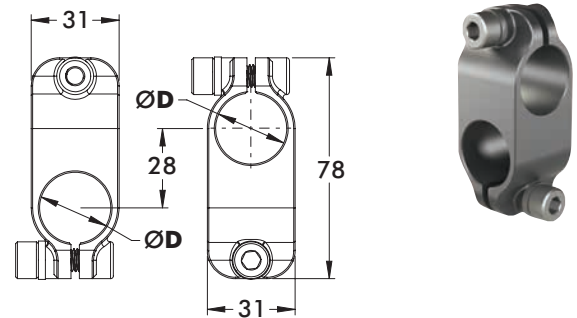
Ø40mm/1.50 in to Ø25mm/1.00 in Cross Clamp

Model Number	ØD1	ØD2	Weight
CL-40M-25M-A	40mm	25mm	214g [0.47 lb]
CL-15E-10E-A	1.50 in	1.00 in	223g [0.50 lb]



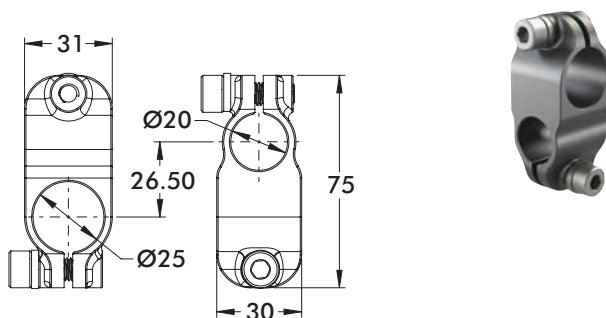
Ø40mm to Ø20mm Cross Clamp

Model Number	Weight
CL-40M-20M-A	202g [0.45 lb]



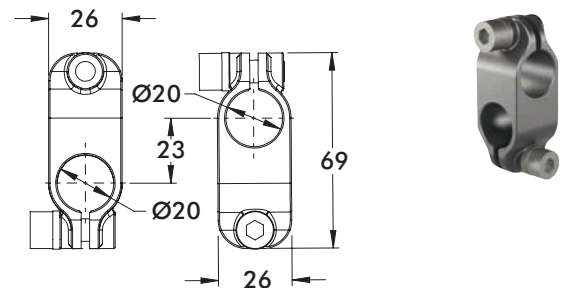
Ø25mm/1.00 in to Ø25mm/1.00 in Cross Clamp

Model Number	ØD	Weight
CL-25M-25M-A	25mm	102g [0.22 lb]
CL-10E-10E-A	1.00 in	105g [0.23 lb]



Ø25mm to Ø20mm Cross Clamp

Model Number	Weight
CL-25M-20M-A	98g [0.22 lb]



Ø20mm to Ø20mm Cross Clamp

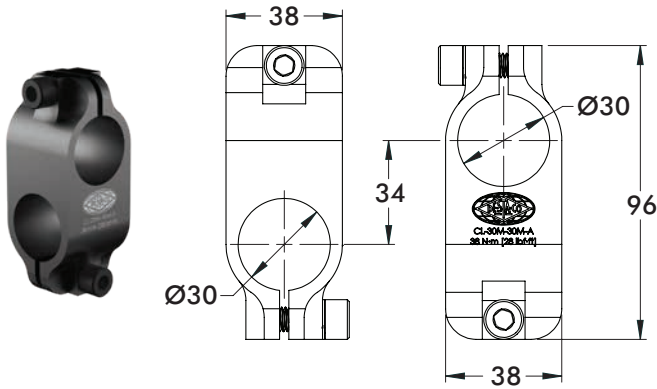
Model Number	Material	Weight
CL-20M-20M-A	Aluminum	52g [0.11 lb]
CL-20M-20M-S	Steel	178g [0.39 lb]

CL SERIES

Accelerate® Tooling Collection | Dimensions

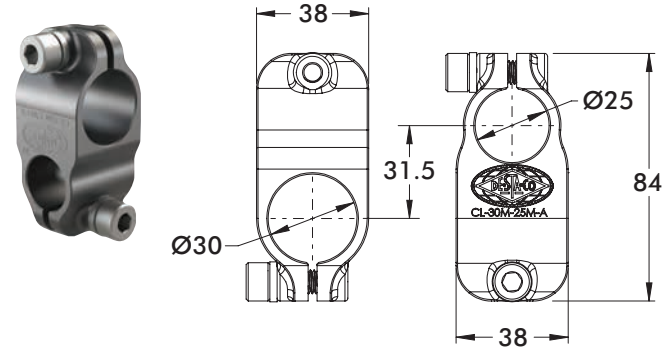
CL Cross Clamps

Material: High Strength Aluminum



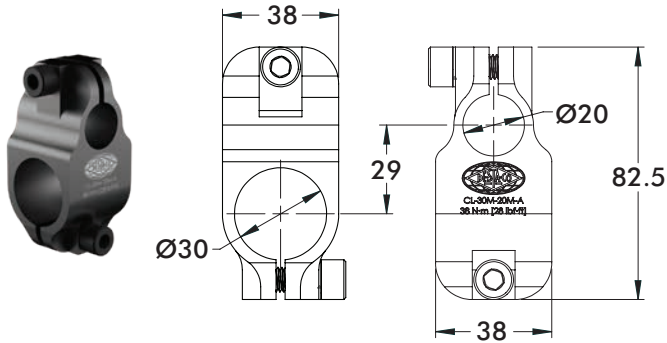
Ø30mm to Ø30mm Cross Clamp

Model Number	Material	Weight
CL-30M-30M-A	Aluminum	200g [0.44 lb]
CL-30M-30M-S	Steel	415g [0.91 lb]



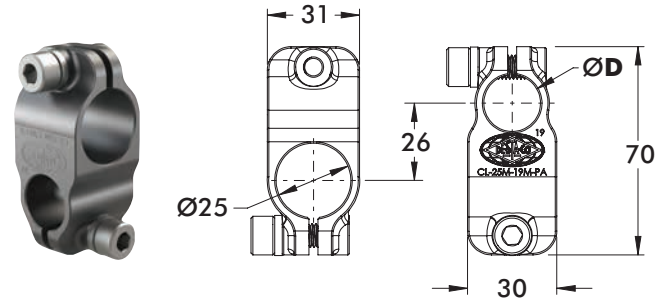
Ø30mm to Ø25mm Cross Clamp

Model Number	Weight
CL-30M-25M-A	148g [0.33 lb]



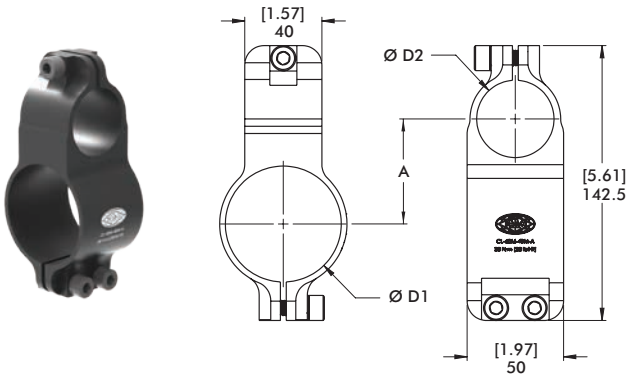
Ø30mm to Ø20mm Cross Clamp

Model Number	Weight
CL-30M-20M-A	125g [0.28 lb]



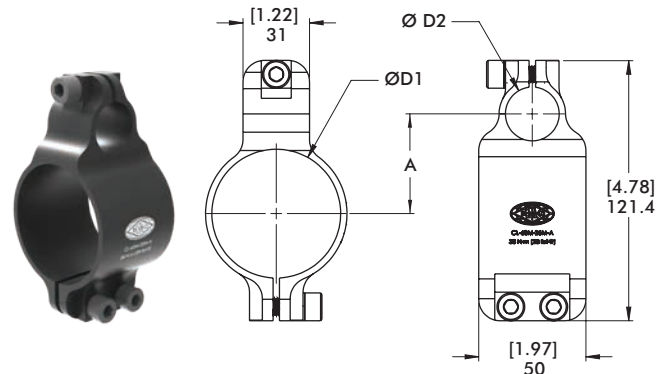
Ø25mm to Apple Core Cross Clamp

Model Number	ØD	Weight
CL-25M-19M-PA-A	19	95g [0.21 lb]
CL-25M-20M-PA-A	20	94g [0.21 lb]



Ø60mm/2.50 in to Ø40mm/1.50 in Cross Clamp

Model Number	ØD1	ØD2	A	Weight
	mm [in]	mm [in]	mm [in]	g [lb]
CL-60M-40M-A	60	40	54,5	276 [0.61]
CL-25E-15E-A	[2.50]	[1.50]	[2.13]	271 [0.60]



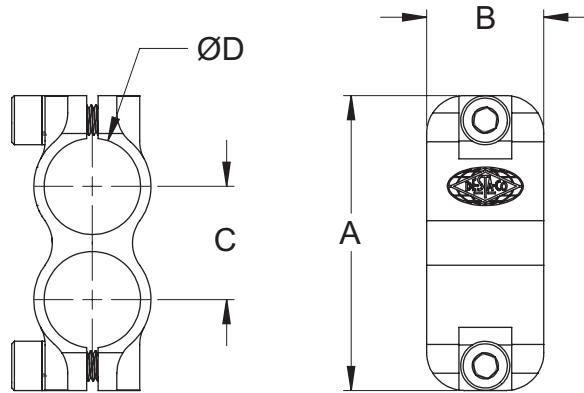
Ø60mm/2.50 in to Ø25mm/1.00 in Cross Clamp

Model Number	ØD1	ØD2	A	Weight
	mm [in]	mm [in]	mm [in]	g [lb]
CL-60M-25M-A	60	25	46,5	220 [0.49]
CL-25E-10E-A	[2.50]	[1.00]	[1.91]	228 [0.50]

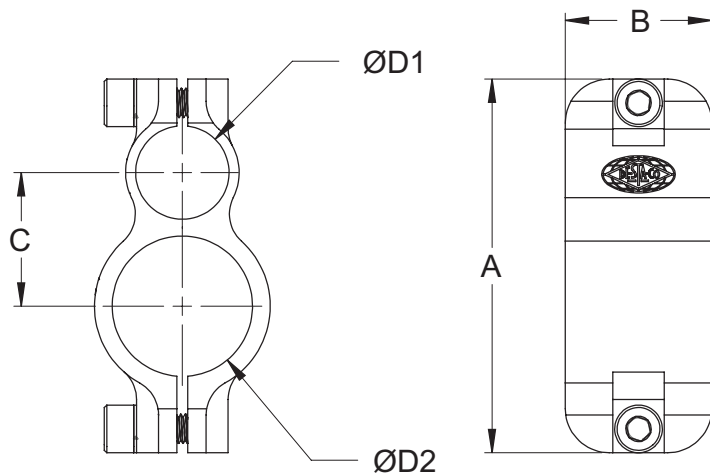
PC SERIES

Accelerate® Tooling Collection | Dimensions

PC Parallel Clamps



Model Number	A	B	C	ØD	Material	Weight
PC-10E-10E-A	[3.07] 78	[1.22] 31	[1.18] 30	[1.00] 25.4	Aluminum	[0.21 lb] 95g
PC-20M-20M-A	[2.72] 69	[1.02] 26	[0.91] 23	[0.79] 20	Aluminum	[0.18 lb] 83g
PC-20M-20M-S	[2.72] 69	[1.02] 26	[0.91] 23	[0.79] 20	Steel	[0.39 lb] 177g
PC-25M-25M-A	[3.07] 78	[1.22] 31	[1.18] 30	[1.00] 25.4	Aluminum	[0.21 lb] 93g
PC-30M-30M-A	[3.86] 98	[1.50] 38	[1.34] 34	[1.18] 30	Aluminum	[0.34 lb] 155g
PC-30M-30M-S	[3.86] 98	[1.50] 38	[1.34] 34	[1.18] 30	Steel	[0.83 lb] 378g

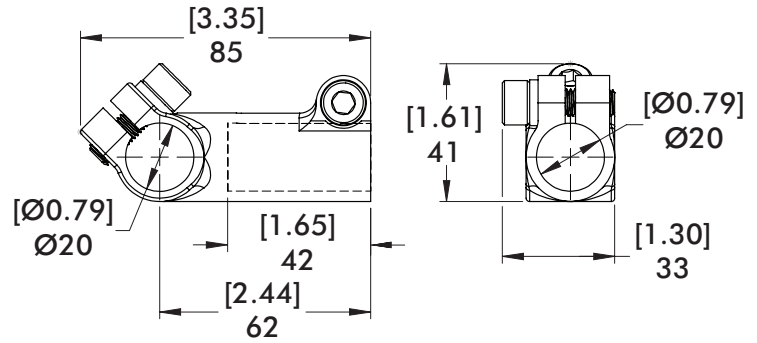


Model Number	A	B	C	ØD1	ØD2	Weight
PC-15E-10E-A	[4.02] 102	[1.57] 40	[1.44] 36.5	[1.00] 25.4	[1.50] 38.1	169g [0.37 lb]
PC-30M-20M-A	[3.29] 83.5	[1.5] 38	[1.12] 28.5	[0.79] 20	[1.18] 30	129g [0.28 lb]
PC-30M-25M-A	[3.52] 89.5	[1.5] 38	[1.24] 31.5	[0.98] 25	[1.18] 30	136g [0.30 lb]
PC-40M-25M-A	[4.02] 102	[1.57] 40	[1.44] 36.5	[0.98] 25	[1.57] 40	158g [0.35 lb]

ES/ESS SERIES

Accelerate® Tooling Collection | Dimensions

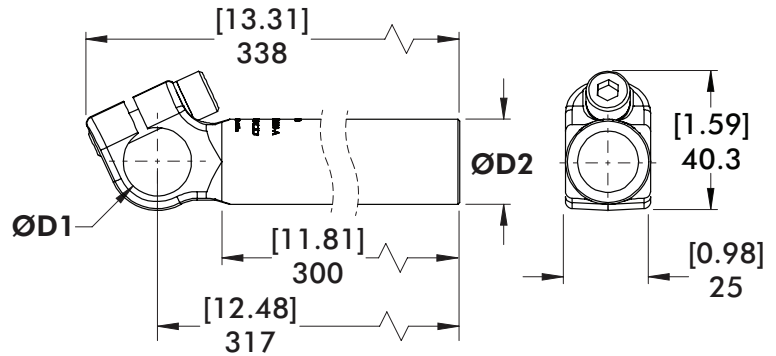
ES Ø20 to Ø20



Material: High Strength Aluminum

Model Number	Weight
ES-20M-20M-A	100g [0.22 lb]

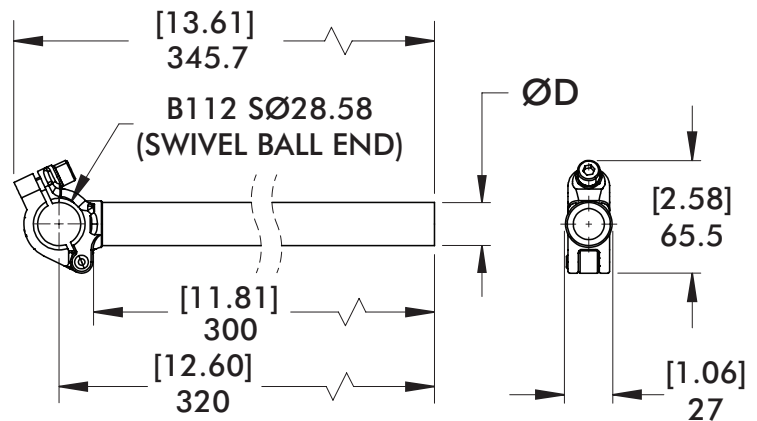
ES Single End Extensions



Material: High Strength Aluminum

Model Number	ØD1	ØD2	Weight
ES-20M-25M-300-A	20 [0.79]	25 [0.98]	250g [0.55 lb]
ES-19M-25M-300-A	19 [0.75]		250g [0.55 lb]
ES-19M-10E-300-A		1.00 in	269g [0.59 lb]

ES B112 Ball Mount Extension



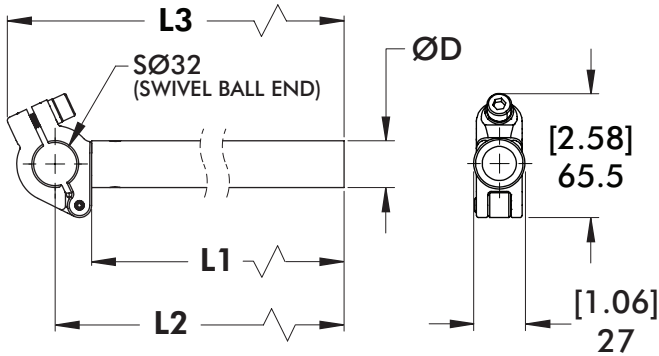
Material: High Strength Aluminum

Model Number	ØD	Weight
ES-B112-25M-300-A	25 [.98]	302g [0.67 lb]
ES-B112-10E-300-A	25.4 [1.00]	

ES/ESS SERIES

Accelerate® Tooling Collection | Dimensions

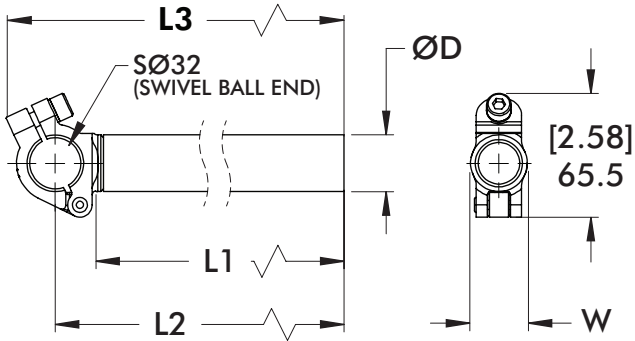
ES 32B Ball Mount Extension



Material: High Strength Aluminum

Model Number	ØD	L1	L2	L3	Weight
ES-32B-10E-300-A	25.4 [1.00]				277g [0.61 lb]
ES-32B-20M-300-A	20 [.79]	300 [11.81]	320 [12.60]	345 [13.58]	225g [0.50 lb]
ES-32B-25M-300-A	25 [0.98]				262g [0.56 lb]
ES-32B-25M-600-A		600 [23.62]	620 [24.41]	645 [25.39]	437g [0.96 lb]

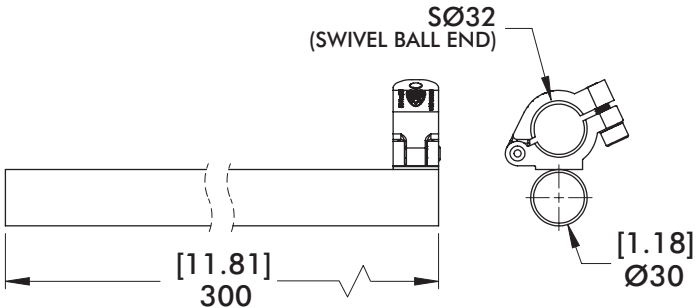
ESS 32B Ball Mount Extension - Steel



Material: Steel

Model Number	ØD	L1	L2	L3	W	Weight
ESS-32B-20M-300-S	20 [.79]	300 [11.81]	325.5 [12.81]	351.5 [13.84]	25 [0.98]	470g [1.04 lb]
ESS-32B-20M-600-S		600 [23.62]	625.5 [24.63]	651.5 [25.65]		792g [1.75 lb]
ESS-32B-30M-300-S	30 [1.18]	298 [11.73]	325.5 [12.81]	351.5 [13.84]	30 [1.18]	657g [1.49 lb]
ESS-32B-30M-600-S		598 [23.54]	625.5 [24.63]	651.5 [25.65]		1166g [2.57 lb]

ESS-90 32B Ball Mount Extension 90° - Steel



Model Number	Weight
ESS-32B-30M-90-300-S	518.4g [1.14 lb]

ACCELERATE® SPRING-LOADED CUP MOUNTS

Accelerate® Tooling Collection | Dimensions



LW-SCM Accelerate Spring-Loaded Cup Mounts

Features:

- Lightweight & compact design
- Bulkhead, apple core mounting
- Metric or imperial tube mounting
- Three travel lengths
- Non-rotating shaft for accurate part/sheet placement
- NPT or G mounting threads and vacuum ports

Benefits:

- Lightweight design offers increased productivity
- Hard-coat anodized with teflon for smooth operation and reduced wear
- Maintenance-free bushings for long life

Note: To be used in vertical orientations only.

Bulkhead Style
LW-SCM(B)



Apple Core Style
LW-SCM(A)



Clamp Style
LW-SCM(-40M/-15E)



Travel Length
LW-SCM(X)-"T"



Base Model	Vertical Travel
LW-SCM	50 50 mm [2.00 in]
	100 100 mm [4.00 in]
	150 150 mm [6.00 in]



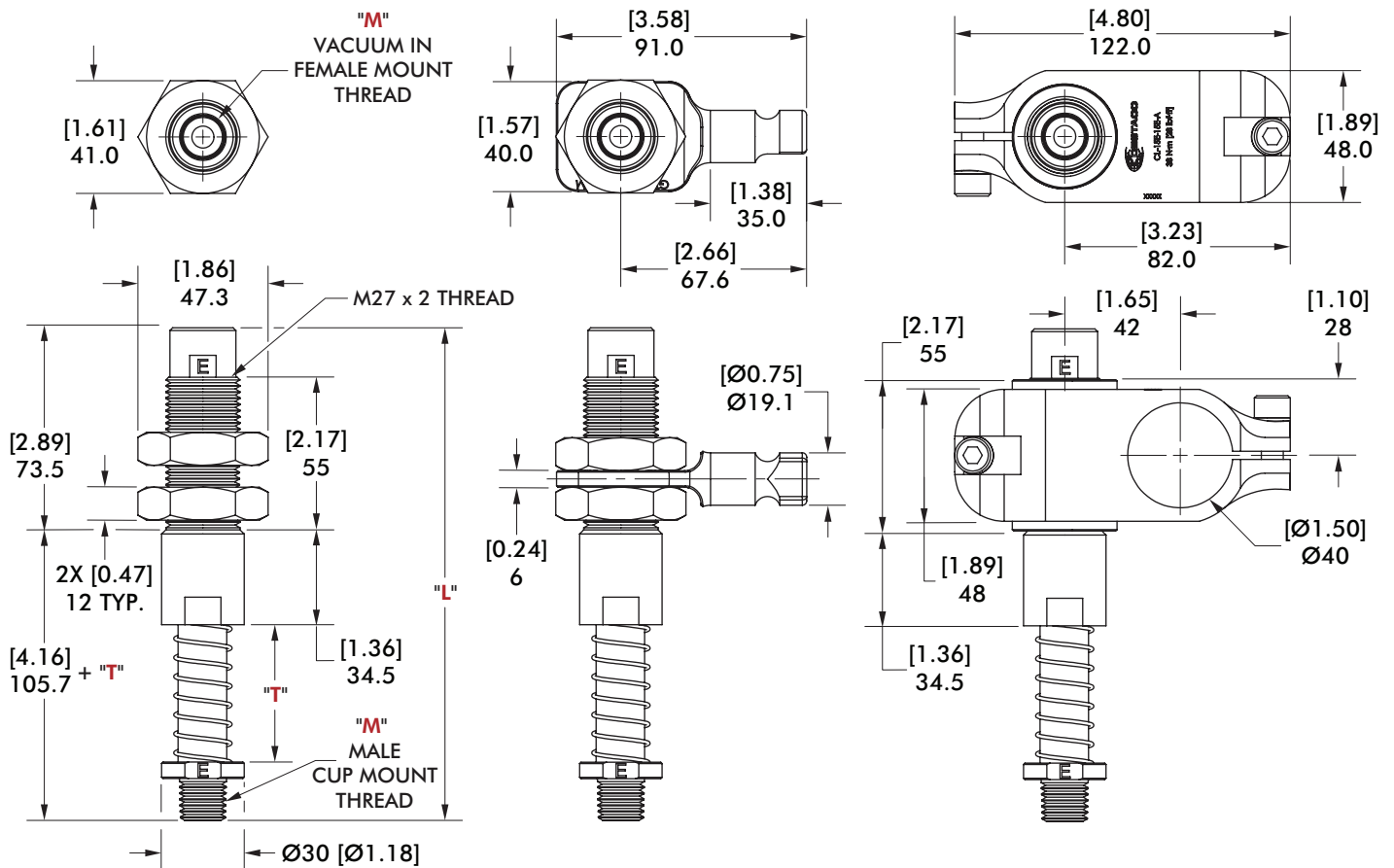
- | | |
|---|------------------------------|
| Mounting Style | Port Threads |
| B Bulkhead Style | U38 Imperial 3/8" NPT |
| A Apple Core Style | G38 Metric ISO G3/8 |
| -15E Tube Mount Style (Imperial) | |
| -40M Tube Mount Style (Metric) | |

ACCELERATE® SPRING-LOADED CUP MOUNTS

Accelerate® Tooling Collection | Dimensions

LW-SCM Bulkhead/Apple Core/Tube Mounting

Note: To be used in vertical orientations only.



LW-SCM(B)
Bulkhead Style

Travel [mm]	Weight kg [lb]
50	0.35 [0.77]
100	0.38 [0.84]
150	0.41 [0.90]



LW-SCM(A)
Apple Core Style

Travel [mm]	Weight kg [lb]
50	0.40 [0.88]
100	0.43 [0.95]
150	0.46 [1.01]

LW-SCM(-40M/-15E)
Tube Mount Style

Travel [mm]	Weight kg [lb]
50	0.57 [1.26]
100	0.60 [1.32]
150	0.63 [1.39]

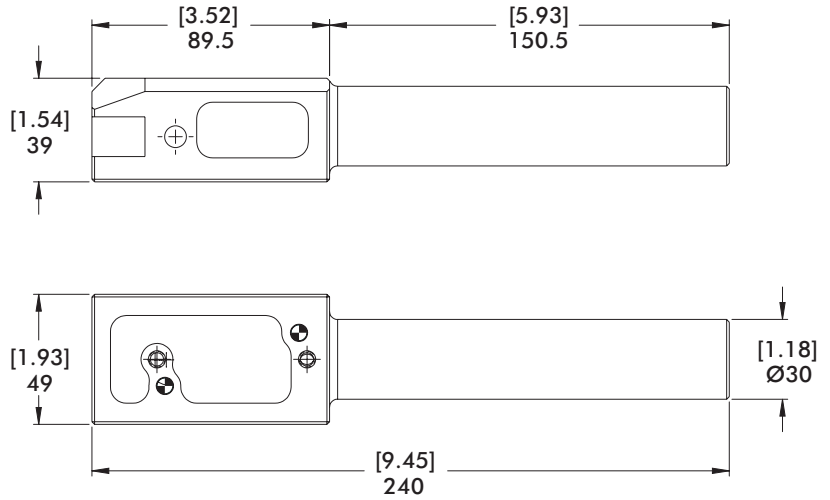
LW-SCM Travel, Length, and Port Threads - LW-SCM("X")-"T"- "M"-A

Version	Vertical Travel "T"	L	"M"	Spring Force (compressed)
 Imperial	-50 (2.00 in)	176 mm [6.93 in]	U38 (3/8" NPT)	17.8 N [4.0 lbs]
	-100 (4.00 in)	226 mm [8.90 in]		25.7 N [6.0 lbs]
	-150 (6.00 in)	276 mm [10.87 in]		28.9 N [6.5 lbs]
 Metric	-50 (50 mm)	179.25 mm [7.06 in]	G38 (ISO G3/8)	17.8 N [4.0 lbs]
	-100 (100 mm)	229.25 mm [9.03 in]		25.7 N [6.0 lbs]
	-150 (150 mm)	279.25 mm [10.99 in]		28.9 N [6.5 lbs]

GTA, LPT SERIES

Accelerate® Tooling Collection | Dimensions

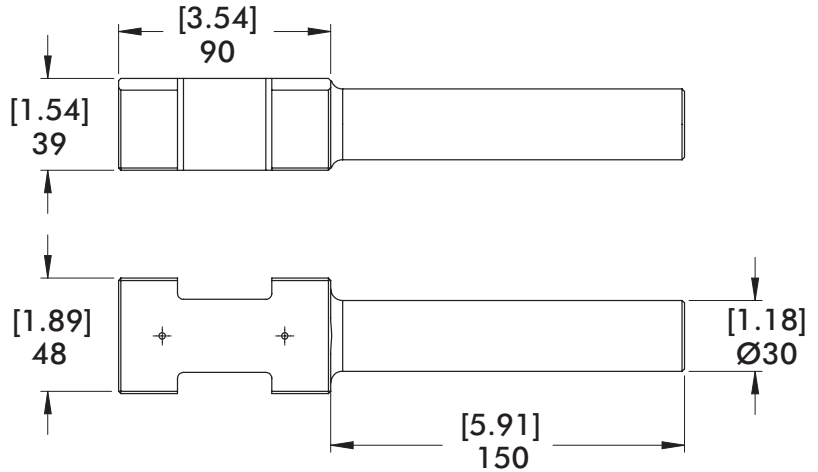
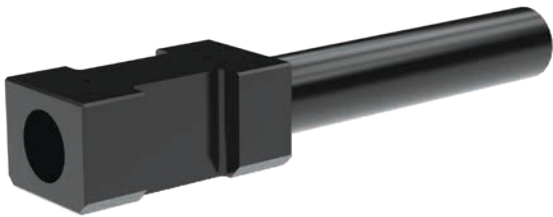
GTA - Tri Axis Adaptor Mounts



Material: High Strength Aluminum

Model Number	Weight
GTA-30-150	412g [0.91 lb]

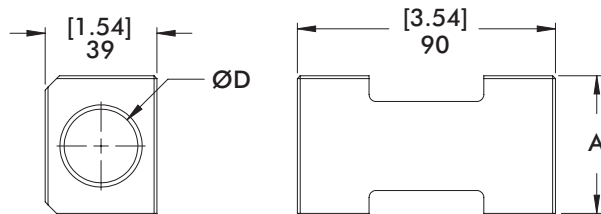
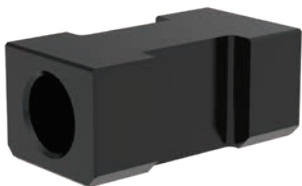
GTA



Material: High Strength Aluminum

Model Number	Weight
GTA-30-LTP	499g [1.10 lb]

LTP



Material: Steel

Model Number	A	ØD	Weight
CPI-LTP-B-10	48 [1.89]	25.4 [1.00]	771g [1.70 lb]
CPI-LTP-B-11	49 [1.93]	27.3 [1.07]	726g [1.60 lb]

TPA SERIES

Accelerate® Tooling Collection | Dimensions

TPA Single Flange Mount

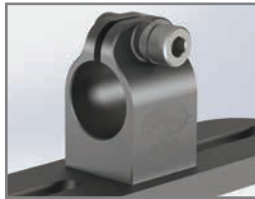


TPA-25-35

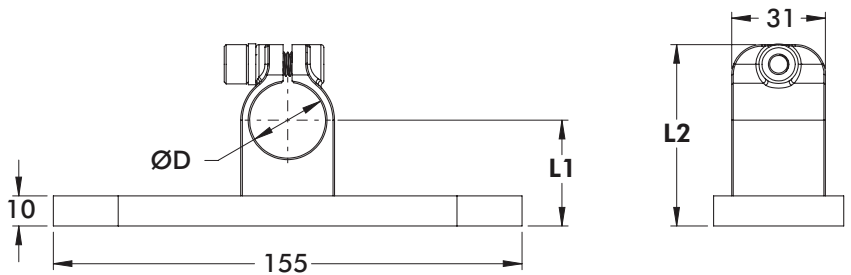
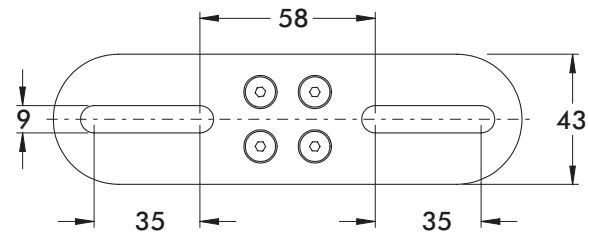
TPA-30-35



TPA-25-65
TPA-30-65



Configured 90°



Material: High Strength Aluminum

Model Number	L1	L2	ØD	Weight
TPA-20-35-LWT-A	35	60	20	234g [0.52 lb]
TPA-25-35-LWT-A	35	60	25	246g [0.54 lb]
TPA-25-65-LWT-A	63	88	25	322g [0.71 lb]
TPA-30-35-LWT-A	35	67	30	265g [0.58 lb]
TPA-30-65-LWT-A	63	95	30	361g [0.80 lb]

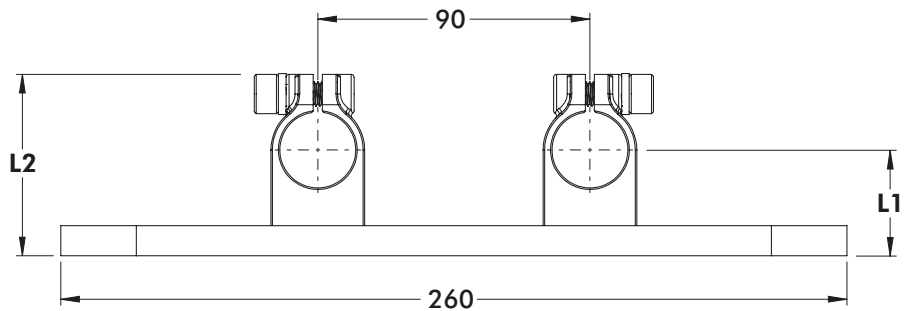
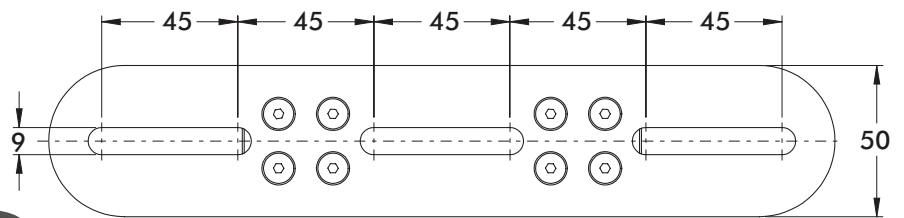
TPA Double Flange Mount



Material: High Strength Aluminum



Configured 90°

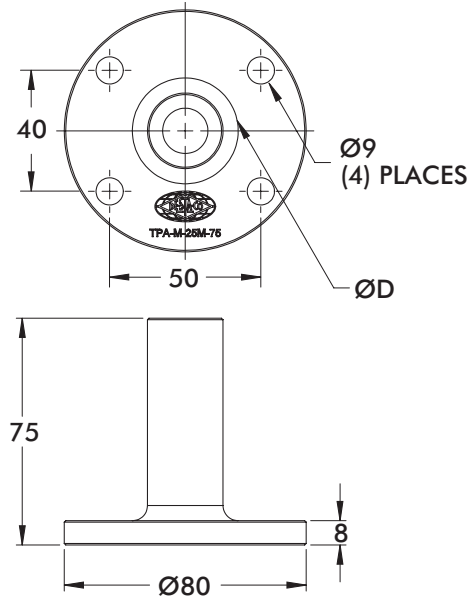


Model Number	L1	L2	Weight
TPA-25-25-65-LWT-A	65	88	644g [1.42 lb]

TPA SERIES

Accelerate® Tooling Collection | Dimensions

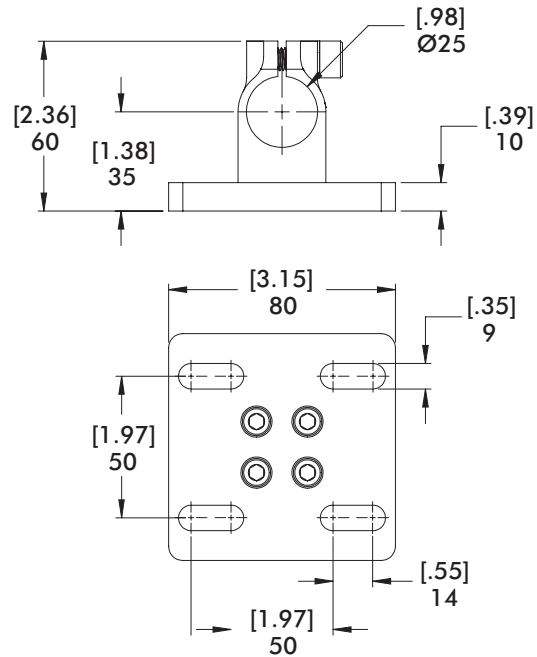
TPA Base Mount



Material: High Strength Aluminum

Model Number	ØD	Weight
TPA-M-20M-75	20mm	151g [0.33 lb]
TPA-M-25M-75	25mm	164g [0.36 lb]

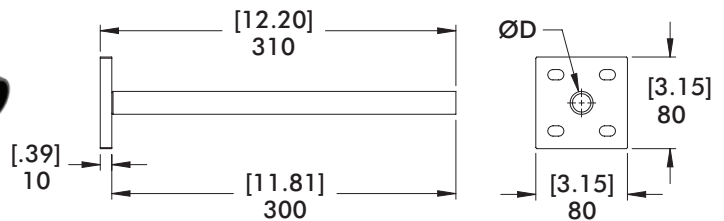
TPA 90° Base Clamp



Material: High Strength Aluminum

Model Number	Weight
TPA-G-25-35-A	258g [0.57 lb]

TPA Flange Extension



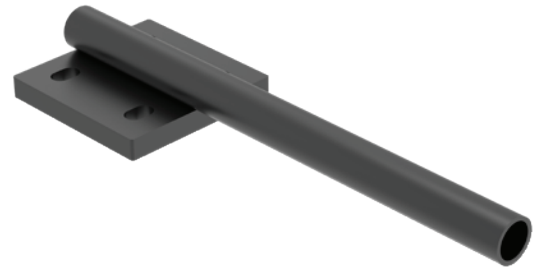
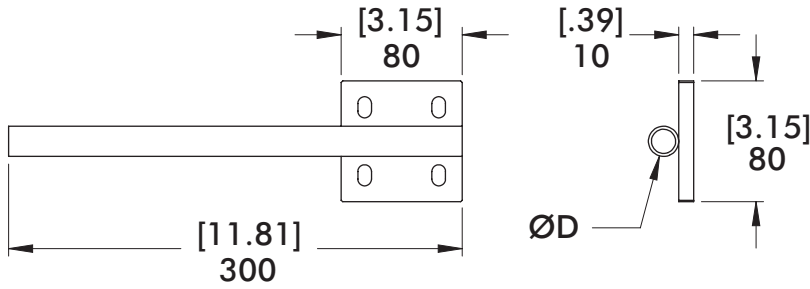
Material: Steel

Model Number	ØD	Weight
TPA-00-20-300-GD	20mm	736g [1.62 lb]
TPA-00-25-300-GD	25mm	810g [1.79 lb]
TPA-00-30-300-GD	30mm	884g [1.95 lb]

TPA, TBS SERIES

Accelerate® Tooling Collection | Dimensions

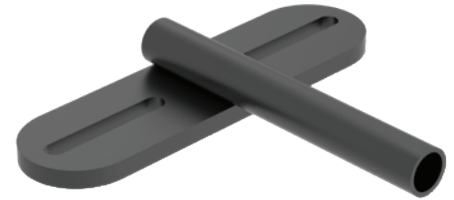
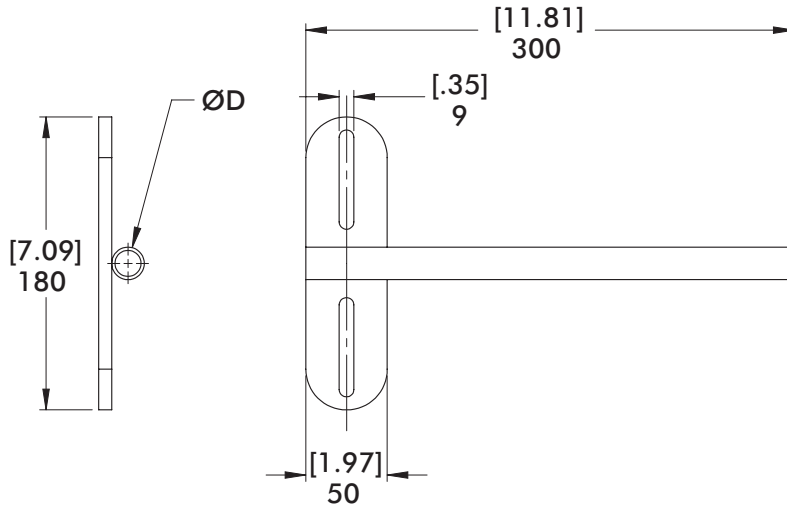
TPA 90° Slotted Flange Extension



Material: Steel

Model Number	ØD	Weight
TPA-90-20-300-GD	20mm	736g [1.62 lb]
TPA-90-25-300-GD	25mm	810g [1.79 lb]
TPA-90-30-300-GD	30mm	884g [1.95 lb]

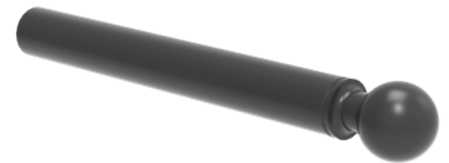
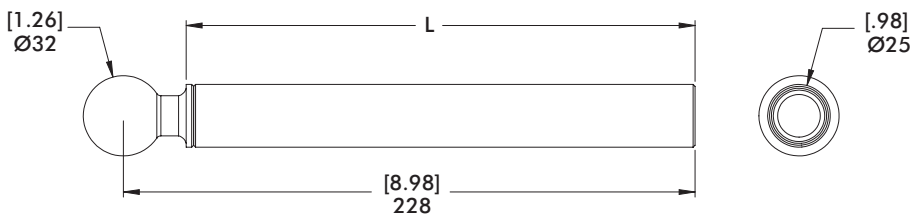
TPA 90° Slotted Flange Extension



Material: Steel

Model Number	ØD	Weight
TPA-90-20-300	20mm	733g [1.62 lb]
TPA-90-25-300	25mm	807g [1.78 lb]
TPA-90-30-300	30mm	881g [1.94 lb]

TBS Ball Extension



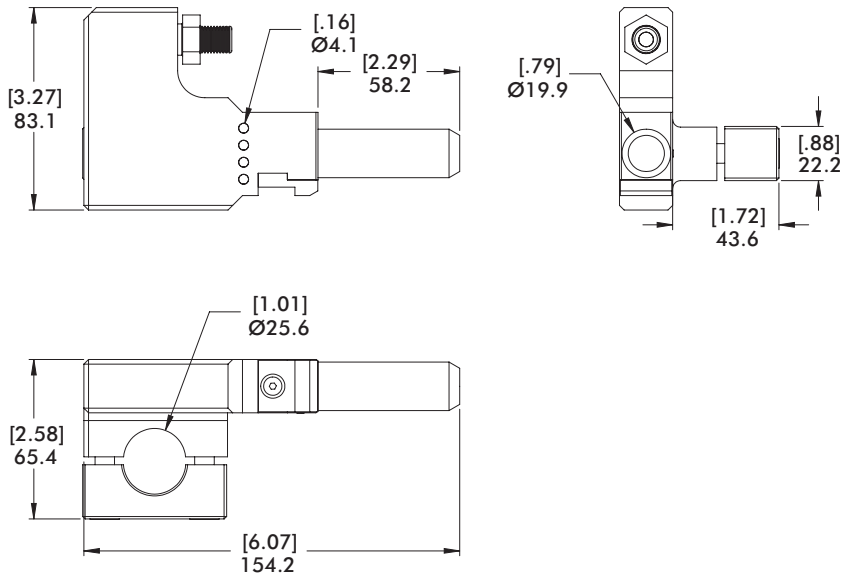
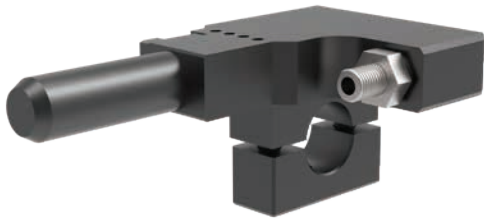
Material: Steel

Model Number	L	Weight
TBS-32B-25M-200-A	[7.87] 200	[0.75 lb] 339g
TBS-32B-25M-300-A	[11.81] 300	[1.43 lb] 648g

TPB, 1T SERIES

Accelerate® Tooling Collection | Dimensions

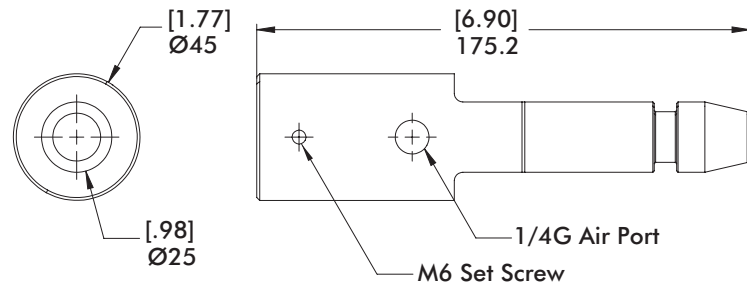
TPB - Transfer Press Bayonet



Material: Steel

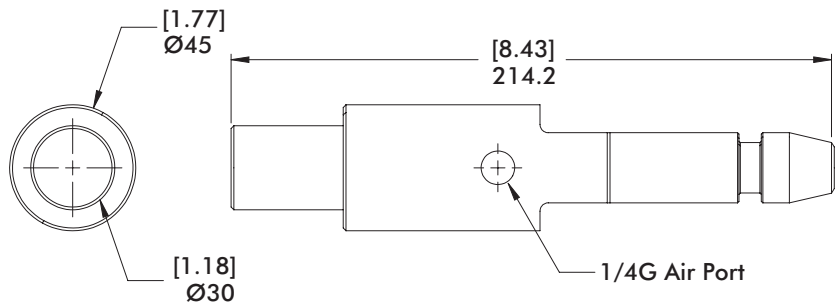
Model Number	Weight
CPI-TPB-HYU-10-1A-ST	734g [1.62 lb]

1T - One Touch Finger Tool 25mm



Model Number	Material	Weight
CPI-1T-25F	Steel	1.05kg [2.31 lb]
CPI-1T-25F-A	Aluminum	0.36kg [0.79 lb]

1T - One Touch Finger Tool 40mm

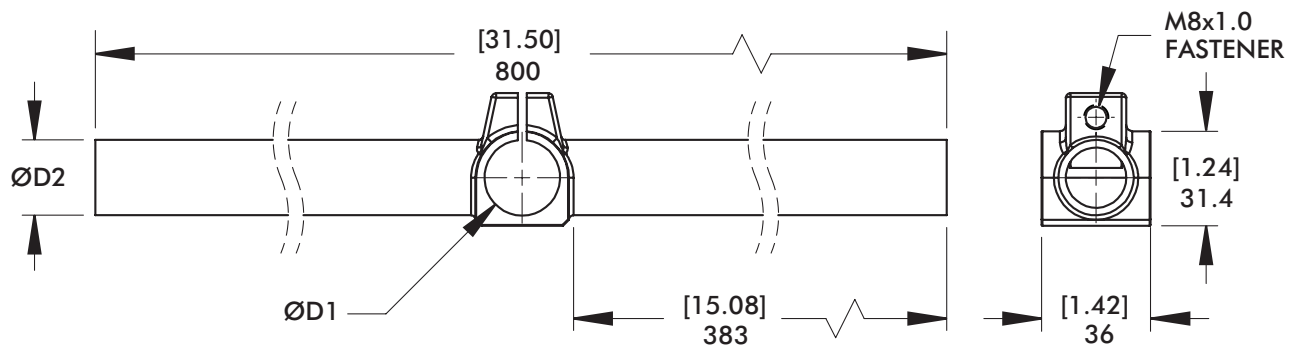


Model Number	Material	Weight
CPI-1T-33M	Steel	1.42kg [3.13 lb]
CPI-1T-33M-A	Aluminum	0.49kg [1.08 lb]

LPT SERIES

Accelerate® Tooling Collection | Dimensions

TCA Double T-Clamp



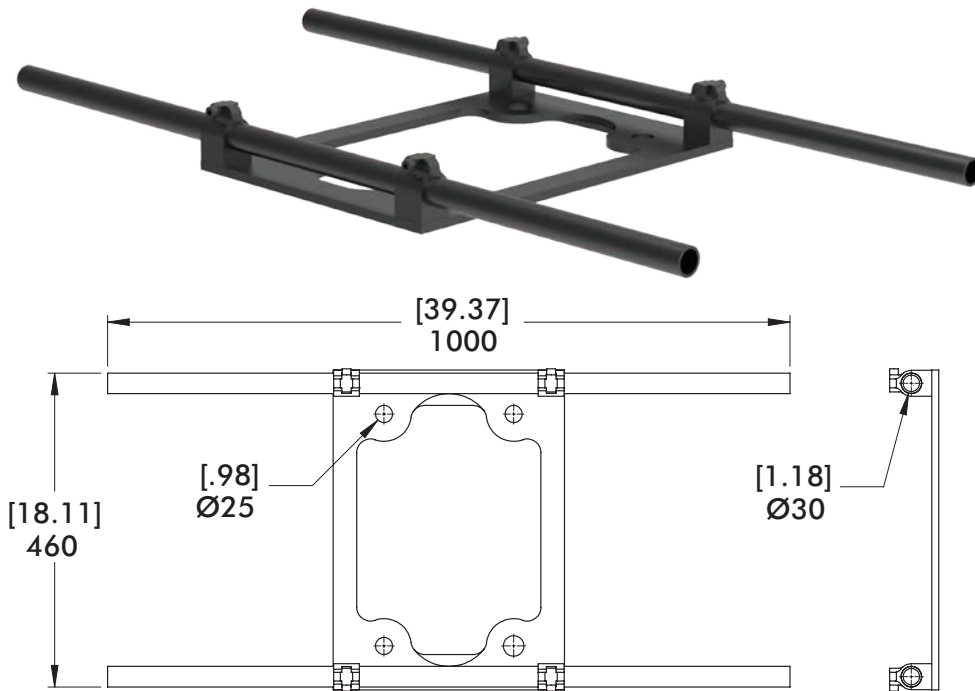
Material: Steel

Model Number	ØD1	ØD2	Weight
TCA-20M-20MD-400-A	20mm	20mm	974.7g [2.15 lb]
TCA-25M-20MD-400-A	25mm	20mm	1001.8g [2.21 lb]
TCA-25M-25MD-400-A	25mm	25mm	1245.3g [2.75 lb]
TCA-30M-30MD-400-A	30mm	30mm	1546.6g [3.41 lb]

LTP SERIES

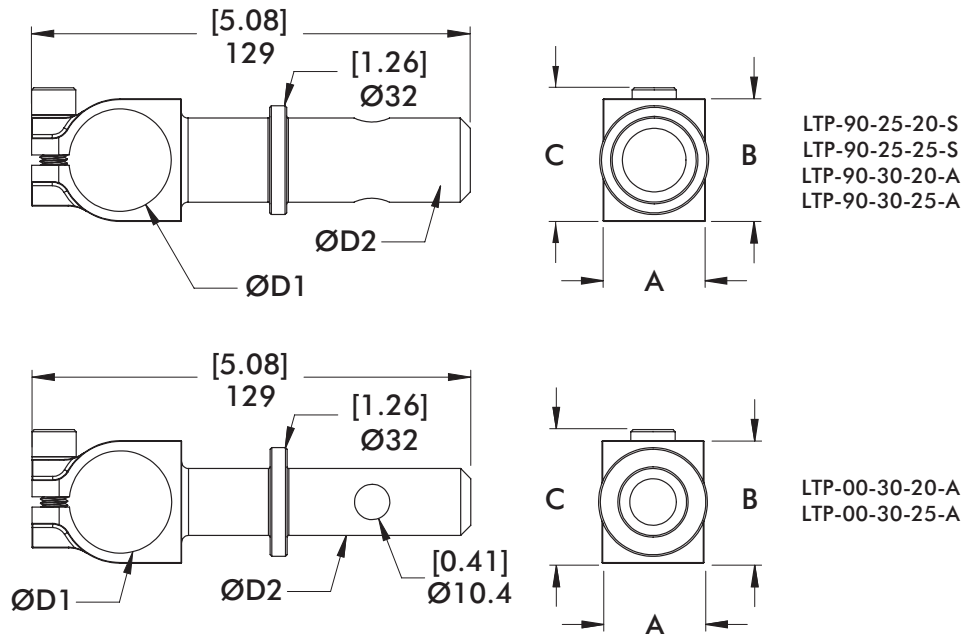
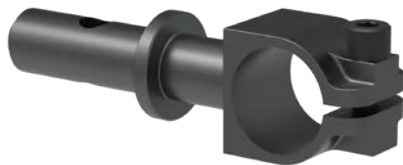
Accelerate® Tooling Collection | Dimensions

LTP Frame



Model Number	Weight
LTP-30M-25-30-1000-A	3939g [8.68 lb]

LTP Pin

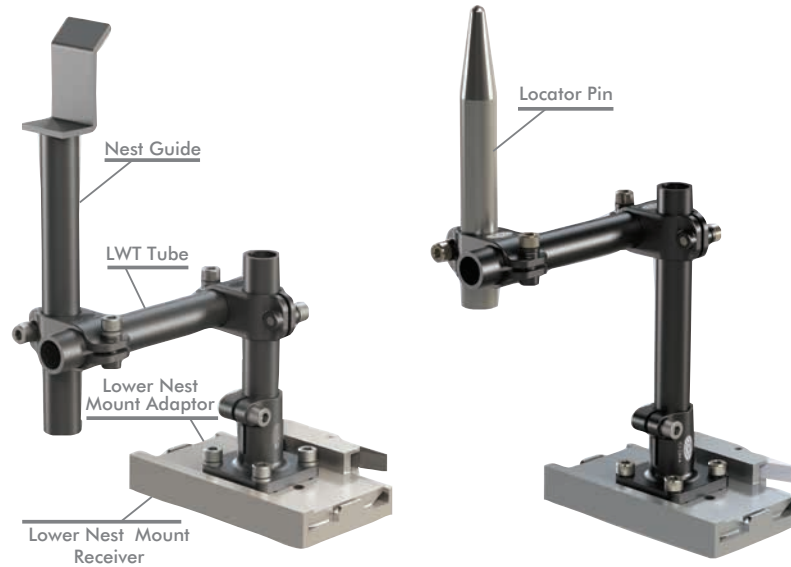


Material: Steel

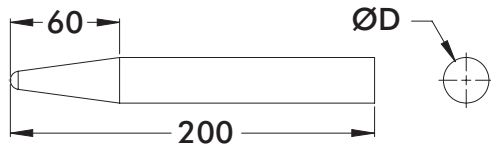
Model Number	ØD1	ØD2	A	B	C	Weight
LTP-90-25-20-S	25mm	20mm	31 [1.22]	31 [1.22]	37.2 [1.46]	370g [0.82 lb]
LTP-90-25-25-S		25mm				470g [1.04 lb]
LTP-90-30-20-S		20mm				350g [0.77 lb]
LTP-90-30-25-S	30mm	25mm	30 [1.18]	36 [1.42]	39.65 [1.56]	460g [1.01 lb]
LTP-00-30-20-S		20mm				350g [0.77 lb]
LTP-00-30-25-S		25mm				460g [1.01 lb]

CP, SGM SERIES

Accelerate® Tooling Collection | Lower Nest Tooling Example



CP Center Pin

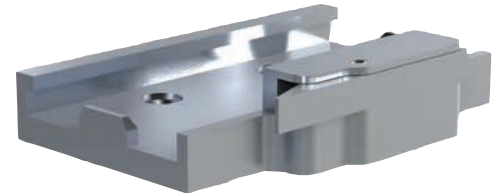
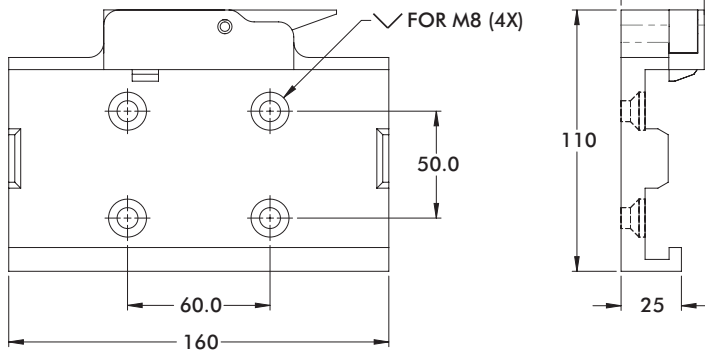


Material: Steel

Ø20/Ø25, 200mm Length

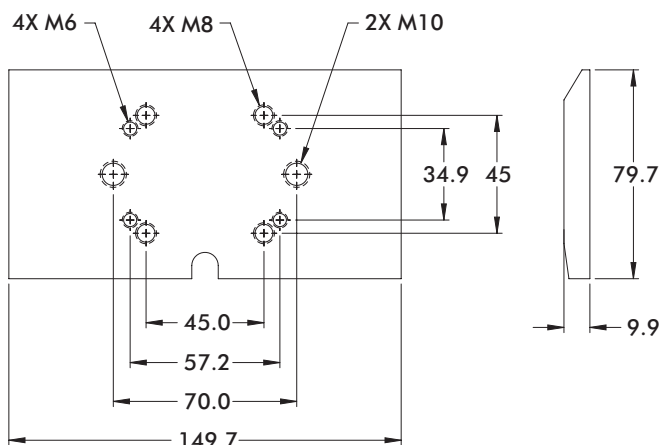
Model Number	ØD	Weight
CP-20-200	20	427g [0.94 lb]
CP-25-200	25	640g [1.41 lb]

SGM Mount Receiver



Model Number	Material	Weight
CPI-SGM-TH-USR-AL	Aluminum	670g [1.48 lb]
CPI-SGM-TH-USR	Steel	1730g [3.81 lb]

SGM Mount Adaptor

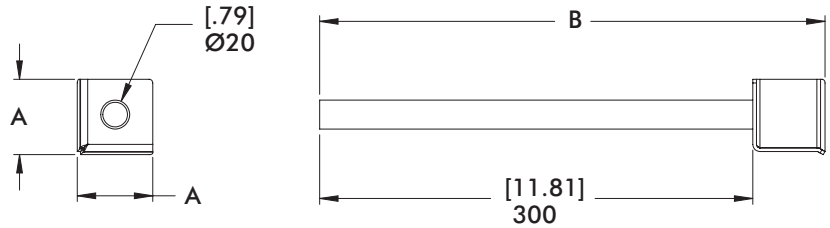


Model Number	Material	Weight
CPI-SGM-TH-USA-AL	Aluminum	287g [0.63 lb]
CPI-SGM-TH-USA	Steel	839g [1.85 lb]

GTS, NPG SERIES

Accelerate® Tooling Collection | Dimensions

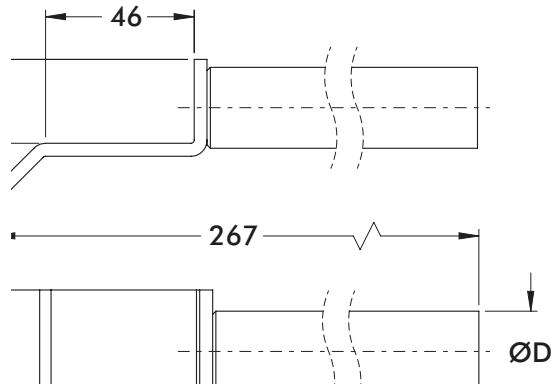
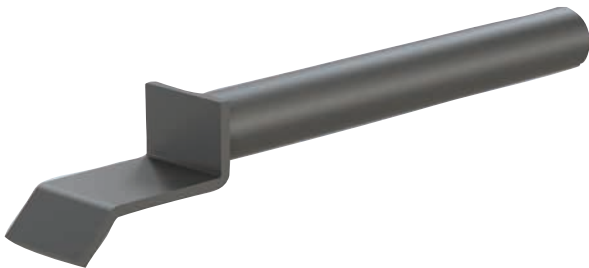
GTS Shovel with Welded Post



Material: Steel

Model Number	A	B	ØD	Weight
GTS-40-40-40-20M-A	42.2 [1.66]	340 [13.39]	Ø20 [0.79]	290g [0.64 lb]
GTS-40-40-40-30M-A	42.2 [1.66]	340 [13.39]	Ø30 [1.18]	400g [0.88 lb]
GTS-50-50-50-20M-A	52.2 [2.05]	350 [13.78]	Ø20 [0.79]	341g [0.75 lb]
GTS-50-50-50-30M-A	52.2 [2.05]	350 [13.78]	Ø30 [1.18]	451g [0.99 lb]

NPG Nest Guide



Material: Steel

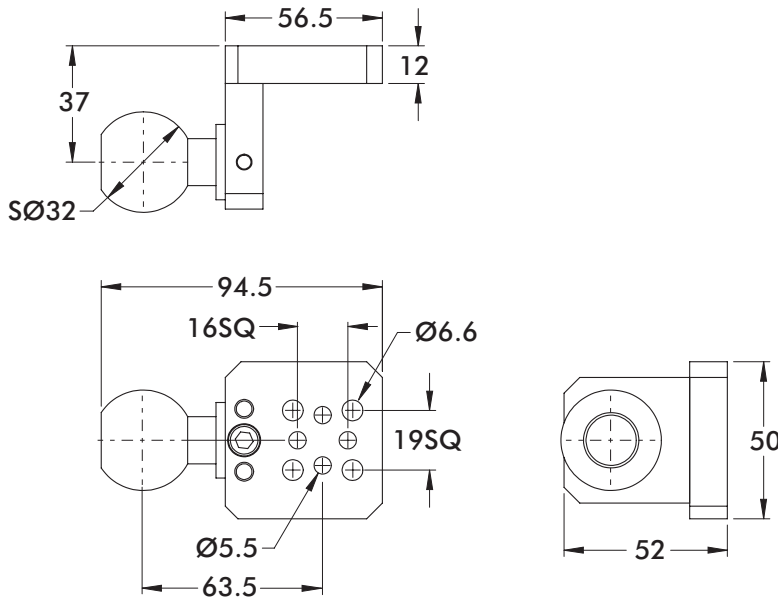
Ø20/Ø25, 200mm Length

Model Number	ØD	Weight
NPG-25-200	25	432g [0.95 lb]

GT SERIES

Accelerate® Tooling Collection | Dimensions

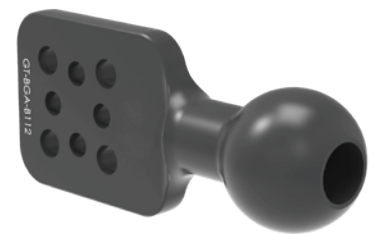
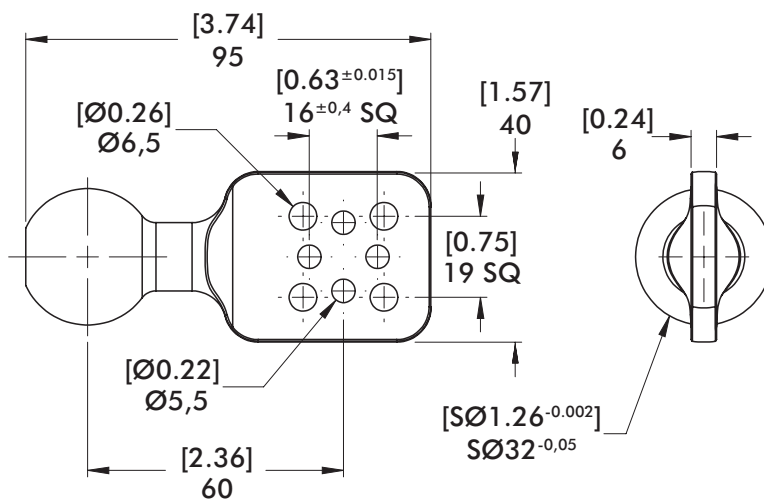
GT-BGA 32mm Ball Gripper Mount



Material: High Strength Aluminum

Model Number	Weight
GT-BGA-A	174g [0.38 lb]

GT-BGA Paddle Gripper Mount



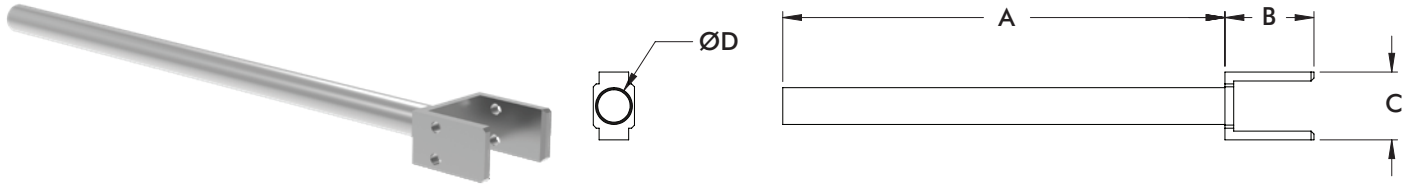
Material: High Strength Aluminum

Model Number	ØD	A	Weight
GT-BGA-B112	28.6 [1.12]	93 [3.66]	66g [0.15 lb]
GT-BGA-32B	32 [1.26]	95 [3.74]	79g [0.17 lb]

GT SERIES

Accelerate® Tooling Collection | Dimensions

GT-UGA Side Mount Extension



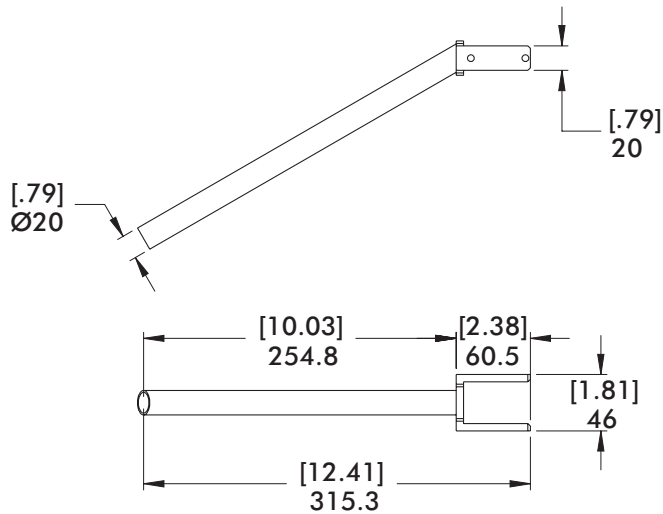
Material: Steel

Model Number	A	B	C	ØD	Weight
GT-UGA-84A2-20M-400-A	400 [15.74]	60.5 [2.38]	46 [1.81]	20 [0.79]	425g [0.94 lb]
GT-UGA-84A2-25M-300-A	300 [11.81]	60.5 [2.38]	46 [1.81]	25 [0.98]	412g [0.91 lb]
GT-UGA-84A2-30M-400-A	400 [15.74]	60.5 [2.38]	46 [1.81]	30 [1.18]	582g [1.28 lb]
GT-UGA-84A3-20M-400-A	400 [15.74]	51 [2.01]	58 [2.28]	20 [0.79]	475g [1.05 lb]
GT-UGA-84A3-25M-300-A	300 [11.81]	51 [2.01]	58 [2.28]	25 [0.98]	462g [1.02 lb]
GT-UGA-84A3-30M-400-A	400 [15.74]	51 [2.01]	58 [2.28]	30 [1.18]	631g [1.39 lb]

GT-UGA Angled Side Mount Extension



Material: Steel



Model Number	Weight
GT-UGA-84A2-20M-300-30-A	353g [0.78 lb]

GT-UGA Side Mount Clamp



Material: Steel

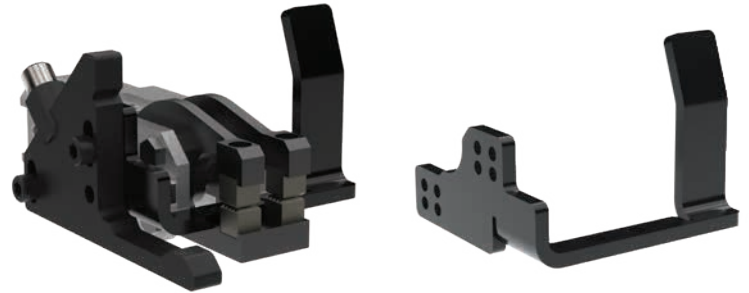
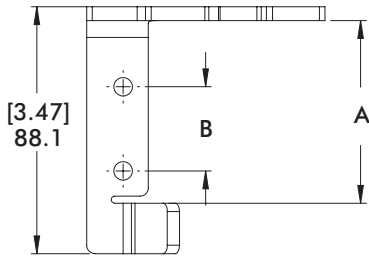


Model Number	A	B	C	D	Weight
GT-UGA-84A2-20M-A	40 [1.57]	116 [4.57]	20 [0.79]	20 [0.79]	165g [0.36 lb]
GT-UGA-84A2-25M-A	40 [1.57]	116 [4.57]	20 [0.79]	25 [0.98]	184g [0.41 lb]
GT-UGA-84A2-30M-A	40 [1.57]	116 [4.57]	20 [0.79]	30 [1.18]	200g [0.44 lb]
GT-UGA-84A3-20M-A	52 [2.05]	109 [4.29]	30 [1.18]	20 [0.79]	194g [0.43 lb]
GT-UGA-84A3-25M-A	52 [2.05]	109 [4.29]	30 [1.18]	25 [0.98]	213g [0.47 lb]
GT-UGA-84A3-30M-A	52 [2.05]	109 [4.29]	30 [1.18]	30 [1.18]	228g [0.50 lb]

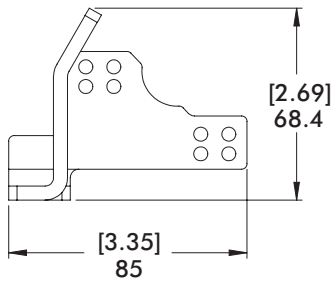
GT-OPS, SAP SERIES

Accelerate® Tooling Collection | Dimensions

GT-OPS Jaw Sensor Mount

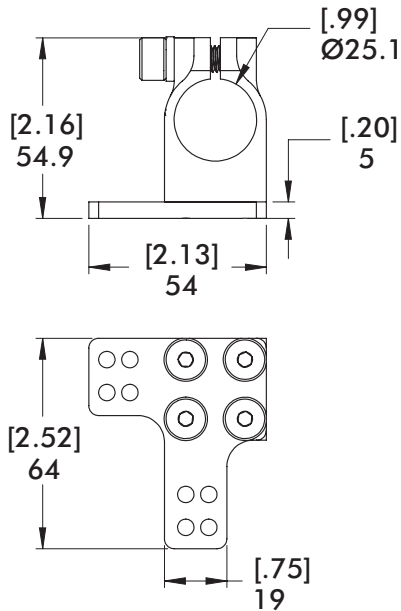


Material: Steel



Model Number	A	B	Weight
GT-OPS-84A2-LH-A	63.5 [2.50]	17.5 [0.69]	171g [0.38 lb]
GT-OPS-84A2-RH-A	63.5 [2.50]	17.5 [0.69]	171g [0.38 lb]
GT-OPS-84A3-LH-A	65.1 [2.56]	30 [1.18]	192g [0.42 lb]
GT-OPS-84A3-RH-A	65.1 [2.56]	30 [1.18]	192g [0.42 lb]

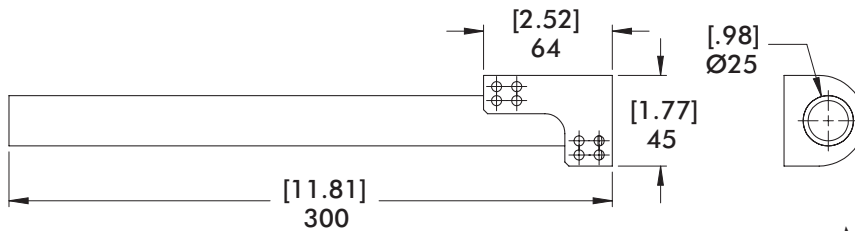
SAP Sensor Clamp Mount



Material: High Strength Aluminum

Model Number	Weight
SAP-OPS-25M-A	120g [0.26 lb]

SAP Sensor Extension Mount



Material: Steel

Model Number	Weight
SAP-OPS-25M-300-LH-A	515g [1.14 lb]
SAP-OPS-25M-300-RH-A	515g [1.14 lb]

GTS SERIES

Accelerate® Tooling Collection | Dimensions

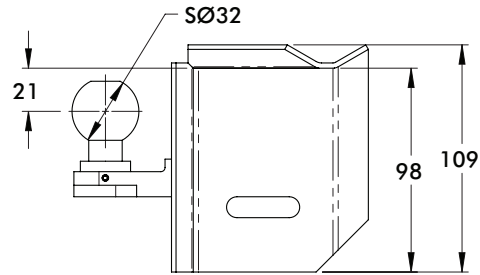
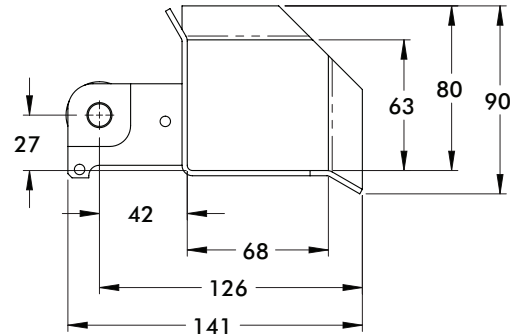
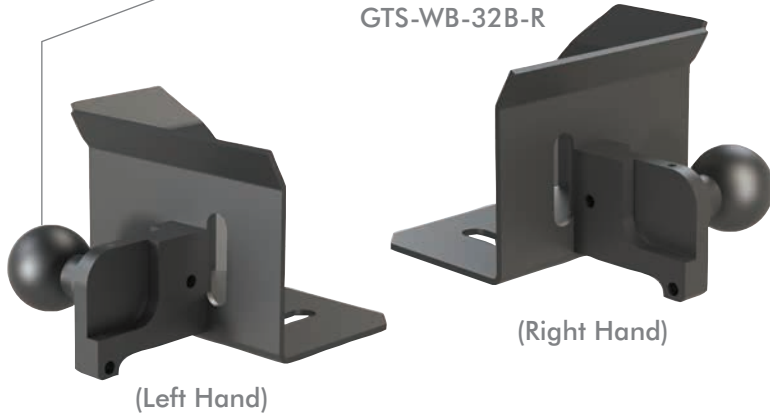
GTS-100 32mm Ball 80mm Shovel



Optional spare parts

28.58mm Ball
GTS-WB-B112-L
GTS-WB-B112-R

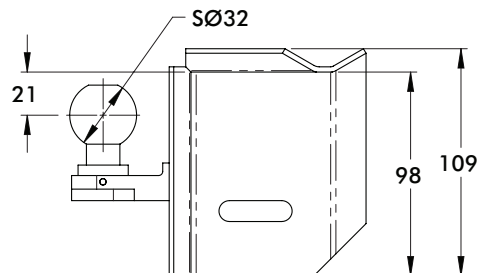
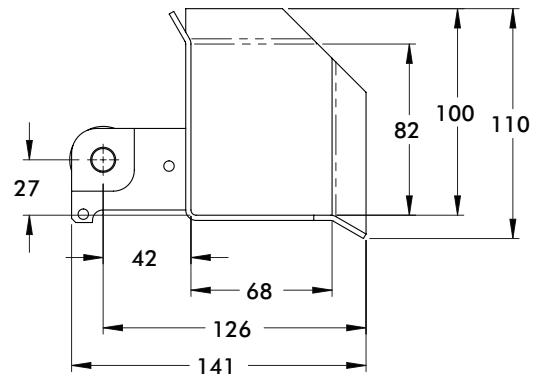
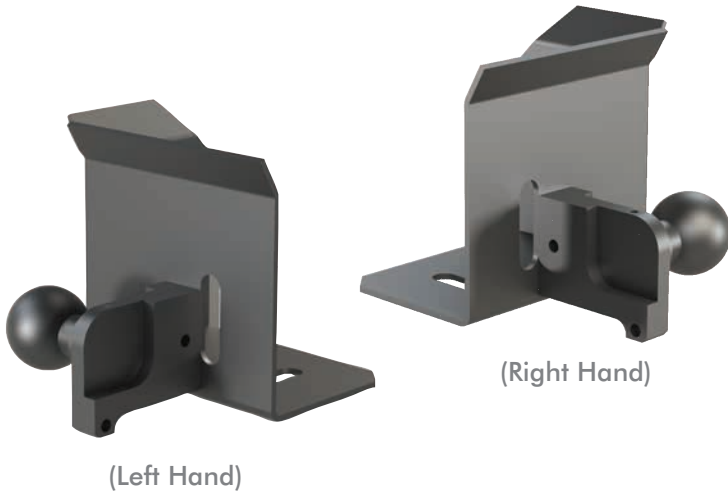
32mm Ball
GTS-WB-32B-L
GTS-WB-32B-R



Material: Steel

Model Number	Weight
GTS-100-85-80LH-A	656g [1.45 lb]
GTS-100-85-80RH-A	

GTS-100 32mm Ball 100mm Shovel



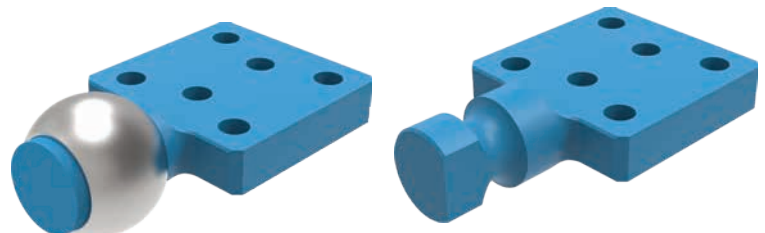
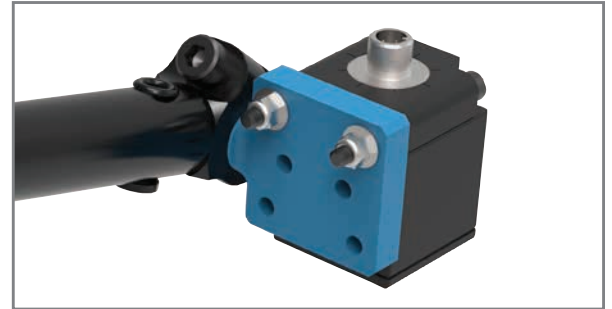
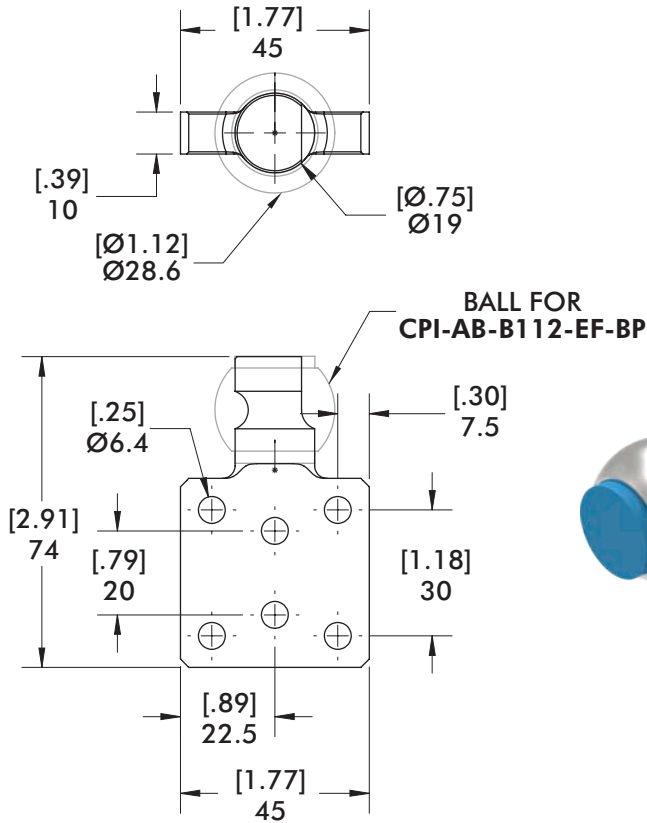
Material: Steel

Model Number	Weight
GTS-100-85-100LH-A	730g [1.61 lb]
GTS-100-85-100RH-A	

AB, SAP SERIES

Accelerate® Tooling Collection | Dimensions

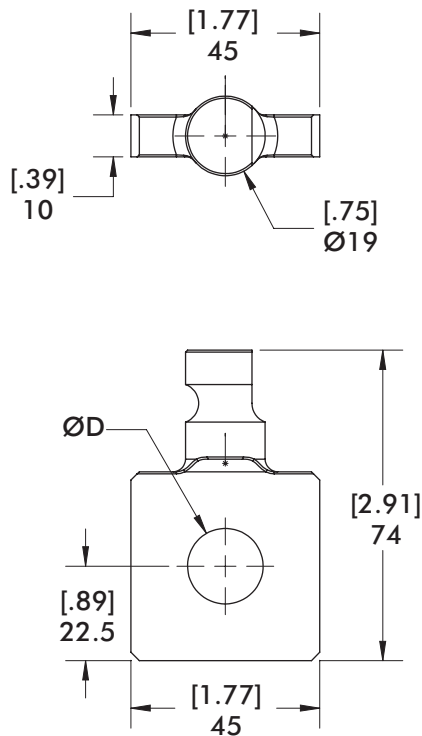
AB Block Style Proximity Switch Mounts



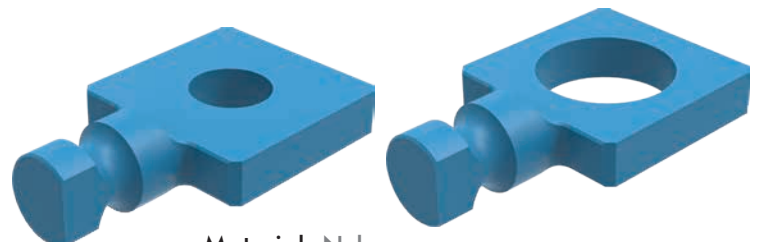
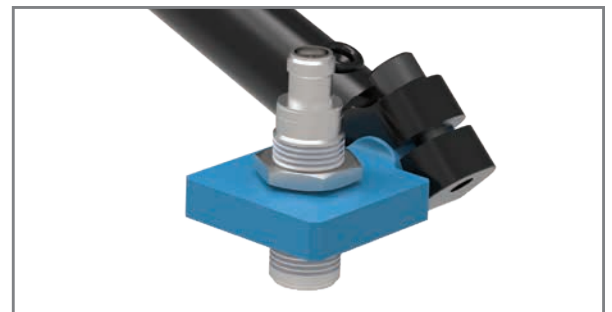
Material: Nylon

Model Number	Weight
CPI-AB-750-EF-BP	31.2g [1.1oz]
CPI-AB-B112-EF-BP	36.3g [1.3oz]

(2) screws & (2) locking flange nuts included



SAP Barrel Style Proximity Switch Mounts




Material: Nylon

Model Number	(Ø)"D"	Weight
CPI-SAP-18-BP	[0.71] 18	28.3g [1.0oz]
CPI-SAP-30-BP	[1.18] 30	22.7g [0.8oz]

ROUND TOOLING SYSTEMS

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	Tubes and Rods	8
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	Double Mushroom Tool Holder	11
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	Flange Mid Mount Brackets and Blocks	15
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	Base Mount Block.....	20
	Cross Transition Brackets and Blocks	21
	T-Clamp Transition Brackets and Blocks	26
	Wrist Brackets and Blocks	30

ROUND TOOLING SYSTEMS

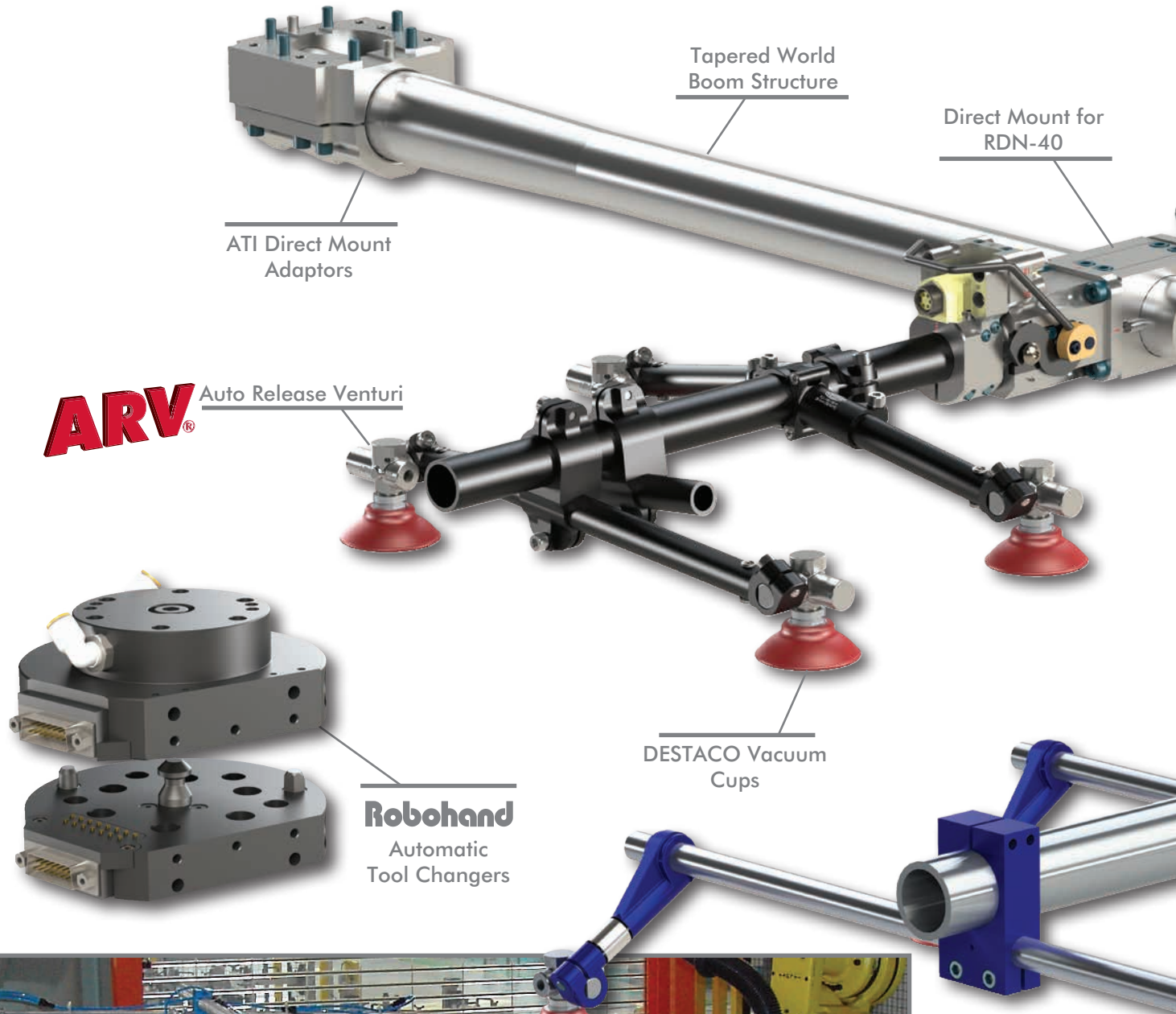
Table of Contents

	Low-Profile Wrist Brackets and Blocks.....	31
	Elbow and Straight Transition Brackets.....	32
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	Single End Extensions	46
	Nest Pad Brackets.....	48
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	Proximity Switch Bumpers	53
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	Tool Storage.....	56

ROUND TOOLING SYSTEMS

World Tool System Example with Accelerate® Lightweight Tooling Components

DESTACO's world tool components are configured to handle parts of any size and shape, and can be re-used for future applications.



ROUND TOOLING SYSTEMS

Traditional Round Tooling System Example

Round tooling components are used in combination with the Accelerate® Collection for lightweight tooling solutions



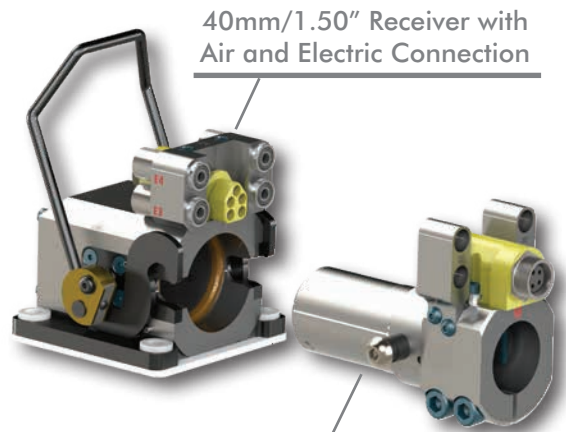
Most commonly used in:

Applications	Markets
Load/Unload	Automotive
Pick and Place	Industrial
Material Handling	Appliance
Hot Forming	Plastics



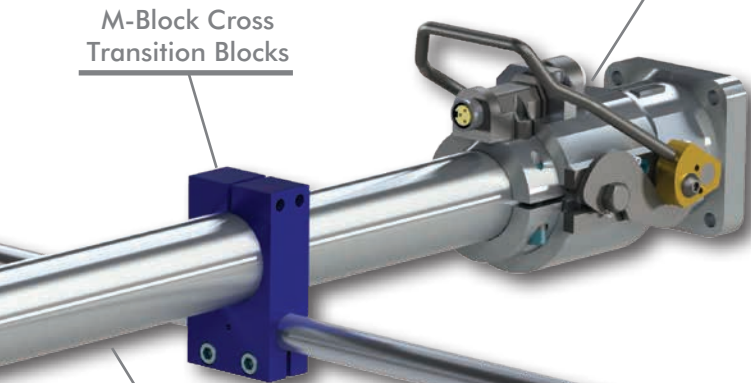
40mm/1.50" Quick Disconnect

60mm/2.50" Quick Disconnect with Electric Connection

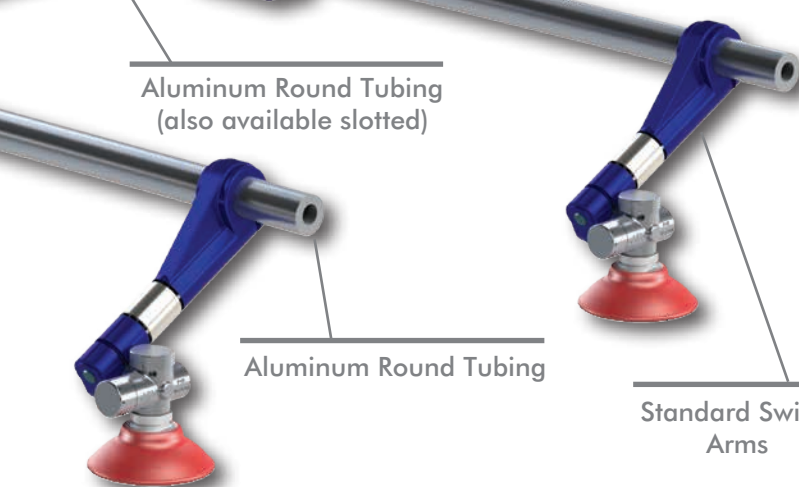


40mm/1.50" Receiver with Air and Electric Connection

40mm/1.50" Receiver with Air and Electric Connection



M-Block Cross Transition Blocks

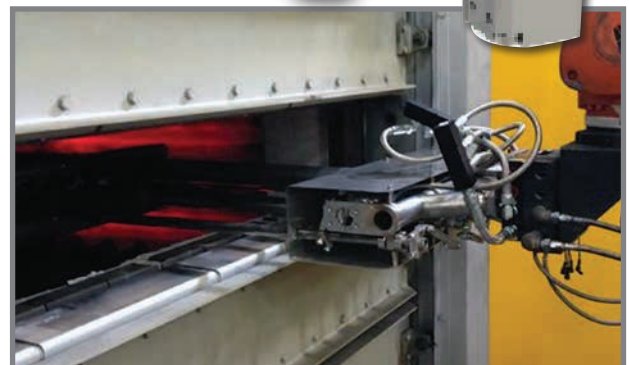


Aluminum Round Tubing (also available slotted)

Aluminum Round Tubing

Standard Swivel Arms

Hot Forming Solutions



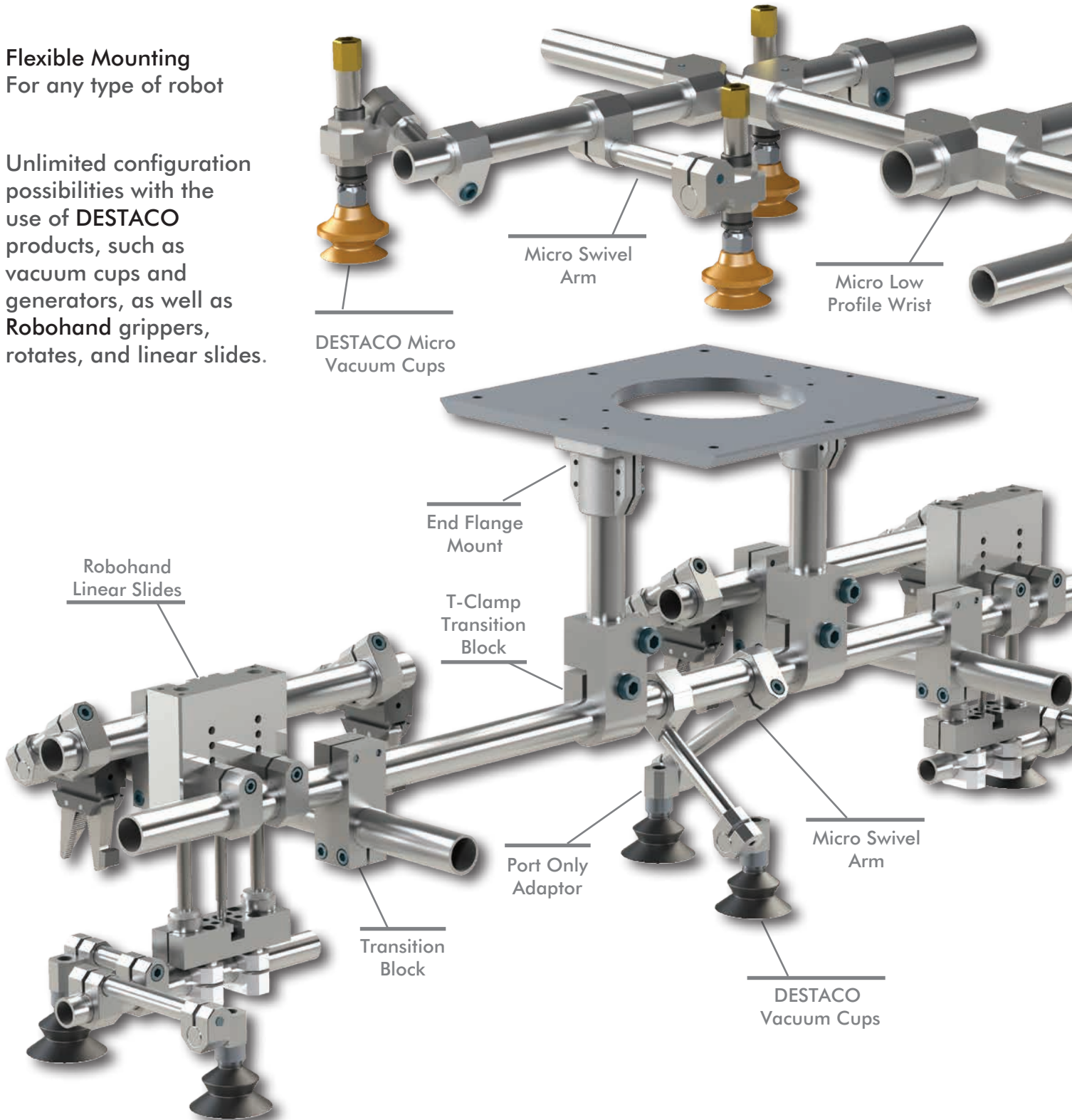
ROUND TOOLING SYSTEMS

Micro Round Tooling System Example

A family within the traditional round tooling system, micro tooling components are made from lightweight aluminum with thin wall tubing. This system is designed to handle small, lightweight parts, plastic injection mold unloading, and unusual shaped objects.

Flexible Mounting
For any type of robot

Unlimited configuration possibilities with the use of DESTACO products, such as vacuum cups and generators, as well as Robohand grippers, rotates, and linear slides.



ROUND TOOLING SYSTEMS

Micro Round Tooling System Example

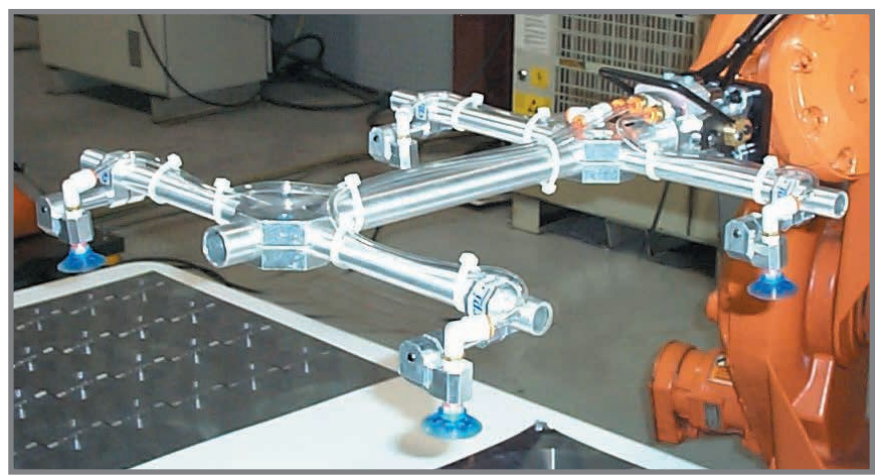
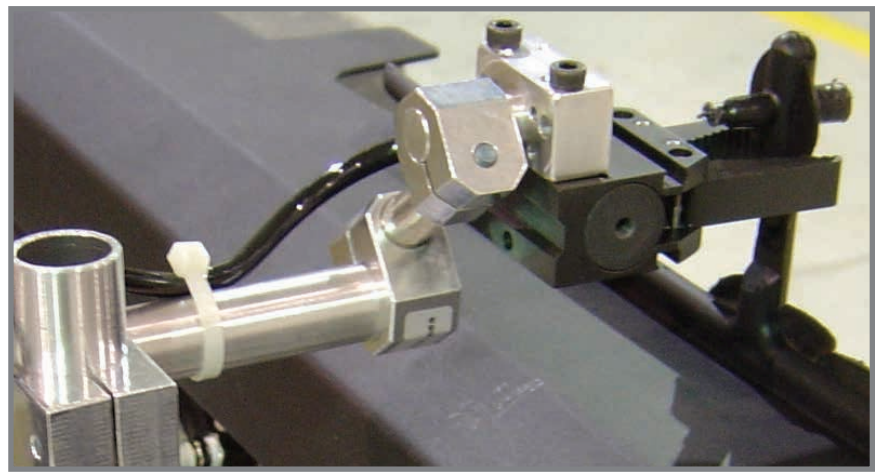


Most commonly used in:

Applications	Markets
Pick and Place	Medical
Material Handling	Industrial
Plastic Injection	Consumer
Vision/Testing	Food and Packaging

Level Compensator and Mount

The micro tooling system can be used with DESTACO's award winning, world's first electric vacuum cup.

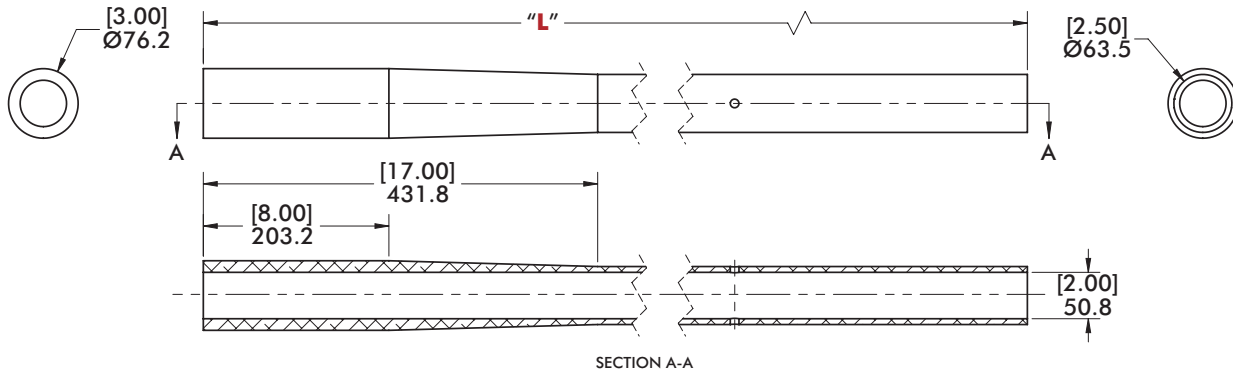


Micro round tooling systems can be permanently mounted to the robot with a direct mount or with manual or automatic tool changers. Optional quick disconnect air ports provides a simple connection point for air supply when changing between different tooling configurations.

WORLD TOOL BOOMS

Round Tooling | Dimensions | Technical Specifications

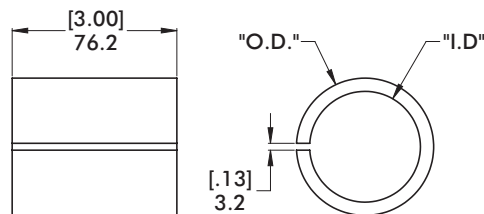
PAT Ø3.00" Tapered Aluminum Main Booms



Model	"L"	Weight
CPI-PAT-30TP-0M-1600	[62.99] 1600.0	[13.43 lb] 6.09 kg
CPI-PAT-30TP-0M-30	[30.00] 762.0	[7.91 lb] 3.59 kg
CPI-PAT-30TP-0M-34	[34.00] 863.6	[8.58 lb] 3.89 kg
CPI-PAT-30TP-0M-36	[36.00] 914.4	[8.91 lb] 4.04 kg
CPI-PAT-30TP-0M-60	[60.00] 1524.0	[12.95 lb] 5.87 kg

Model	"L"	Weight
CPI-PAT-30TP-1M-55	[55.00] 1397.0	[12.08 lb] 5.48 kg
CPI-PAT-30TP-1M-60	[60.00] 1524.0	[12.95 lb] 5.87 kg
CPI-PAT-30TP-1M-64	[64.00] 1625.6	[13.60 lb] 6.17 kg
CPI-PAT-30TP-2M-55	[55.00] 1397.0	[12.08 lb] 5.48 kg

CB Aluminum Bushing



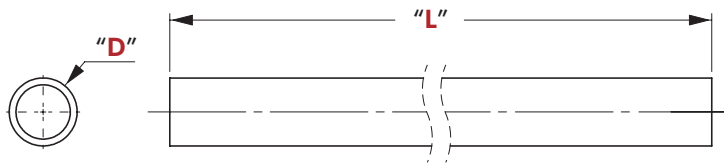
For use in cooperation with Clamp Blocks.

Model	(Ø)"O.D."	(Ø)"I.D."	Weight
CPI-CB-15-10	1.50"(in)	1.00"(in)	[.76 lb] .34 kg
CPI-CB-20-15	2.00"(in)	1.50"(in)	[.81 lb] .37 kg
CPI-CB-25-20	2.50"(in)	2.00"(in)	[.81 lb] .37 kg

TUBES AND RODS

Round Tooling | Dimensions | Technical Specifications

PAT Aluminum Tubing



"L" = Specify Length

in 6.00" or 150mm Increments

English Example:

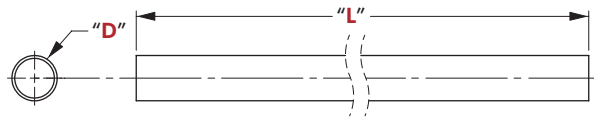
CPI-PAT-15-06 (6.00")

Metric Example:

CPI-PAT-40-150 (150mm)

Model	(Ø) "D"	Wall Thickness	Weight	Linear Deflection	Torsional Twist
CPI-PAT-12-"L"	1.25"(in)	[0.25"] 6.35mm	[0.9 lb/ft] 1.37kg/m	3.3mm [0.13"] @ 75lb/18.00"	1.6° @ 100ft-lbs
CPI-PAT-15-"L"	1.50"(in)	[0.25"] 6.35mm	[1.2 lb/ft] 1.8 kg/m	5.6mm [0.22"] @ 100lb/24.00"	3.1° @ 300ft-lbs
CPI-PAT-40-"L" (Metric)	40mm	[0.20"] 5mm	[1.2 lb/ft] 1.8 kg/m	5.6mm [0.22"] @ 100lb/24.00"	3.2° @ 300ft-lbs
CPI-PAT-25-"L"	2.50"(in)	[0.25"] 6.35mm	[2.1 lb/ft] 3.1 kg/m	12.7mm [0.50"] @ 150lb/48.00"	2.3° @ 600ft-lbs
CPI-PAT-60-"L" (Metric)	60mm	[0.20"] 5mm	[1.6 lb/ft] 2.4 kg/m	17.8mm [0.70"] @ 150lb/48.00"	3.3° @ 600ft-lbs
CPI-PAT-2538-"L"	2.50"(in)	[0.375"] 9.53mm	[2.9 lb/ft] 4.3 kg/m	10.2mm [0.40"] @ 150lb/48.00"	1.8° @ 600ft-lbs

PAT Thin Wall Aluminum Tubing



"L" = Specify Length

Standard Lengths

04 (4.00") 12 (12.00")

06 (6.00") 24 (24.00")

08 (8.00") 36 (36.00")

10 (10.00")

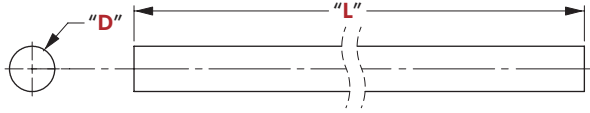


Model	(Ø)"O.D."	Wall Thickness	Weight
CPI-PAT-50T-"L"	0.50"(in)	[0.085"] 2.16mm	[0.13 lb/ft] 193.0 g/m
CPI-PAT-75T-"L"	0.75"(in)	[0.085"] 2.16mm	[0.20 lb/ft] 309.3 g/m
CPI-PAT-10T-"L"	1.00"(in)	[0.085"] 2.16mm	[0.28 lb/ft] 425.6 g/m

TUBING, RODS AND BUSHINGS

Round Tooling | Dimensions | Technical Specifications

PAB Aluminum Rods



"L" = Specify Length

in 6.00" or 150mm Increments

English Example:

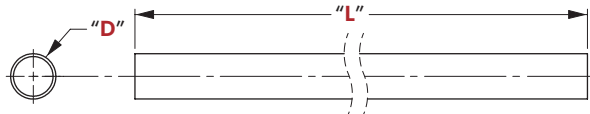
CPI-PAB-10-06 (6.00")

Metric Example:

CPI-PAB-25-150 (150mm)

Model	(Ø) "D"	Wall Thickness	Weight	Linear Deflection	Torsional Twist
CPI-PAB-10-"L"	1.00"(in)	SOLID BAR	[0.9 lb/ft] 1.4 kg/m	1.52mm [0.06"] @ 50lb/12.00"	.002° @ 100ft-lb
CPI-PAB-25-"L" (Metric)	25.0mm	SOLID BAR	[0.9 lb/ft] 1.4 kg/m	1.52mm [0.06"] @ 50lb/12.00"	.002° @ 100ft-lb

PST Steel Tubing



(L) = Specify Length

PST-10: 150, 200, 225, 250, 275, 300 [mm] (CPI-PST-10-150)

PST-1212: 6, 8, 10, 12, 14, 16, 18 [in] (CPI-PST-1212-6)

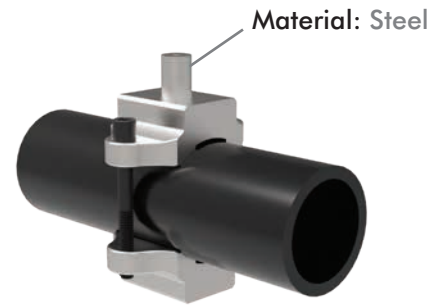
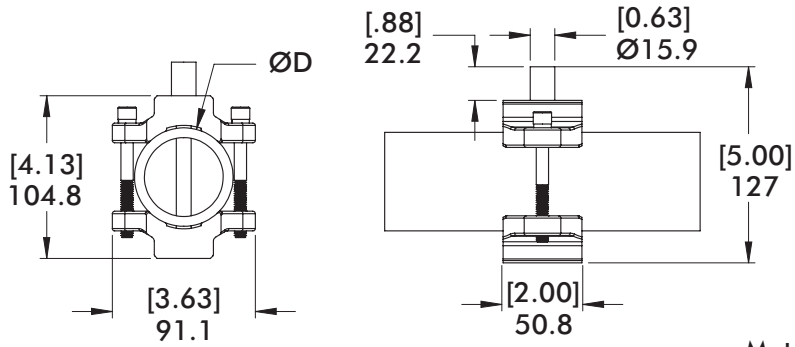
M1512: 125, 160, 300, 350, 350, 600, 900 [mm] (M1512-150)

Model	(Ø) "D"	Wall Thickness	Weight	Linear Deflection	Torsional Twist
CPI-PST-10-"L"	1.00"(in)	3.18mm [0.125"]	1.8 kg/m [1.2 lb/ft]	0.9mm [0.003"] @ 50lb/12.00"	.001° @ 100ft-lb
CPI-PST-1212-"L"	1.25"(in)	3.18mm [0.125"]	2.2 kg/m [1.5 lb/ft]	0.3mm [0.001"] @ 50lb/12.00"	.001° @ 100ft-lb

Model	(Ø) "O.D."	Wall Thickness	Weight
M1512-"L"	1.00"(in)	3.0mm [0.12"]	1.5 kg/m [1.03 lb/ft]

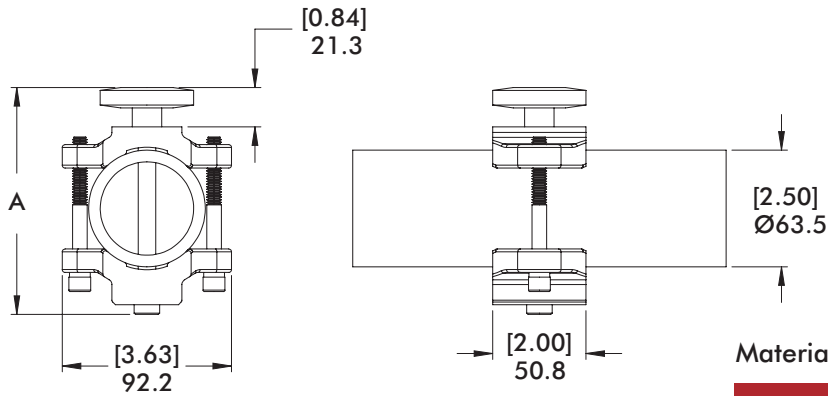
SINGLE MUSHROOM TOOL HOLDER

Round Tooling | Dimensions



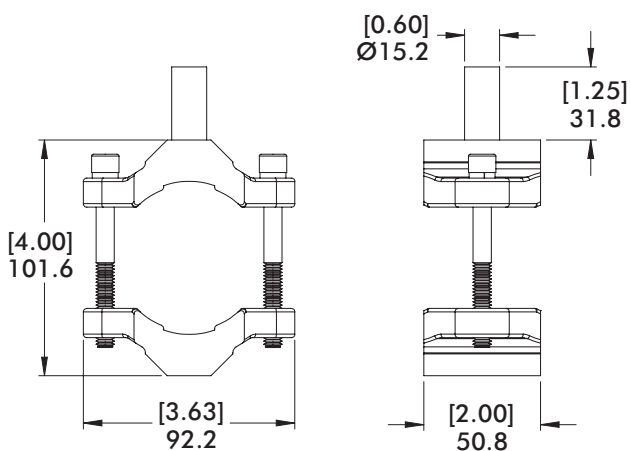
Material: Aluminum

Model Number	ØD	Weight
CPI-THM-250-POST	2.5 in	499g [1.10 lb]
CPI-THM-60-POST	60mm	499g [1.10 lb]



Material: Aluminum

Model Number	A	Weight
CPI-THM-250	122.7 [4.83]	635g [1.40 lb]
CPI-THM-250-WTTB	127 [5.00]	590g [1.30 lb]

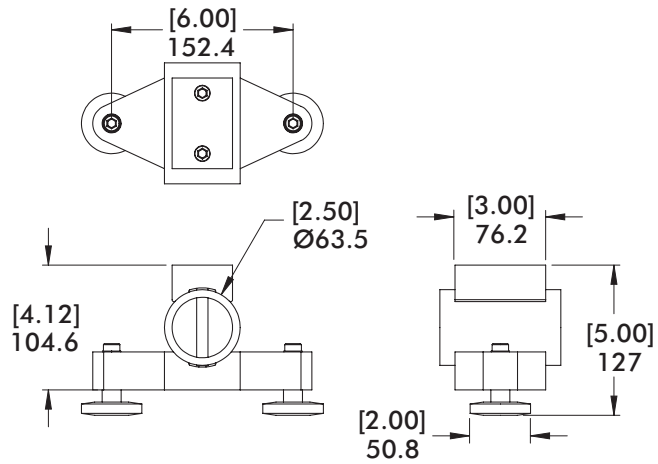
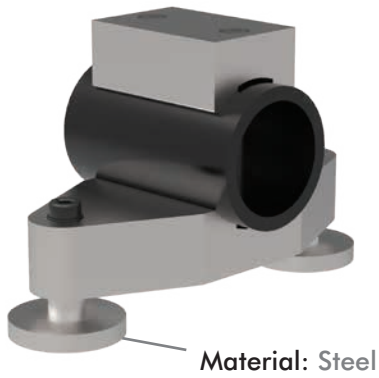


Material: Aluminum

Model Number	Weight
CPI-THM-250-SVP	408g [0.90 lb]

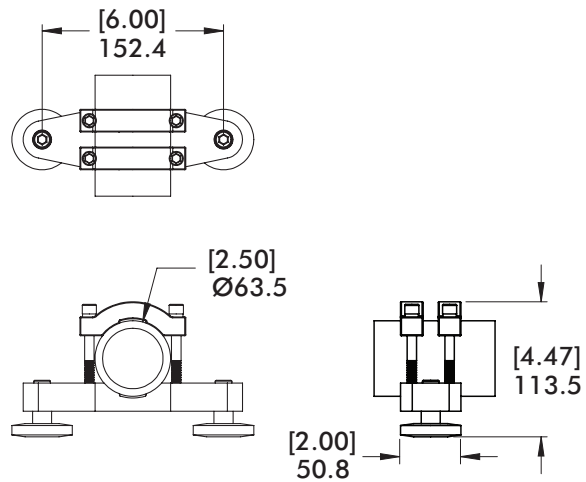
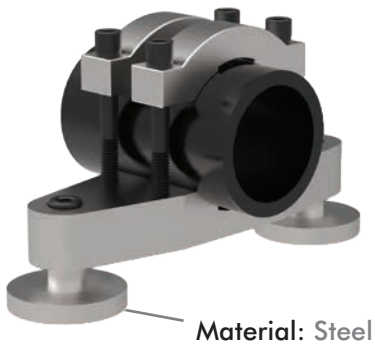
DOUBLE MUSHROOM TOOL HOLDER

Round Tooling | Dimensions



Material: Aluminum

Model Number	Weight
CPI-THM-250-DBL	1.54g [3.40 lb]



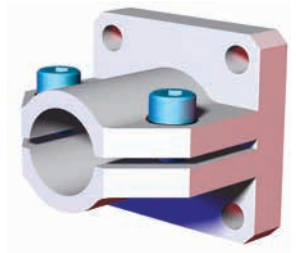
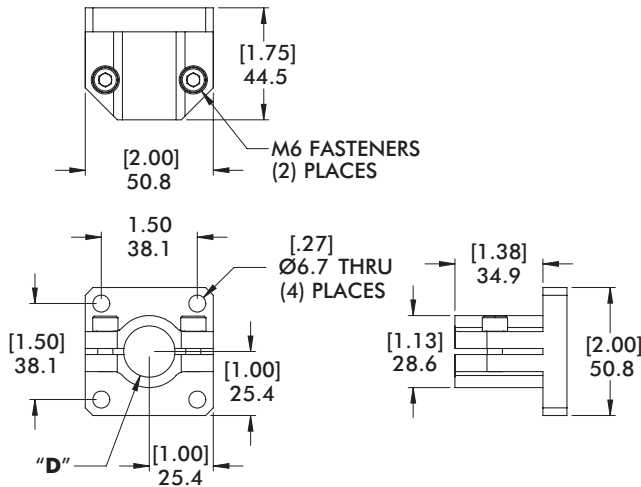
Material: Aluminum

Model Number	Weight
CPI-THM-250-DBL-WTTB	1.09g [2.40 lb]

FLANGE END MOUNT BRACKET AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

CLM-xxx-15F End Flange Mount for Ø20mm/0.75" Tube (Micro)



Specifications:

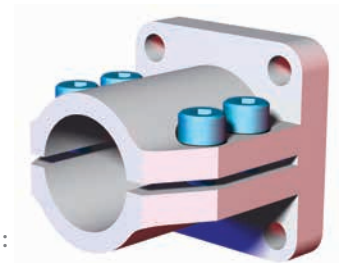
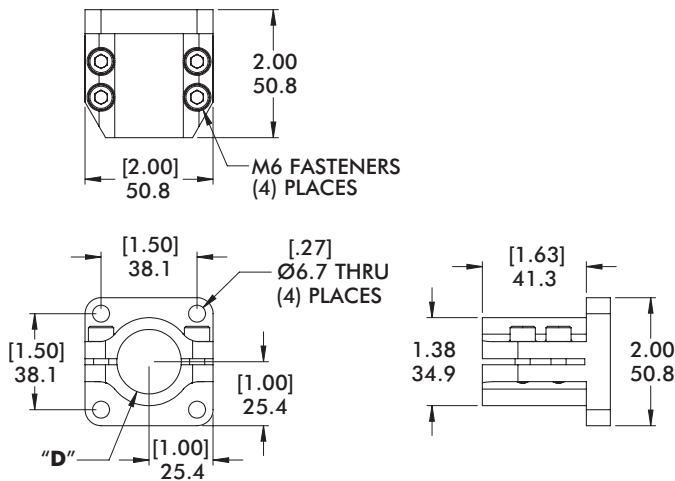
Max. Static Clamp Load:

20.3 N*m [15 ft-lb]

Material: Aluminum

Model Number	(Ø)"D"	Weight
CPI-CLM-20M-15F	20mm	[.26 lb] .12 kg
CPI-CLM-75-15F-ATI	.75"(in)	[.32 lb] .14 kg

CLM-xxx-15F End Flange Mount for Ø25mm/1.00" Tube (Micro)



Specifications:

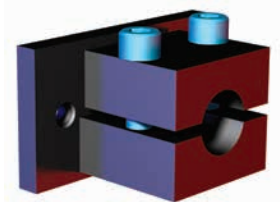
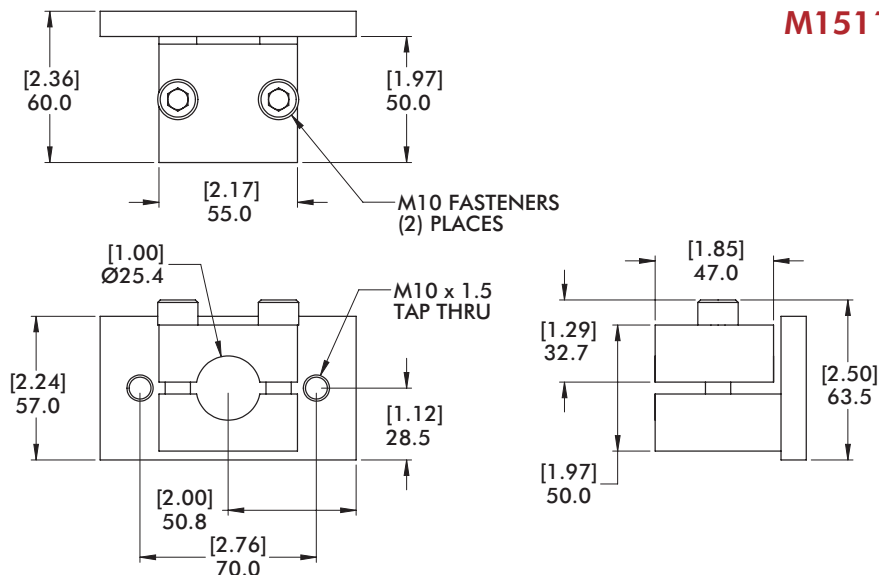
Max. Static Clamp Load:

40.7 N*m [30 ft-lb]

Material: Aluminum

Model Number	(Ø)"D"	Weight
CPI-CLM-25M-15F	25mm	[.32 lb] .14 kg
CPI-CLM-10-15F	1.00"(in)	[.32 lb] .14 kg

M1511 End Flange Mount for Ø1.00" Tube



Specifications:

Max. Static Clamp Load:

203 N*m [150 ft-lb]

Material: Aluminum

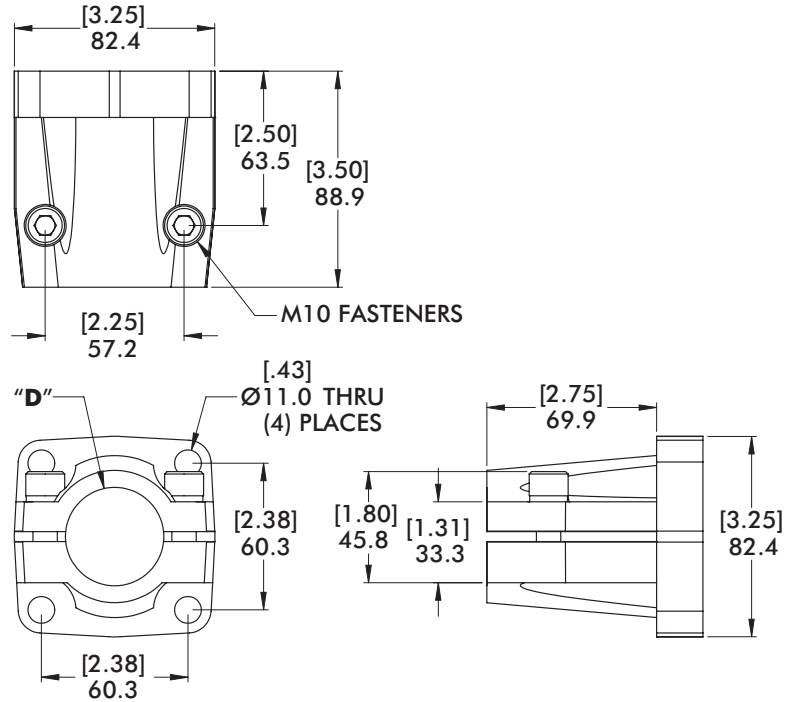
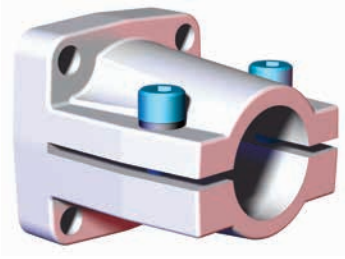
Model Number	Weight
M1511	[1.08 lb] .49 kg

FLANGE END MOUNT BRACKET AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

KL/CL End Flange Mount for Ø40mm/1.50" Tube



Specifications:

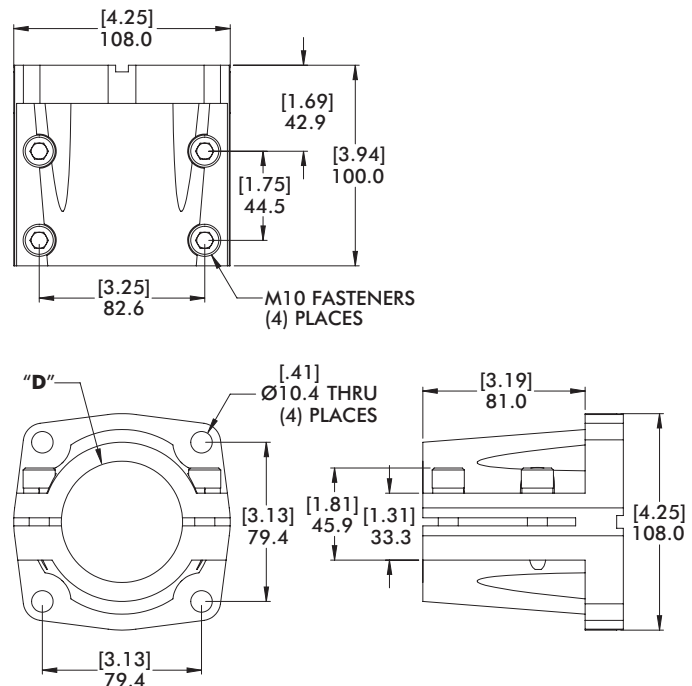
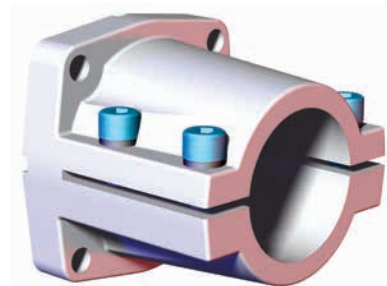
Max. Static Clamp Load:

203 N*m [150 ft-lb]

Material: Aluminum

Model Number	(Ø)"D"	Weight
CPI-KL-40-60F	40mm	[1.55 lb] .70 kg
CPI-CL-15-238F	1.50"(in)	[1.61 lb] .73 kg

KL/CL End Flange Mount for Ø60mm/2.50" Tube



Specifications:

Max. Static Clamp Load:

675 N*m [500 ft-lb]

Material: Aluminum

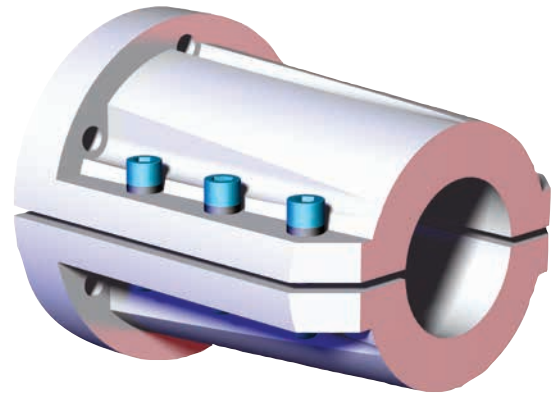
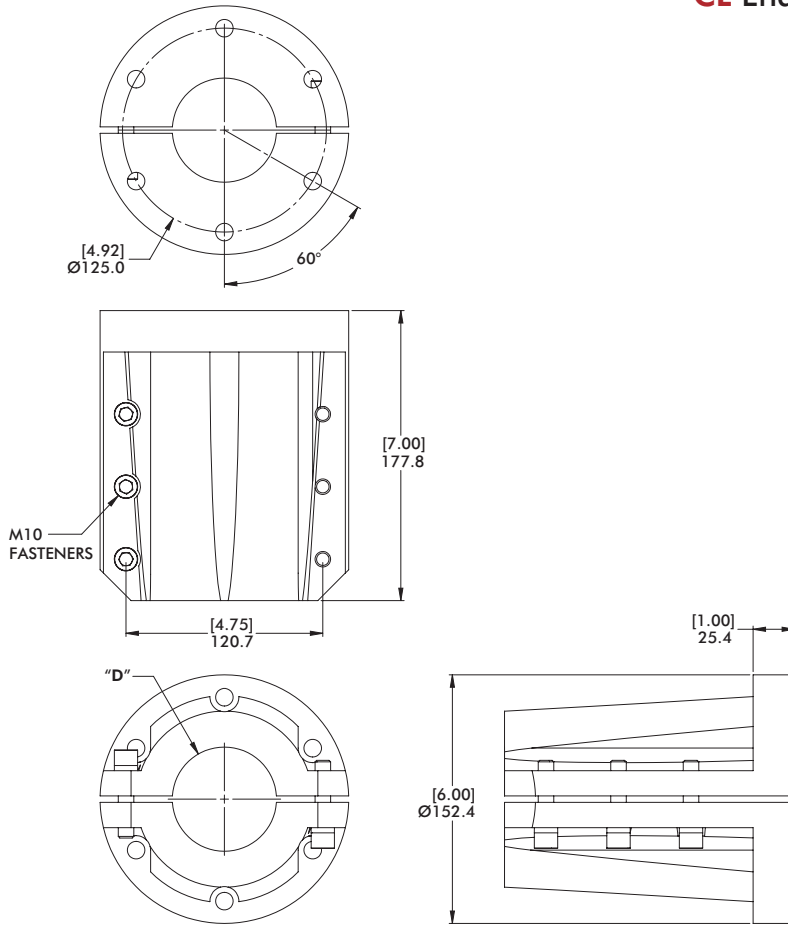
Model Number	(Ø)"D"	Weight
CPI-KL-60-78F	60mm	[2.73 lb] 1.24 kg
CPI-CL-25-312F	2.50"(in)	[2.52 lb] 1.14 kg

FLANGE END MOUNT BRACKET AND BLOCKS

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Round Tooling | Dimensions | Technical Specifications

CL End Flange Mount with Ø125mm Bolt Pattern



Specifications:

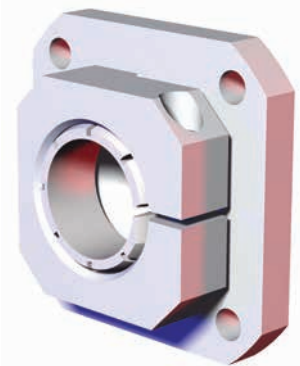
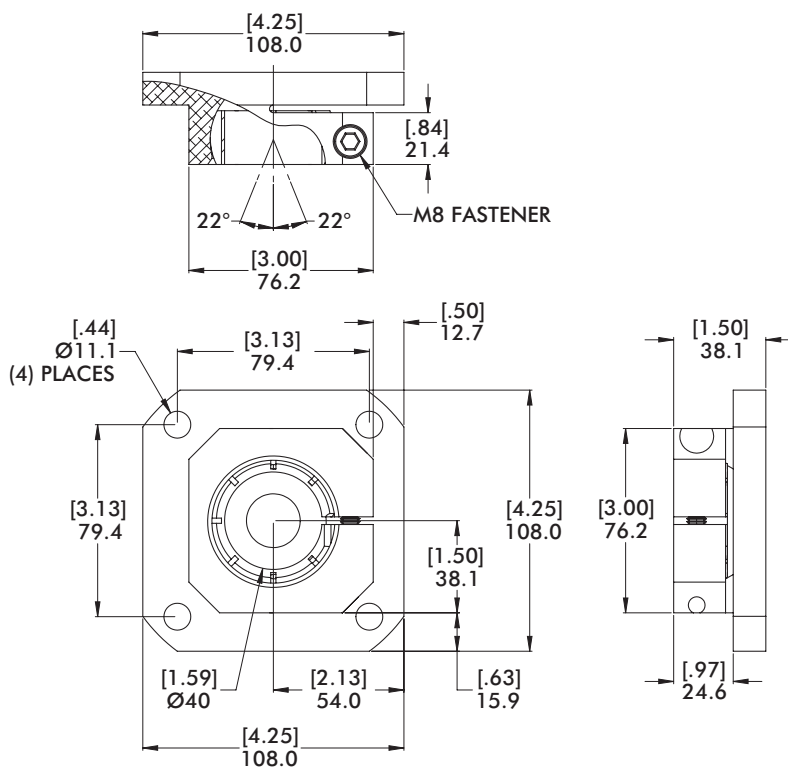
Max. Static Clamp Load:

746 N*m [550 ft-lb]

Material: Aluminum

Model Number	(Ø) "D"	Weight
CPI-CL-60-125F	60mm	[9.86 lb] 4.47 kg
CPI-CL-250-125F	2.50"(in)	[10.20 lb] 4.63 kg
CPI-CL-300-125F	3.00"(in)	[8.70 lb] 3.95 kg

RJM Ø40mm Spherical Flange End Mount



Specifications:

Max. Static Clamp Load:

203 N*m [150 ft-lb]

Material: Aluminum

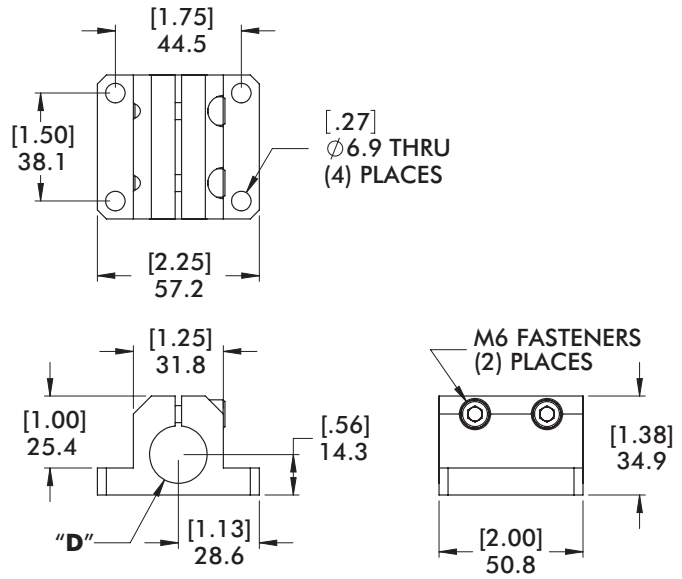
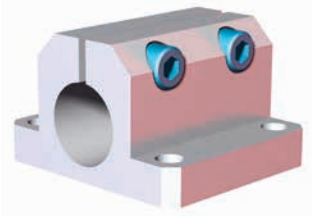
Model Number	Weight
CPI-RJM-78F-40S	[1.54 lb] .70 kg

FLANGE MID MOUNT BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (\emptyset) given
See chart on Page 72
for actual (\emptyset) size

CLM-xxx-1517F-90 Mid Flange Mount for \emptyset 20mm/0.75" Tube (Micro)



Specifications:

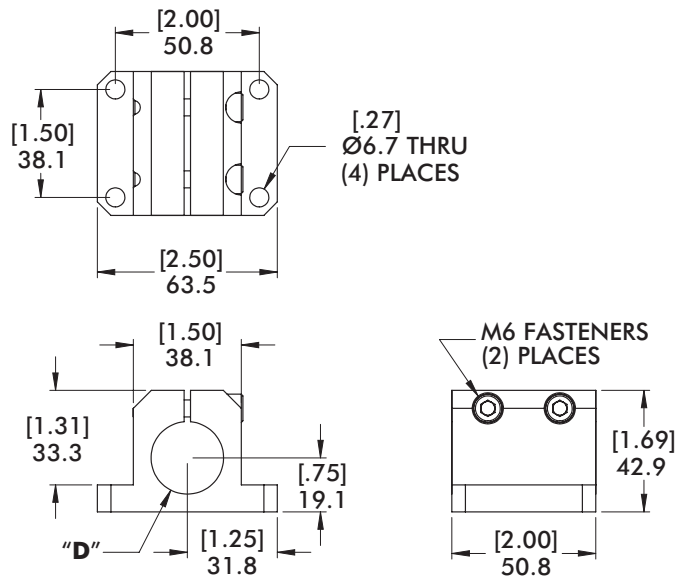
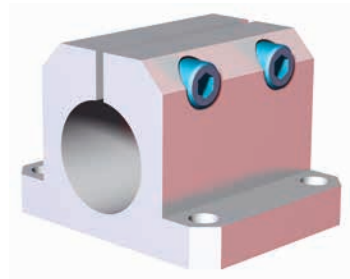
Max. Static Clamp Load:

47.5 N*m [35 ft-lb]

Material: Aluminum

Model Number	(\emptyset) "D"	Weight
CPI-CLM-20M-1517F-90	20mm	[.33 lb] .14 kg
CPI-CLM-75-1517F-90	.75"(in)	[.35 lb] .16 kg

CLM-xxx-152F-90 Mid Flange Mount for \emptyset 25mm/1.00" Tube (Micro)



Specifications:

Max. Static Clamp Load:

81.4 N*m [60 ft-lb]

Material: Aluminum

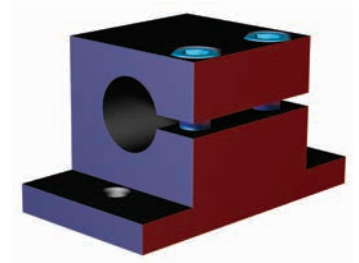
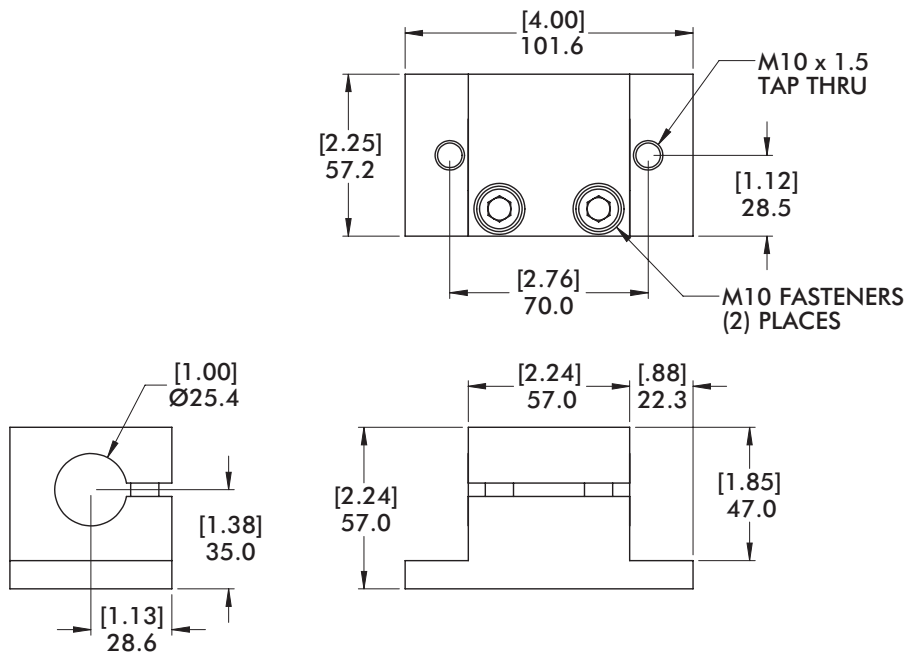
Model Number	(\emptyset) "D"	Weight
CPI-CLM-25M-152F-90	25mm	[.41 lb] .19 kg
CPI-CLM-10-152F-90	1.00"(in)	

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

FLANGE MID MOUNT BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

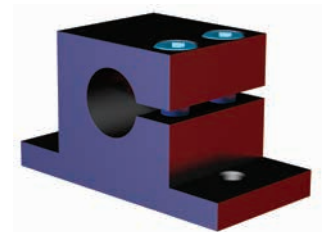
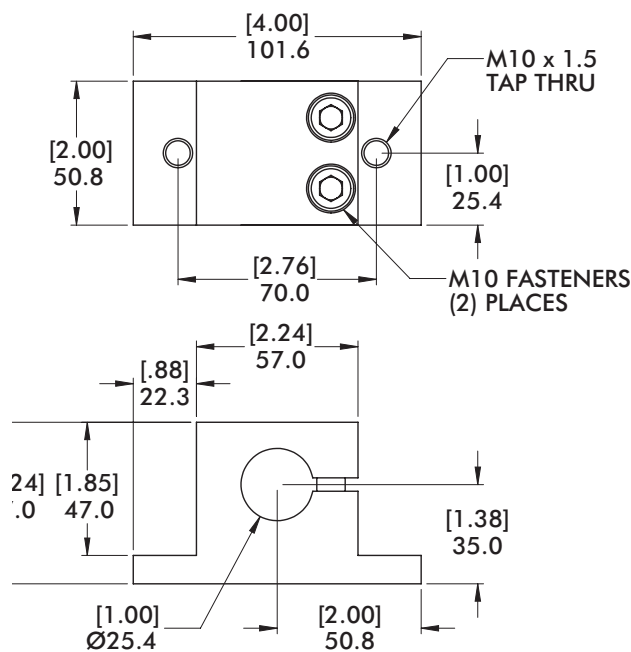
M-1509 Inline End Flange Mount for Ø1.00" Tube



Specifications:
Max. Static Clamp Load:
203 N*m [150 ft-lb]
Material: Aluminum

Model Number	Weight
M1509	[.99 lb] .45 kg

M-1510 End Flange Mount for Ø1.00" Tube



Specifications:
Max. Static Clamp Load:
203 N*m [150 ft-lb]
Material: Aluminum

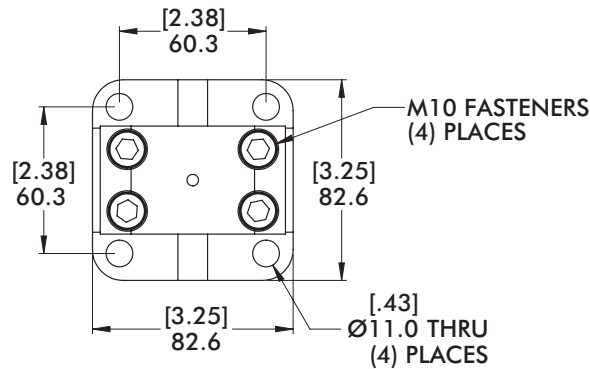
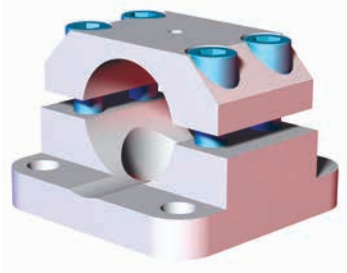
Model Number	Weight
M1510	[.87 lb] .39 kg

FLANGE MID MOUNT BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

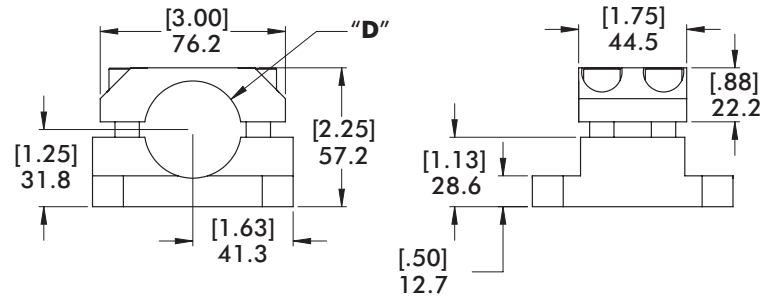
CL-xx-xxxF-90 Mid Flange Mount for Ø40mm/1.50" Tube



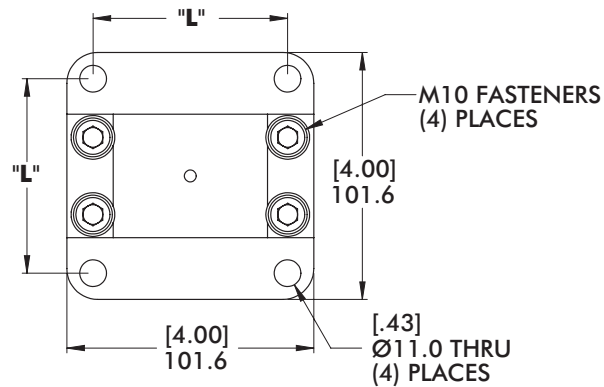
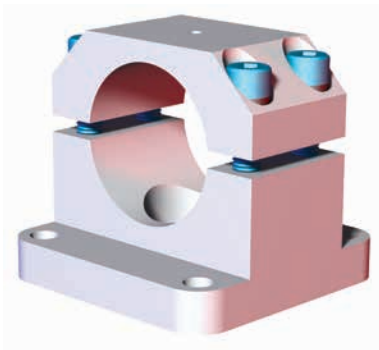
Specifications:

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

Model Number	(Ø)"D"	Weight
CPI-KL-40-60F-90	40mm	[1.09 lb] .49 kg
CPI-CL-15-238F-90	1.50"(in)	[1.11 lb] .50 kg



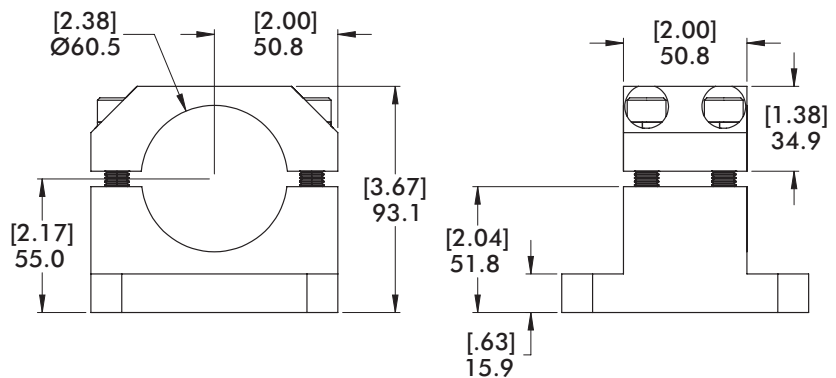
KL-60-xxxF-90 Mid Flange Mount for Ø60mm Tube



Specifications:

Max. Static Clamp Load:
675 N*m [500 ft-lb]
Material: Aluminum

Model Number	"L"	Weight
CPI-KL-60-78F-90	[3.07] 78	[2.24 lb] 1.02 kg
CPI-KL-60-80F-90	[3.15] 80	[2.24 lb] 1.02 kg

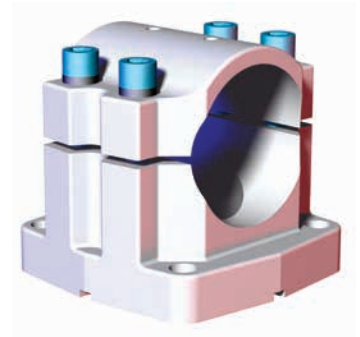
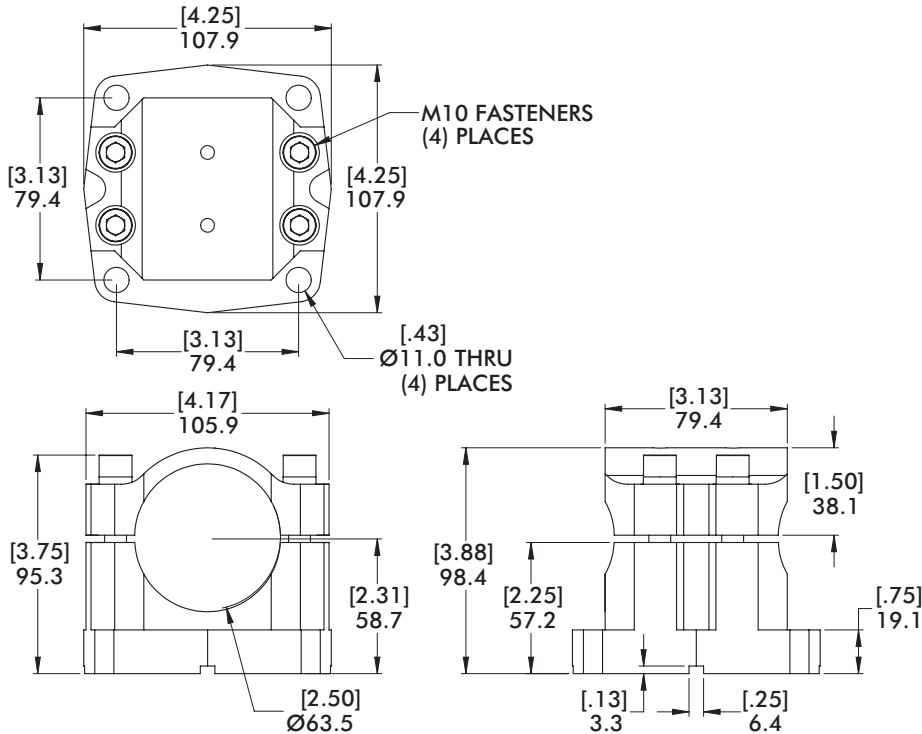


FLANGE MID MOUNT BRACKETS AND BLOCKS

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Round Tooling | Dimensions | Technical Specifications

CL-25-312F-90 Mid Flange Mount for Ø2.50" Tube



Specifications:

Max. Static Clamp Load:

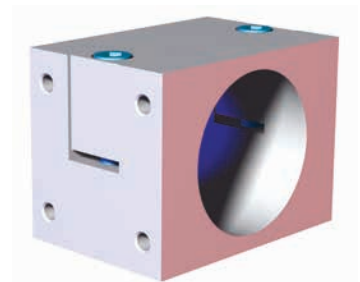
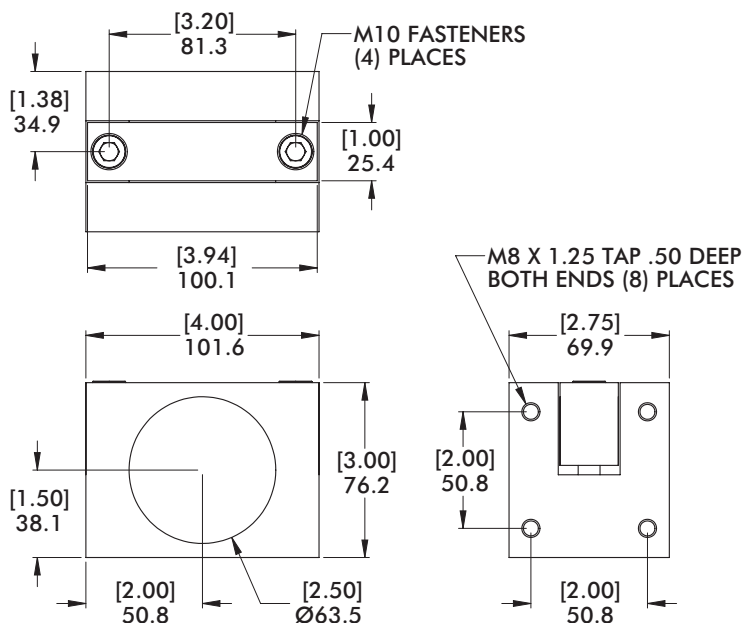
675 N*m [500 ft-lb]

Material: Aluminum

Model Number	Weight
CPI-CL-25-312F-90	[2.51 lb] 1.14 kg

World Tool Direct Mounts

CL-xx-DM-10F Direct Mount Bracket for 2.50" Tube



Material: Aluminum

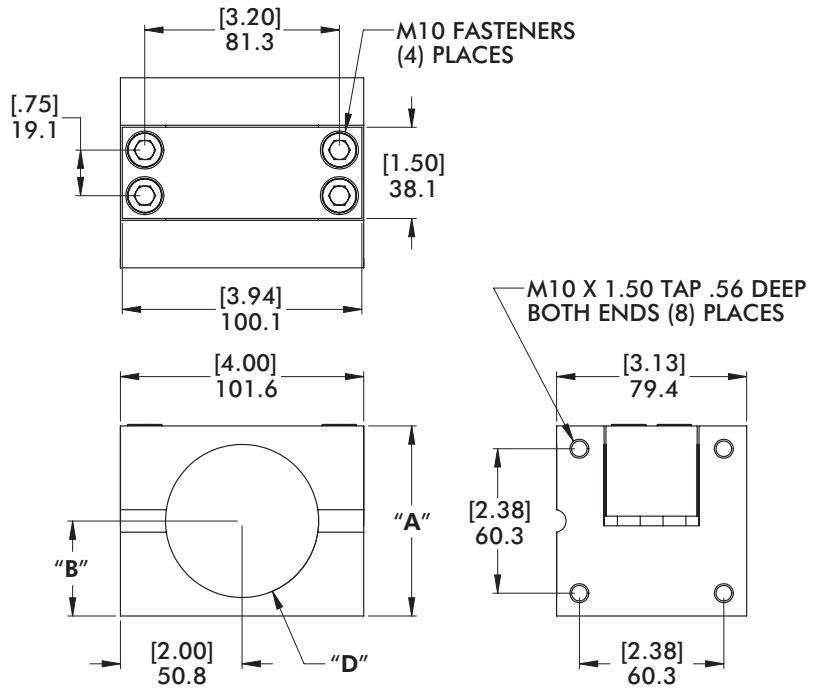
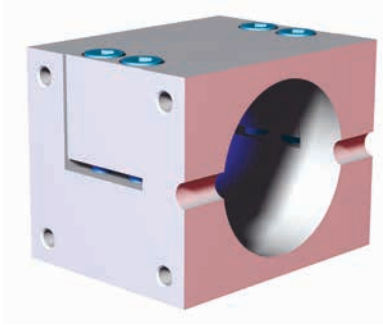
Model Number	Weight
CPI-CL-25-DM-10F	[1.89 lb] .86 kg

WORLD TOOL DIRECT MOUNTS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

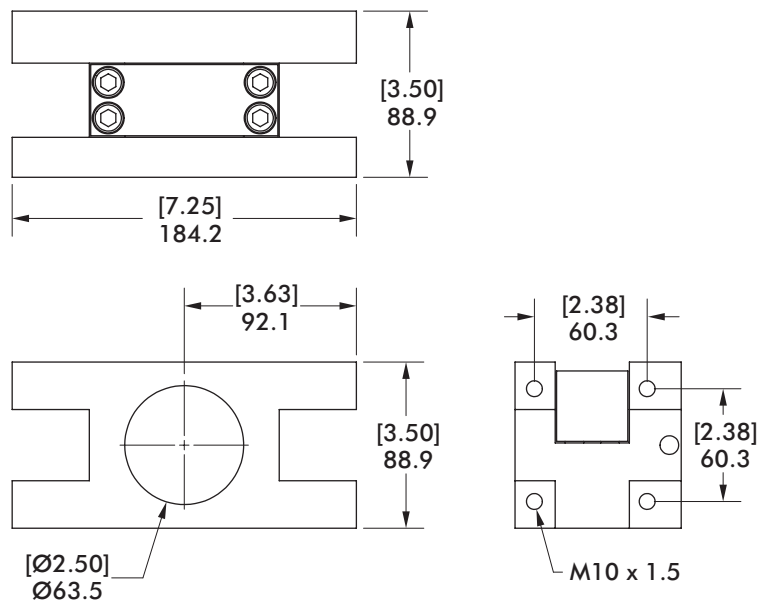
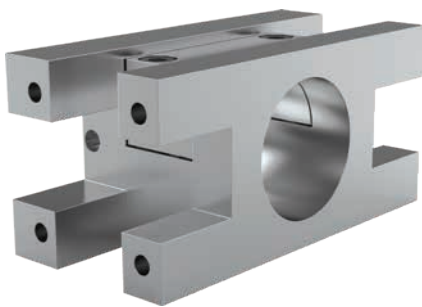
CL-xx-DM-xxF Direct Mount Bracket for Ø60mm/2.50" Tube



Material: Aluminum

Model Number	(Ø)"D"	A	B	Weight
CPI-CL-60-DM-40F	60mm	[3.25] 82.6	[1.63] 41.3	[2.49 lb] 1.13 kg
CPI-CL-25-DM-15F	2.50"(in)	[3.13] 79.4	[1.58] 39.7	[2.36 lb] 1.07 kg

CL-25-DM-15F-EXT Direct Mount Bracket for Ø2.50" Tube



Material: Aluminum

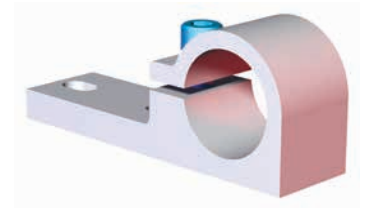
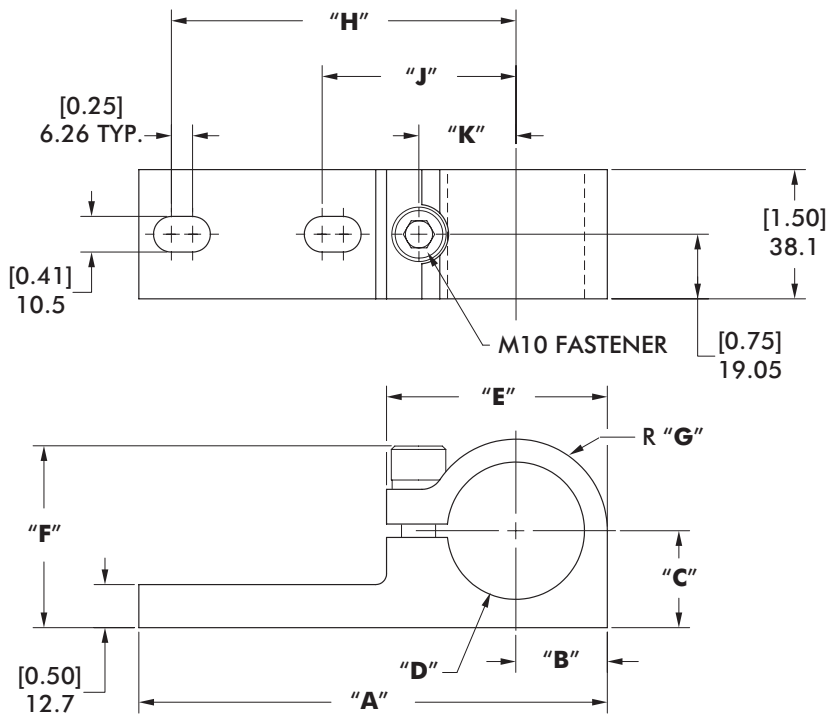
Model Number	Weight
CPI-CL-25-DM-15F-EXT	[4.23 lb] 1.92 kg

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

BASE MOUNT BLOCK

Round Tooling | Dimensions | Technical Specifications

BC-00-xxx Ø25mm/1.00" Tube/Ø40mm/1.50" Tube



Specifications:

Max. Static Clamp Load:
13.6 N*m [10 ft-lb]
Material: Aluminum

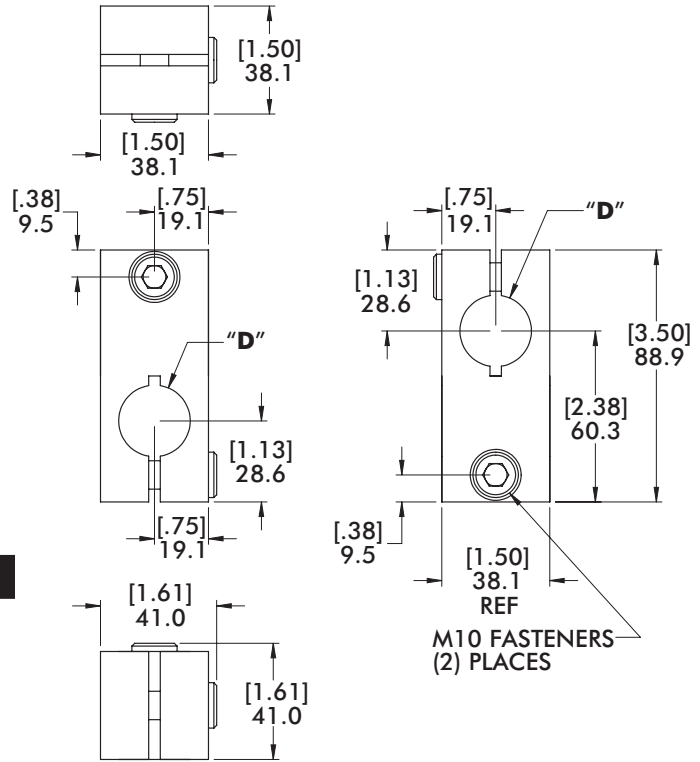
Model Number	(Ø)"D"	"A"	"B"	"C"	"E"	"F"	"G"	"H"	"J"	"K"	Weight
CPI-BC-00-25	25mm	[4.88]	[0.75]	[0.88]	[2.05]	[1.87]	[0.75]	[3.75]	[2.00]	[0.88]	[0.55 lb]
CPI-BC-00-100	1.00"(in)	123.8	19.0	22.2	52.1	47.4	19.0	95.3	50.8	22.3	0.25 kg
CPI-BC-00-40	40mm	[5.44]	[1.06]	[1.13]	[2.56]	[2.18]	[1.06]	[4.00]	[2.25]	[1.13]	[0.68 lb]
CPI-BC-00-150	1.50"(in)	138.1	26.9	28.6	65.1	55.4	26.9	101.6	57.2	28.6	0.31 kg

CROSS TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

SC-xx-xx Ø25mm/1.00" to Ø25mm/1.00" (Single Bolt)



Specifications:

Max. Static Clamp Load:

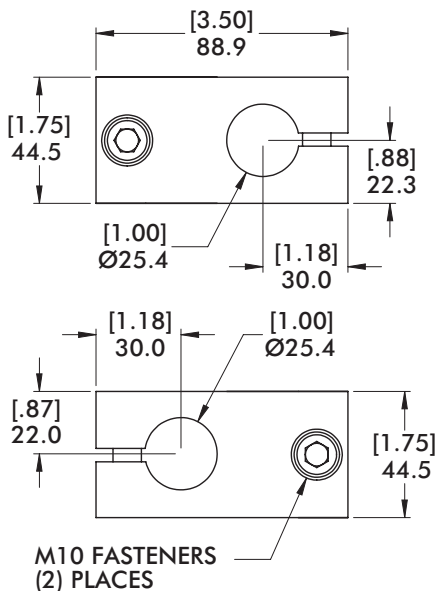
162 N*m [120 ft-lb]

Material: Aluminum

Model Number	(Ø)"D"	Weight	Finish
CPI-SC-25-25	25mm		SILVER
CPI-SC-25-25-BL	25mm	[.60 lb] .27 kg	BLUE
CPI-SC-1010	1.00"(in)		SILVER

M1513 Ø1.00" to Ø1.00"

CLM Ø12mm/.50" to Ø12mm/.50"



Specifications:

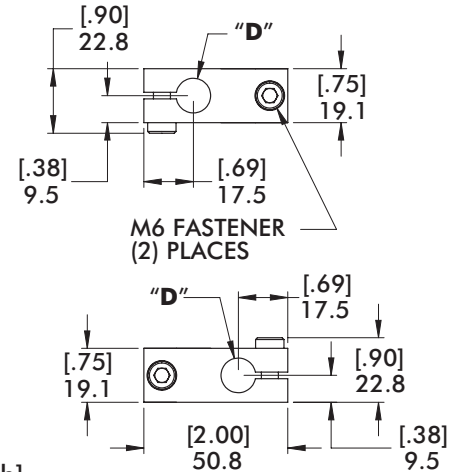
Max. Static

Clamp Load:

203 N*m [150 ft-lb]

Material: Aluminum

Model Number	Weight
M1513	[.82 lb] .37 kg



Specifications:

Max. Static

Clamp Load:

13.6 N*m [10 ft-lb]

Material: Aluminum

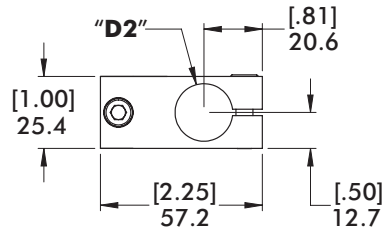
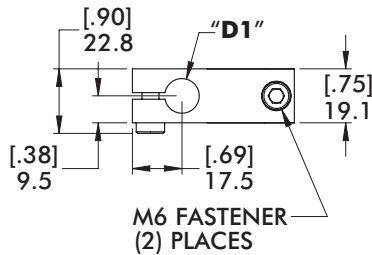
Model Number	(Ø)"D"	Weight
CPI-CLM-12M-12M	12mm	[.10 lb] .05 kg
CPI-CLM-50-50	.50"(in)	

CROSS TRANSITION BRACKETS AND BLOCKS

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Round Tooling | Dimensions | Technical Specifications

CLM Ø20mm/.75" to Ø12mm/.50"

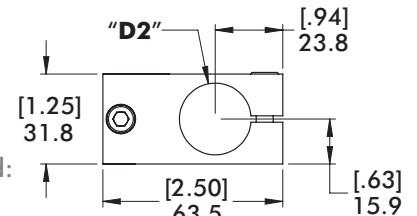
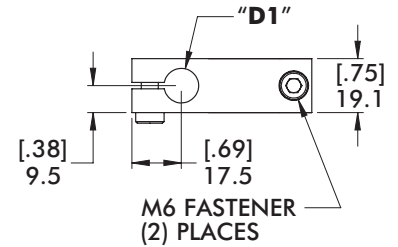


Specifications:

Max. Static
Clamp Load:
Ø20mm/.75":
20.3 N*m [15 ft-lb]
Ø12mm/.50":
13.6 N*m [10 ft-lb]
Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	Weight
CPI-CLM-20M-12M	12mm	20mm	[13 lb] .06 kg
CPI-CLM-75-50	.50"(in)	.75 in	

CLM Ø25mm/1.00" to Ø12mm/.50"

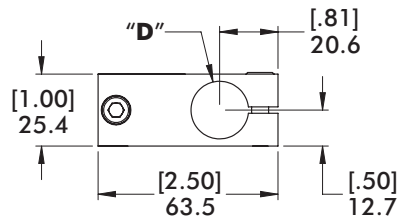
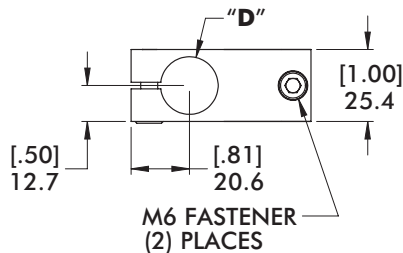


Specifications:

Max. Static Clamp Load:
Ø25mm/1.00":
67.8 N*m [50 ft-lb]
Ø12mm/.50":
13.6 N*m [10 ft-lb]
Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	Weight
CPI-CLM-25M-12M	12mm	25mm	[.08 lb] .17 kg
CPI-CLM-10-50	.50"(in)	1.00"(in)	

CLM Ø20mm/.75" to Ø20mm/.75"

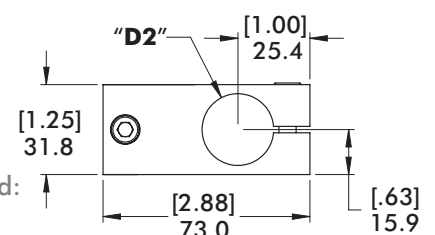
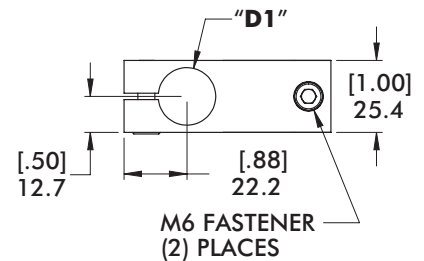


Specifications:

Max. Static
Clamp Load:
20.3 N*m
[15 ft-lb]

Model Number	(Ø)"D"	Weight
CPI-CLM-20M-20M	20mm	[.16 lb] .07 kg
CPI-CLM-20M-20M-ST	20mm	[.40 lb] .18 kg
CPI-CLM-75-75	.75"(in)	[.17 lb] .08 kg

CLM Ø25mm/1.00" to Ø20mm/.75"



Specifications:

Max. Static Clamp Load:
Ø25mm/1.00":
67.8 N*m [50 ft-lb]
Ø20mm/.75":
20.3 N*m [15 ft-lb]
Material: Aluminum

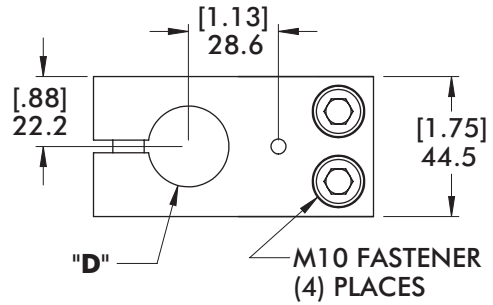
Model Number	(Ø)"D1"	(Ø)"D2"	Weight
CPI-CLM-25M-20M	20mm	25mm	[.23 lb] .11 kg
CPI-CLM-10-75	.75"(in)	1.00"(in)	

CROSS TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

M-xxx-xxx-M Ø25mm/1.00" to Ø25mm/1.00" (Double Bolt)



Specifications:

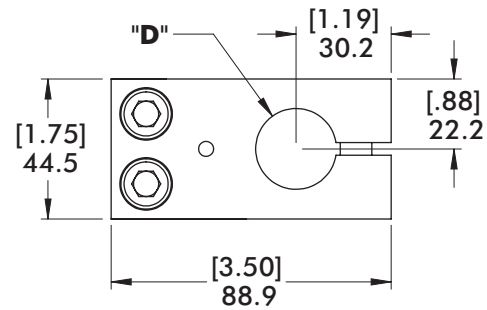
Max. Static Clamp Load:

Ø25mm/1.00":

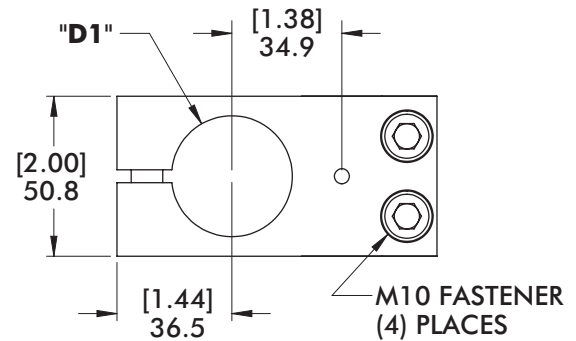
434 N*m [320 ft-lb]

Material: Aluminum

Model Number	(Ø)"D"	Weight	Finish
M-25M-25M-M	25mm	[.93 lb] .42 kg	BLUE
M-10E-10E-M	1.00"(in)		BLACK



M-xxx-xxx-M Ø40mm/1.25"/1.50" to Ø25mm/1.00" (Double Bolt)



Specifications:

Max. Static Clamp Load:

Ø25mm/1.00":

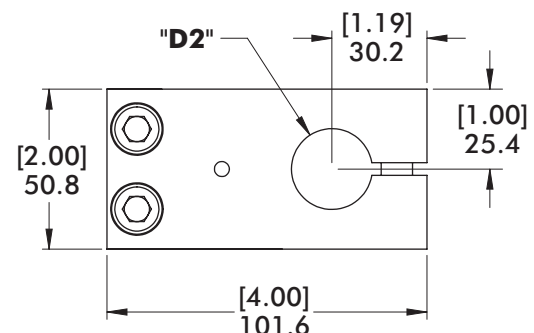
434 N*m [320 ft-lb]

Ø40mm/1.50":

624 N*m [460 ft-lb]

Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	Weight	Finish
M-10E-12E-M	1.25"(in)	1.00"(in)	[1.29 lb] .58 kg	BLACK
M-10E-15E-M	1.50"(in)	1.00"(in)	[1.18 lb] .54 kg	BLACK
M-25M-40M-M	40mm	25mm		BLUE

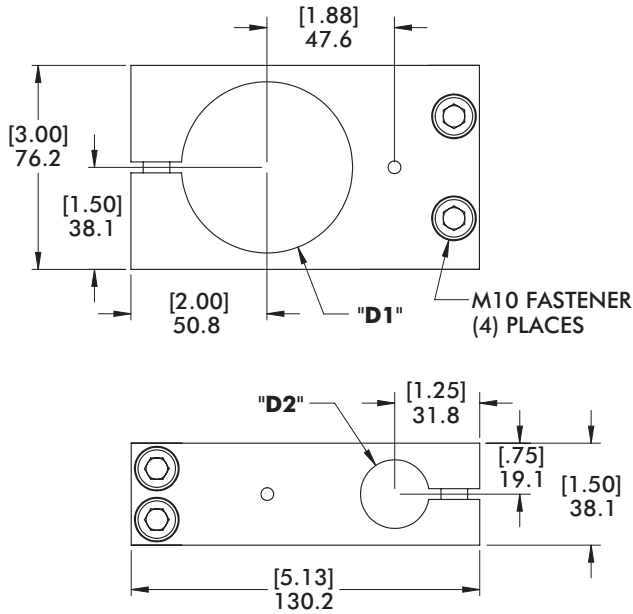


CROSS TRANSITION BRACKETS AND BLOCKS

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Round Tooling | Dimensions | Technical Specifications

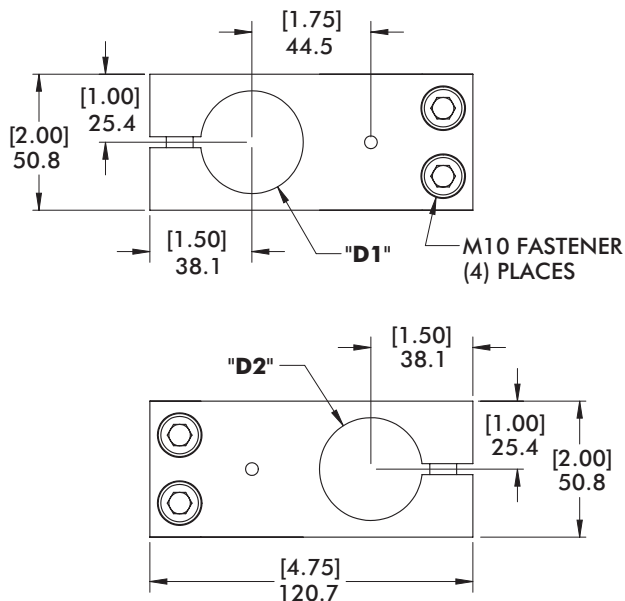
M-xxx-xxx-M Ø60mm/2.50" to Ø25mm/1.00" (Double Bolt)



Specifications:
Max. Static Clamp Load:
Ø25mm/1.00":
434 N*m [320 ft-lb]
Ø60mm/2.50":
813 N*m [600 ft-lb]
Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	Weight	Finish
M-25M-60M-M	60mm	25mm	[1.52 lb] .69 kg	BLUE
M-10E-25E-M	2.50"(in)	1.00"(in)	[1.44 lb] .65 kg	BLACK

M-xxx-xxx-M Ø40mm/1.25"/1.50" to Ø40mm/1.25"/1.50" (Double Bolt)



Specifications:
Max. Static Clamp Load:
Ø1.25":
515 N*m [380 ft-lb]
Ø40mm/1.50":
624 N*m [460 ft-lb]
Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	Weight	Finish
M-12E-12E-M	1.25"(in)	1.25"(in)	[1.51 lb] .69 kg	BLACK
M-12E-15E-M	1.25"(in)	1.50"(in)	[1.41 lb] .64 kg	BLACK
M-15E-15E-M	1.50"(in)	1.50"(in)	[1.31 lb] .59 kg	BLACK
M-40M-40M-M	40mm	40mm	[1.23 lb] .56 kg	BLUE

CROSS TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

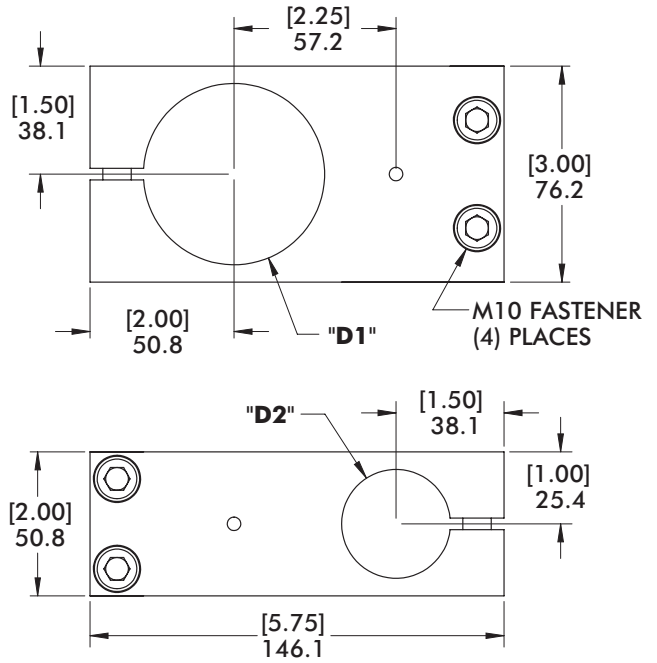
Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

M-xxx-xxx-M Ø60mm/2.50 to Ø40mm/1.50" (Double Bolt)



Specifications:

Max. Static Clamp Load:
 Ø40mm/1.50":
 624 N*m [460 ft-lb]
 Ø60mm/2.50":
 813 N*m [600 ft-lb]
 Material: Aluminum



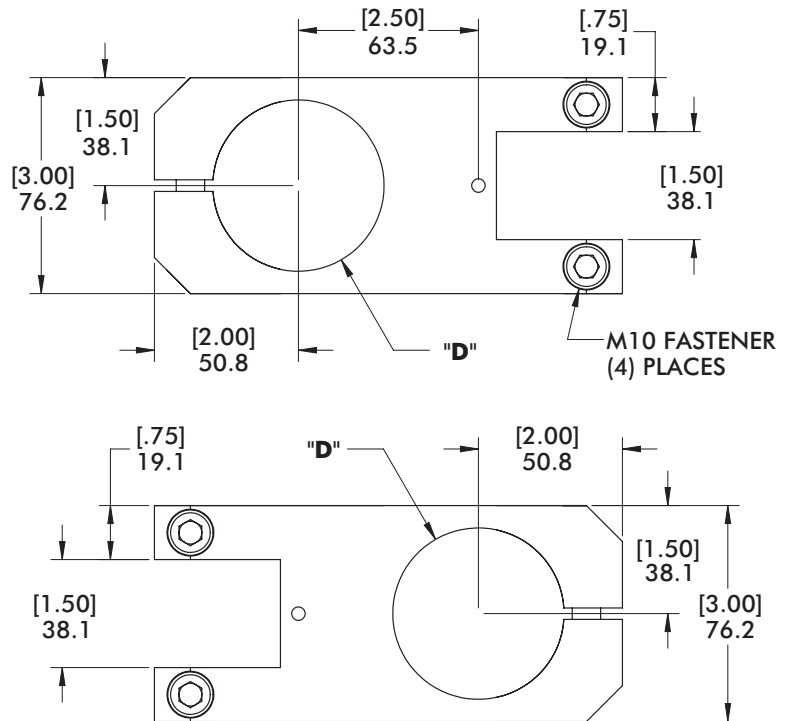
Model Number	(Ø)"D1"	(Ø)"D2"	Weight	Finish
M-40M-60M-M	60mm	40mm	[2.08 lb] .95 kg	BLUE
M-15E-25E-M	2.50"(in)	1.50"(in)		BLACK

M-xxx-xxx-M Ø60mm/2.50" to Ø60mm/2.50" (Double Bolt)



Specifications:

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



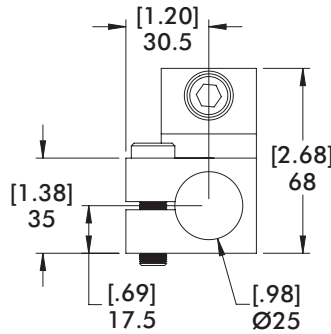
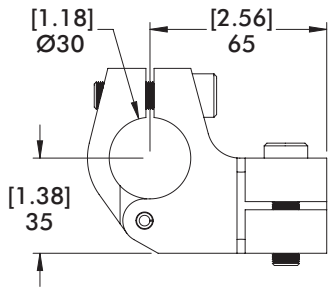
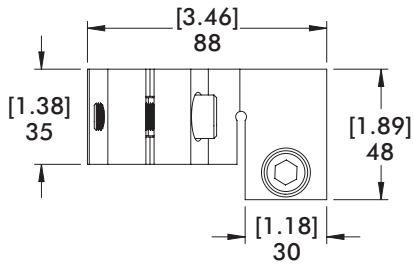
Model Number	(Ø)"D"	Weight	FINISH
M-60M-60M-M	60mm	[2.07 lb] .94 kg	BLUE
M-25E-25E-M	2.50"(in)	[2.03 lb] .92 kg	BLACK

T-CLAMP TRANSITION BRACKETS AND BLOCKS

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Round Tooling | Dimensions | Technical Specifications

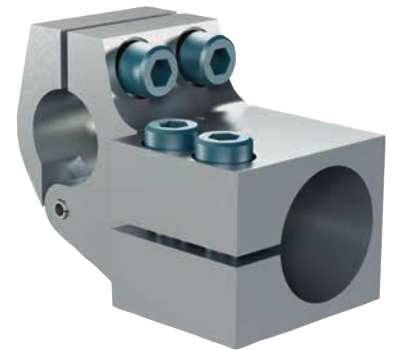
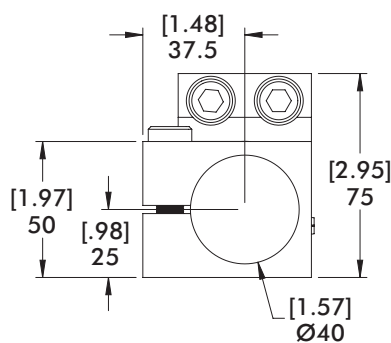
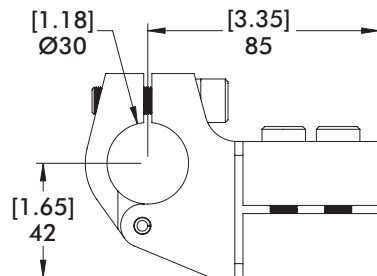
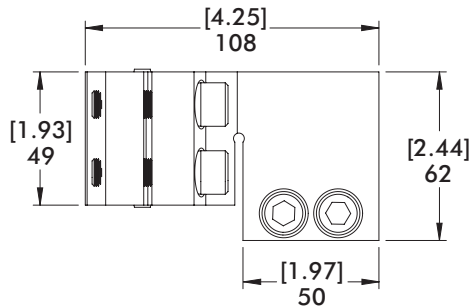
TCAH Ø30mm to Ø25mm



Specifications:
Max. Static Clamp Load:
Ø30mm:
237 N*m [175 ft-lb]
Ø25mm/1.00":
200 N*m [150 ft-lb]
Material: Aluminum

Model Number	Weight
CPI-TCAH30M-25M	[0.72 lb] 325g

TCAH Ø30mm to Ø40mm



Specifications:
Max. Static Clamp Load:
Ø30mm:
237 N*m [175 ft-lb]
Ø40mm:
271 N*m [200 ft-lb]
Material: Aluminum

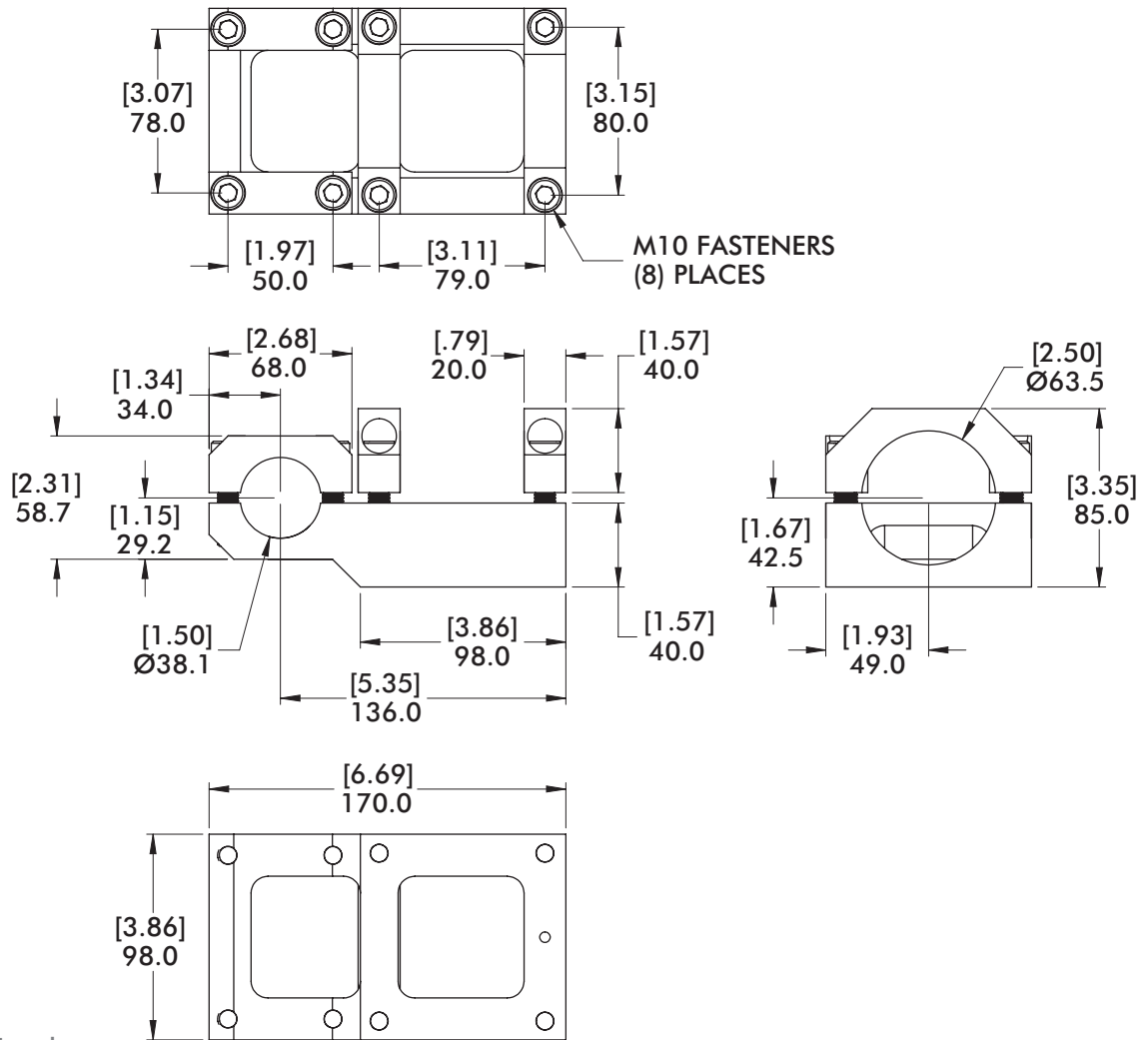
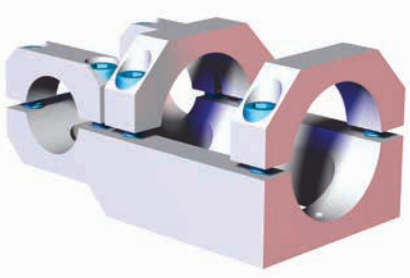
Model Number	Weight
CPI-TCAH30M-40M	[1.40 lb] 634g

T-CLAMP TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (\emptyset) given
See chart on Page 72
for actual (\emptyset) size

TCA $\emptyset 2.50''$ to $\emptyset 1.50''$ T-Clamp Bracket Assembly



Specifications:
Max. Static Clamp Load:
 $\emptyset 1.50''$:
271 N*m [200 ft-lb]
 $\emptyset 2.50''$:
677 N*m [500 ft-lb]
Material: Aluminum

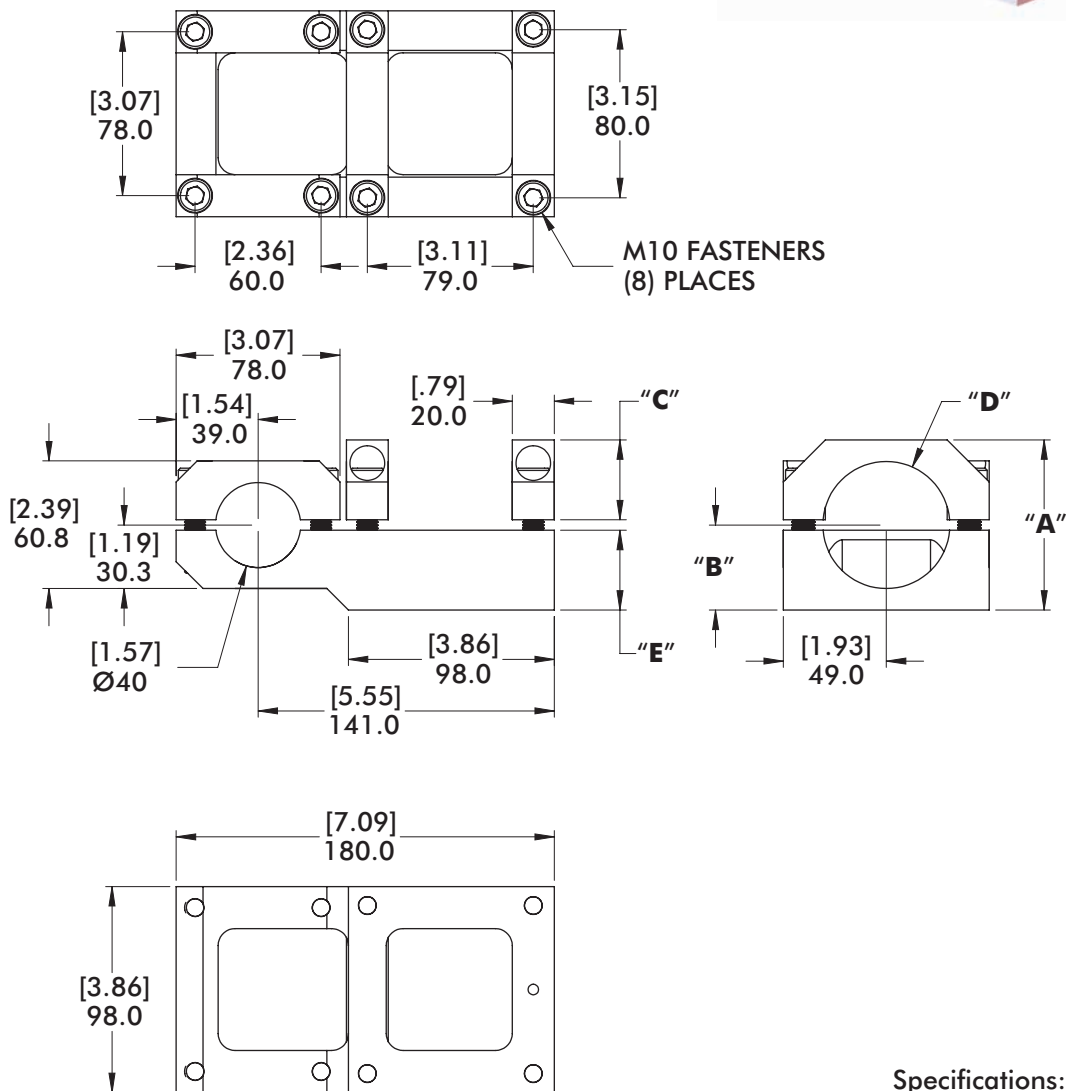
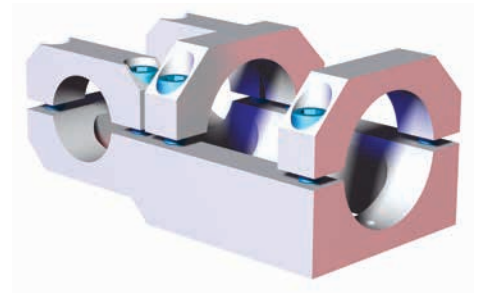
Model Number	Weight
CPI-TCA-250-150	[2.76 lb] 1.25 kg

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

T-CLAMP TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

TCA Ø60mm/2.50" to Ø40mm T-Clamp Bracket Assembly



Specifications:
Max. Static Clamp Load:
Ø40mm:
271 N*m [200 ft-lb]
Ø60mm/2.50":
677 N*m [500 ft-lb]
Material: Aluminum

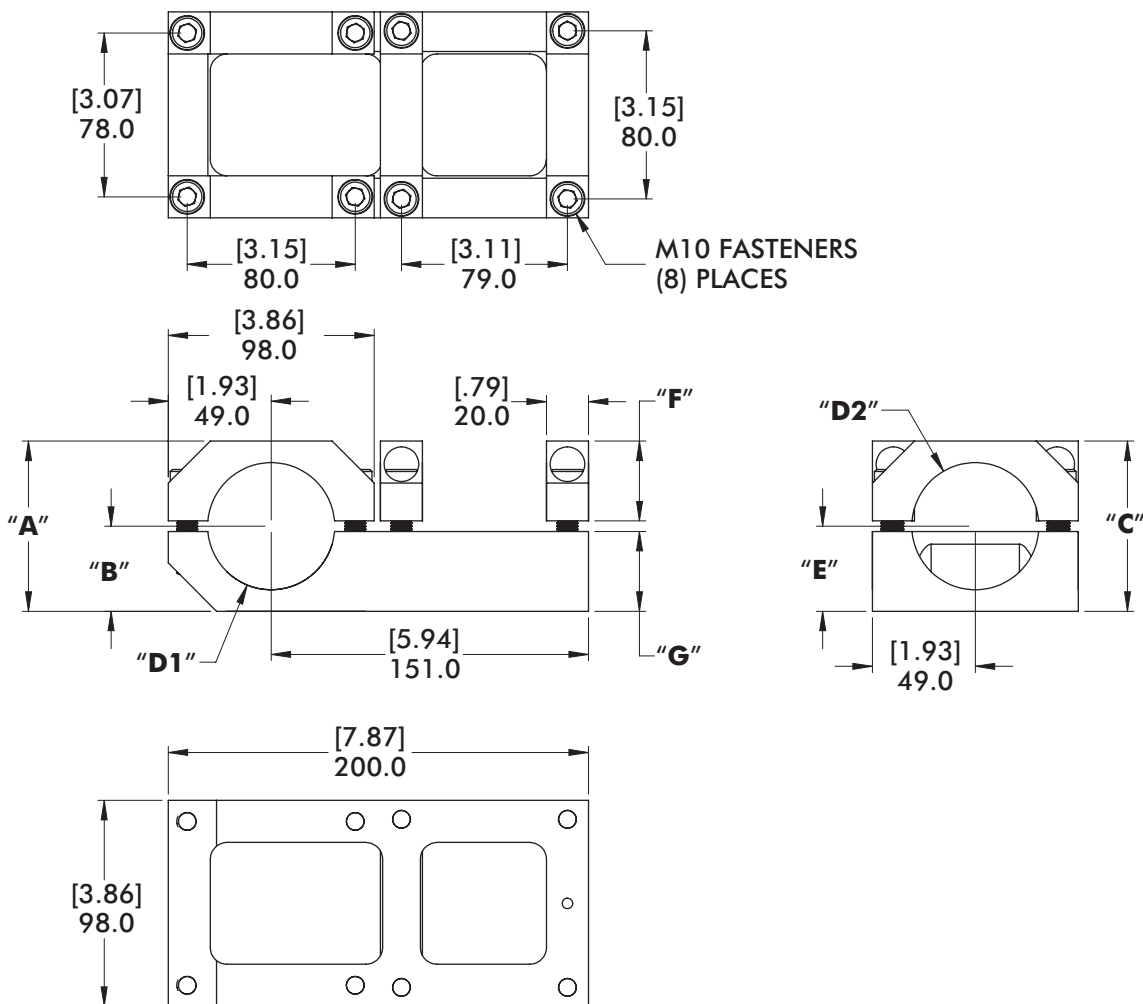
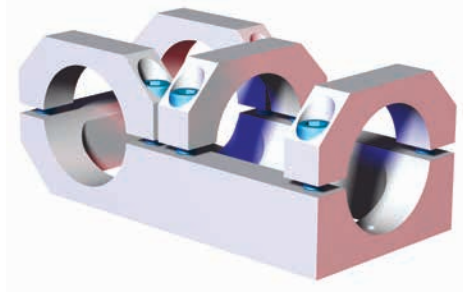
Model Number	(Ø)"D"	"A"	"B"	"C"	"E"	Weight
CPI-TCA-60M-40M	60mm	[3.19] 81.0	[1.59] 40.5	[1.50] 38.0	[1.50] 38.0	[2.89 lb] 1.31 kg

T-CLAMP TRANSITION BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (\emptyset) given
See chart on Page 72
for actual (\emptyset) size

TCA $\emptyset 60\text{mm}/2.50''$ to $\emptyset 60\text{mm}/2.50''$ T-Clamp Bracket Assembly



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

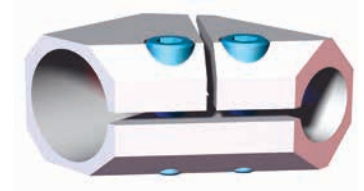
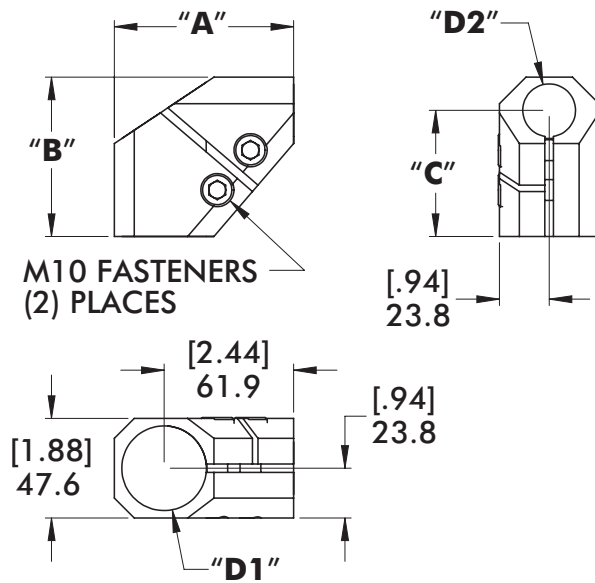
Model Number	(\emptyset) "D1"	(\emptyset) "D2"	"A"	"B"	"C"	"E"	"F"	"G"	Weight
CPI-TCA-60M-60M	60mm	60mm	[3.19] 81.0	[1.59] 40.5	[3.19] 81.0	[1.59] 40.5	[1.50] 38.0	[1.50] 38.0	[3.15 lb]
CPI-TCA-250-250	2.50"(in)	2.50"(in)	[3.35] 85.0	[1.67] 42.5	[3.35] 85.0	[4.67] 42.5	[1.57] 40.0	[1.57] 40.0	1.43 kg

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

WRIST CLAMPS

Round Tooling | Dimensions | Technical Specifications

SEC/SLK Ø40mm/1.50" to Ø25mm/1.00"



Specifications:
Max. Static Clamp Load:
Ø40mm/1.50":
271 N*m [200 ft-lb]
Ø25mm/1.00":
203 N*m [150 ft-lb]
Material: Aluminum

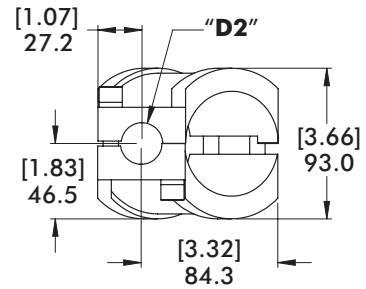
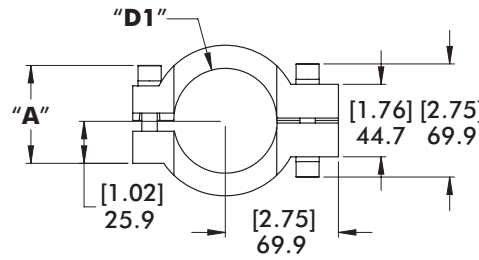
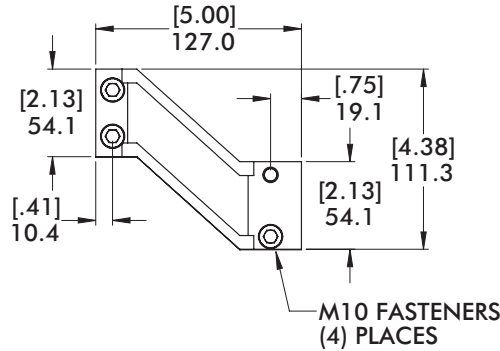
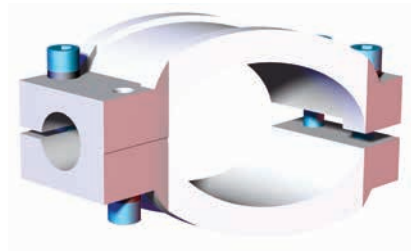
Model Number	(Ø)"D1"	(Ø)"D2"	"A"	"B"	"C"	"E"	Weight
CPI-SEC-1510	1.50"(in)	1.00"(in)	[3.25] 82.6	[2.38] 60.3	[1.75] 44.5	[.88] 22.2	[.67 lb] .31 kg
CPI-SLK-4025	40mm	25mm	[3.38] 85.7	[2.44] 61.9	[1.88] 47.6	[.94] 23.8	[.77 lb] .35 kg

OFFSET WRIST BRACKETS AND BLOCKS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

SEC/SLK Ø60mm/2.50" to Ø25mm/1.00" Wrist Bracket



Specifications:

Max. Static Clamp Load:

Ø25mm/1.00":

149 N*m [110 ft-lb]

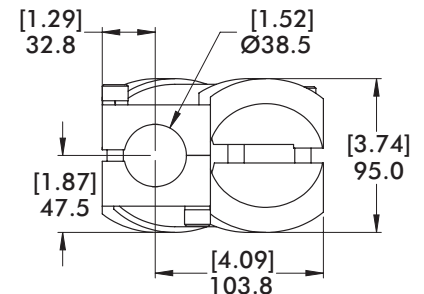
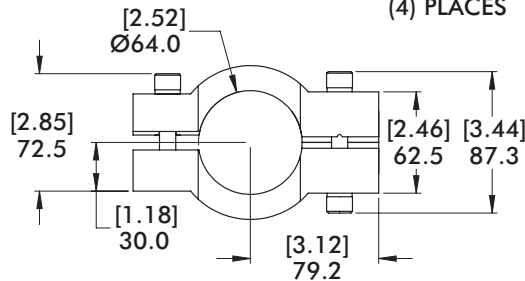
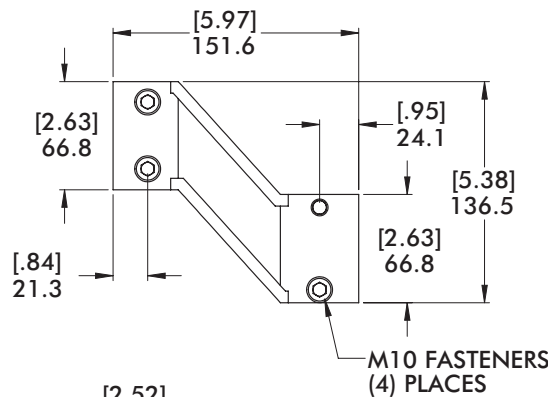
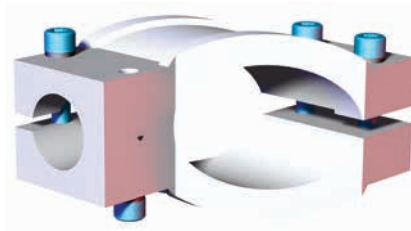
Ø60mm/2.50":

677 N*m [500 ft-lb]

Material: Aluminum

Model Number	(Ø)"D1"	(Ø)"D2"	"A"	Weight
CPI-SLK-6025	60mm	25mm	[2.25] 57.1	[1.72 lb] .78 kg
CPI-SEC-2510	2.50"(in)	1.00"(in)	[2.38] 60.5	[1.61 lb] .73 kg

SEC Ø2.50" to Ø1.50" Wrist Bracket



Specifications:

Max. Static Clamp Load:

Ø40mm/1.50":

271 N*m [200 ft-lb]

Ø60mm/2.50":

677 N*m [500 ft-lb]

Material: Aluminum

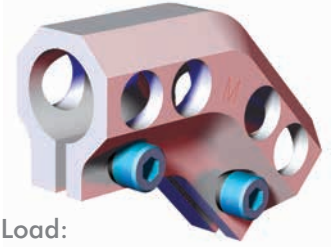
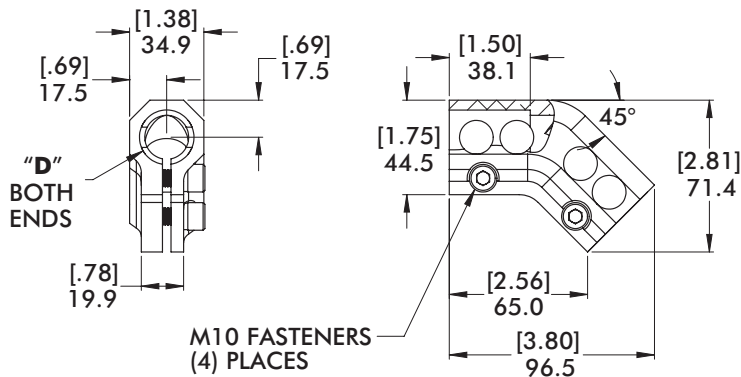
Model Number	Weight
CPI-SEC-2515	[2.72 lb] 1.23 kg

ELBOW AND STRAIGHT BRACKETS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

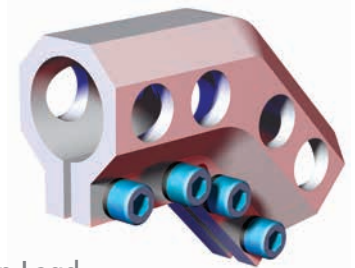
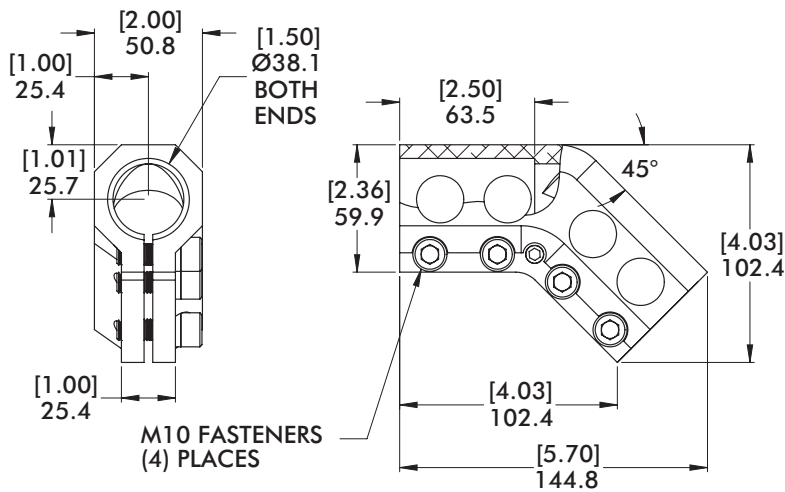
DC Ø25mm/1.00" to Ø25mm/1.00" 45° Elbow



Specifications:
Max. Static Clamp Load:
203 N*m [150 ft-lb]
Material: Aluminum

Model Number	(Ø)"D"	Weight
CPI-DC-2525M-45	25mm	[.35 lb] .16 kg
CPI-DC-1010-45	1.00"(in)	

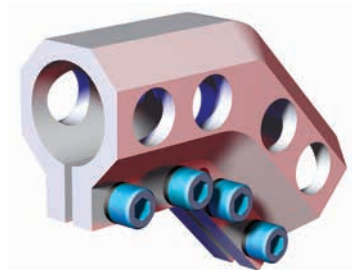
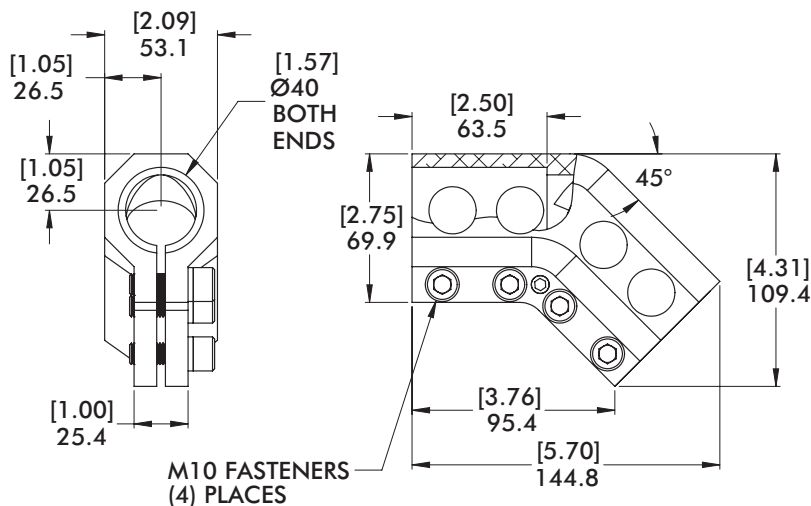
DC Ø1.50" to Ø1.50" 45° Elbow



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

Model Number	Weight
CPI-DC-1515-45	[1.41 lb] .64 kg

DC Ø40mm to Ø40mm 45° Elbow



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

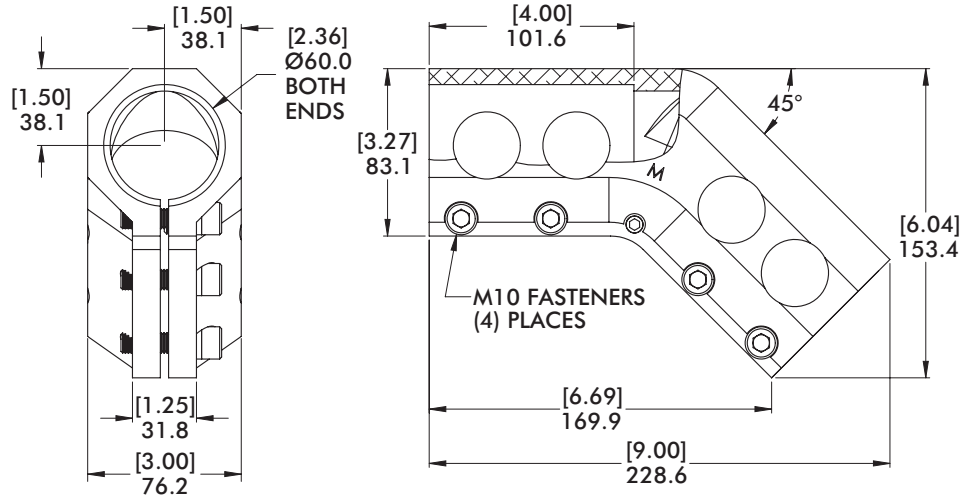
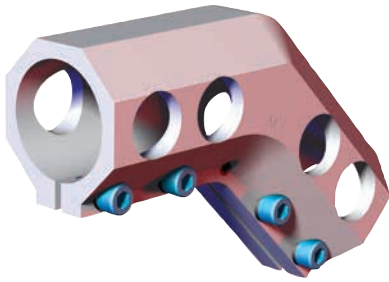
Model Number	Weight
CPI-DC-40-40-45	[1.41 lb] .64 kg

ELBOW AND STRAIGHT BRACKETS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

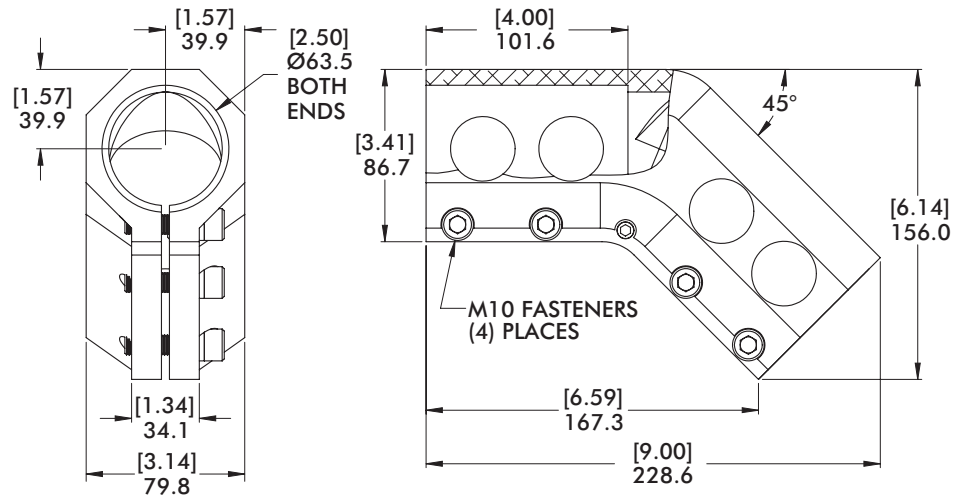
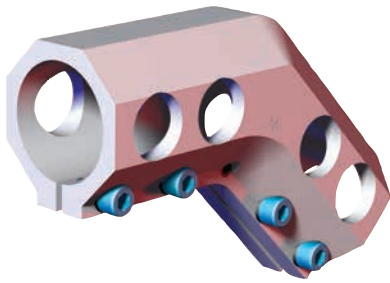
DC Ø60mm to Ø60mm 45° Elbow



Specifications:
Max. Static Clamp Load:
677N*m [500 ft-lb]
Material: Aluminum

Model Number	Weight
CPI-DC-6060M-45	[2.94 lb] 1.33 kg

DC Ø2.50" to Ø2.50" 45° Elbow



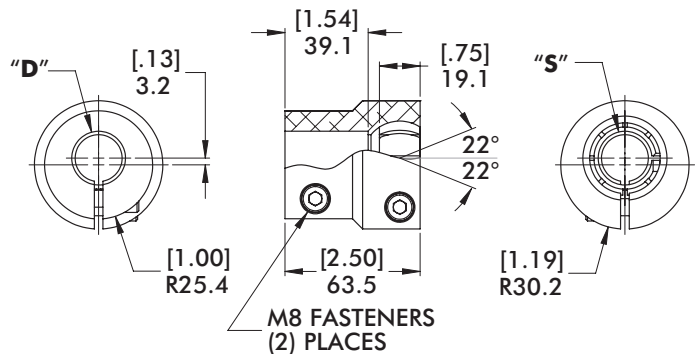
Specifications:
Max. Static Clamp Load:
677 N*m [500 ft-lb]
Material: Aluminum

Model Number	Weight
CPI-DC-2525-45	[3.19 lb] 1.46 kg

DC Ø25mm/1.00" to Ø25mm/1.00" Straight with Swivel



Specifications:
Max. Static Clamp Load:
203 N*m [150 ft-lb]
Material: Aluminum



Model Number	(Ø)"D"	(Ø)"S"	Weight
CPI-DC-2525S-8	25mm	25mm	[.80 lb] .36 kg
CPI-DC-1010S-8	1.00"(in)	1.00"(in)	

SWIVEL ARMS

Round Tooling | Features and Benefits

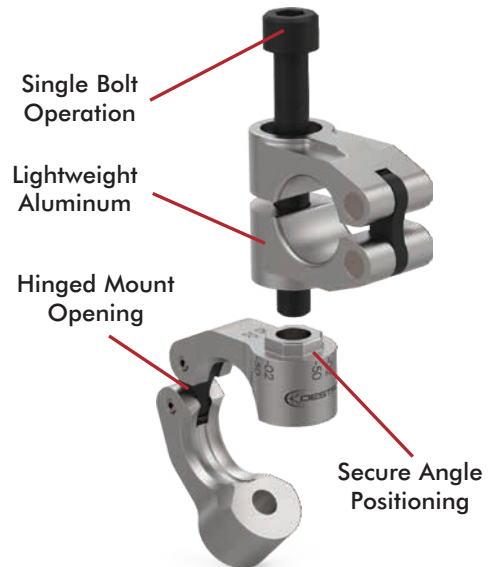
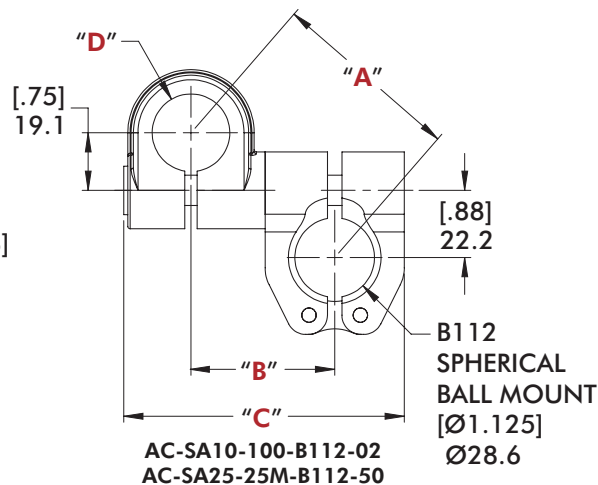
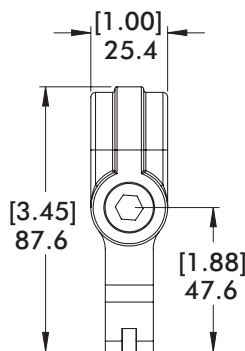
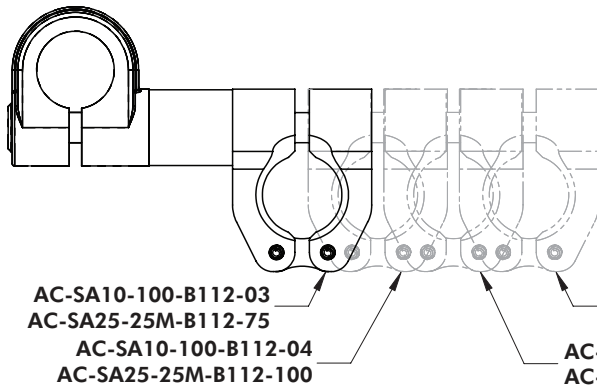
Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

AC-SA Series Accessory Mount Swivel Arms

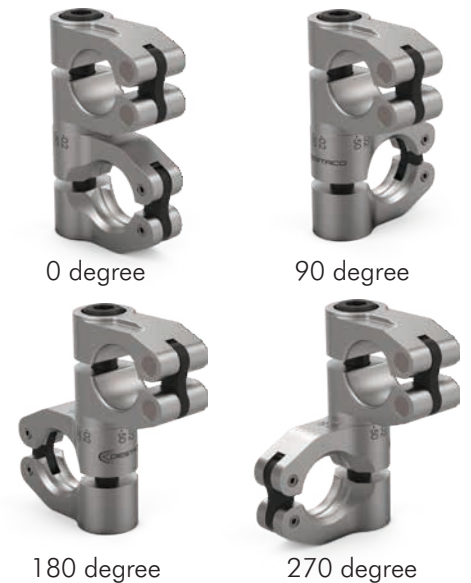


Features:

- Fixed adjustment every 90 degrees
- Mounts to a 1 inch or 25mm tube
- Clamps to a Ø28.6mm [1.125"] (B112) Spherical Ball



AC-SA10-100-B112-02
AC-SA25-25M-B112-50



Specifications:
Maximum Clamp Load:
111 ft-lb [150 Nm]
Material:
Aluminum

Model Number	"A"	"B"	"C"	(Ø)"D"	Weight
AC-SA10-100-B112-02	[2.48]	[1.87]	[3.65]	1.00"(in)	[0.53 lb]
AC-SA25-25M-B112-50	63	47.5	92.8	25mm	0.24kg
AC-SA10-100-B112-03	[3.37]	[2.95]	[4.74]	1.00"(in)	[0.64 lb]
AC-SA25-25M-B112-75	85.6	75.0	120.3	25mm	0.29kg
AC-SA10-100-B112-04	[4.26]	[3.94]	[5.72]	1.00"(in)	[0.73 lb]
AC-SA25-25M-B112-100	108.2	100.0	145.3	25mm	0.33kg
AC-SA10-100-B112-05	[5.18]	[4.92]	[6.70]	1.00"(in)	[0.82 lb]
AC-SA25-25M-B112-125	131.6	125.0	170.3	25mm	0.37 kg
AC-SA10-100-B112-06	[6.12]	[5.90]	[7.69]	1.00"(in)	[0.93 lb]
AC-SA25-25M-B112-150	155.4	150.0	195.5	25mm	0.42kg

MICRO TOOLING SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

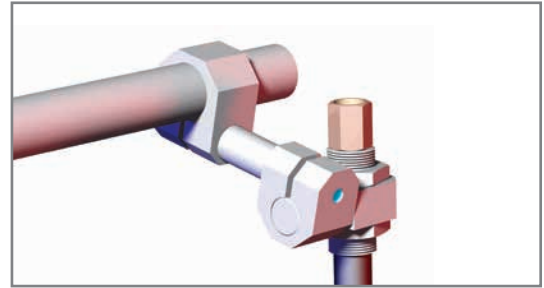
Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

Features:

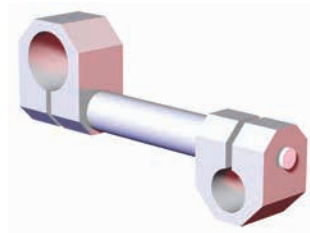
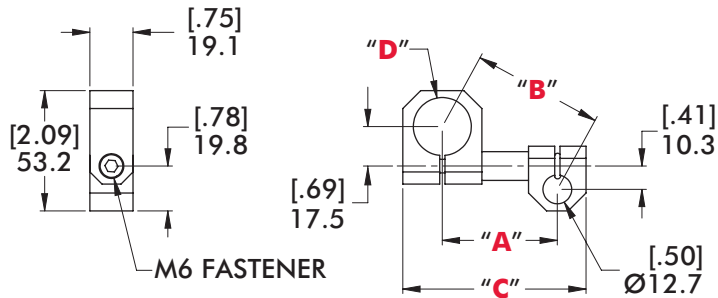
- Mounts micro apple core accessories to Ø20mm/.75" Round tube.
- Provides 360° of rotational adjustments along (3) axes.
- Used to mount venturi, bumpers, round locators, and proximity switches.

Specifications:

Maximum Clamp Load:
120 ft-lb [163 Nm]
Material:
Body and Spacer:
Machined Aluminum



MSA Ø20mm/.75" for Ø12.7mm [.50"] Apple Core (Micro)

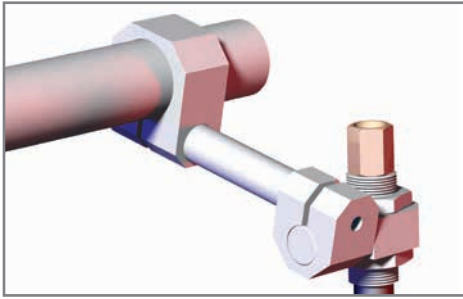


Model Number	(Ø)"D"	"A"	"B"	"C"	Weight
CPI-200-7550-MSA	.75"(in)	[2.00]	[2.28]	[3.19]	[0.16 lb]
CPI-200-20M50-MSA	20mm	50.8	57.9	81.0	0.07kg
CPI-300-7550-MSA	.75"(in)	[3.00]	[3.19]	[4.19]	[0.19 lb]
CPI-300-20M50-MSA	20mm	76.2	81.1	106.4	0.08kg
CPI-400-7550-MSA	.75"(in)	[4.00]	[4.15]	[5.19]	[0.21 lb]
CPI-400-20M50-MSA	20mm	101.7	105.4	131.9	0.09kg
CPI-500-7550-MSA	.75"(in)	[5.00]	[5.12]	[6.19]	[0.23 lb]
CPI-500-20M50-MSA	20mm	127.1	130.1	157.3	0.11kg
CPI-600-7550-MSA	.75"(in)	[6.00]	[6.10]	[7.19]	[0.26 lb]
CPI-600-20M50-MSA	20mm	152.5	155.0	182.7	0.12kg

MICRO TOOLING SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size



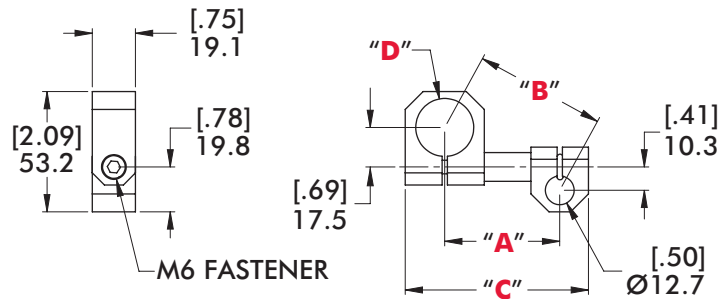
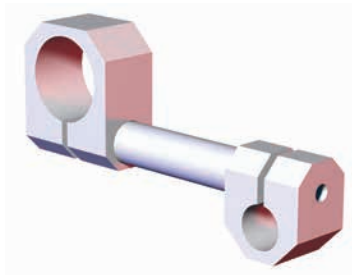
Features:

- Mounts micro apple core accessories to Ø25mm/1.00" Round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
120 ft-lb [163 Nm]
Material:
Body and Spacer:
Machined Aluminum

MSA Ø25mm/1.00" for Ø12.7mm [.50"] Apple Core (Micro)



Model Number	(Ø)"D"	"A"	"B"	"C"	Weight
CPI-200-1050-MSA	1.00"(in)	[2.00] 50.7	[2.23] 56.6	[3.06] 77.7	[0.18 lb] 0.08kg
CPI-200-25M50-MSA	25mm				
CPI-300-1050-MSA	1.00"(in)	[3.00] 76.1	[3.16] 80.2	[4.11] 104.4	[0.21 lb] 0.09kg
CPI-300-25M50-MSA	25mm				
CPI-400-1050-MSA	1.00"(in)	[4.00] 101.6	[4.12] 104.7	[5.08] 129.0	[0.23 lb] 0.10kg
CPI-400-25M50-MSA	25mm				
CPI-500-1050-MSA	1.00"(in)	[5.00] 127.0	[5.10] 129.5	[6.14] 156.0	[0.25 lb] 0.11kg
CPI-500-25M50-MSA	25mm				
CPI-600-1050-MSA	1.00"(in)	[6.00] 152.4	[6.08] 154.4	[7.09] 180.0	[0.27 lb] 0.13kg
CPI-600-25M50-MSA	25mm				

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size



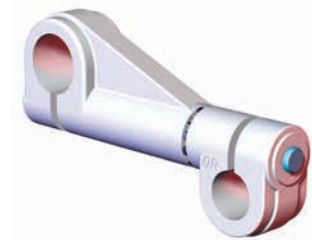
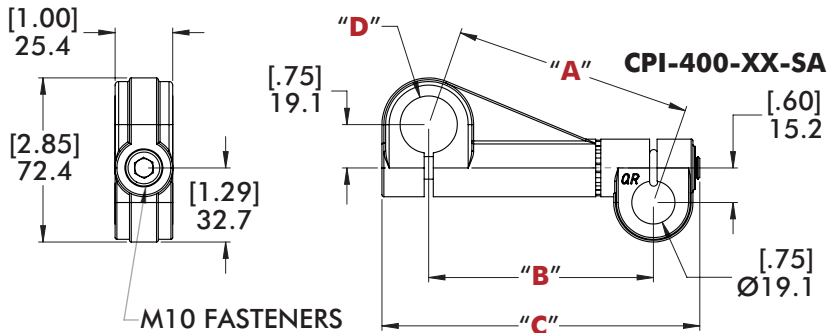
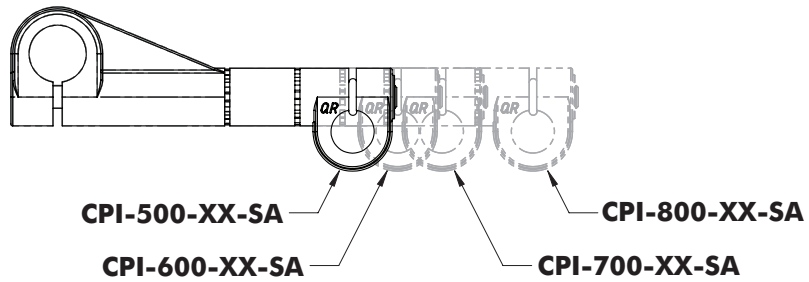
Features:

- Mounts apple core accessories to Ø25mm/1.00" round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Spacer:
Machined Aluminum

SA Ø25mm/1.00" for Ø19.1mm [.75"] Apple Core



Model Number	(Ø)"D"	"A"	"B"	"C"	Weight	FINISH
CPI-400-1-SA	1.00"(in)	[4.13]	[3.90]	[5.52]	[0.70 lb]	SILVER
CPI-100-25-SA	25mm	104.9	99.1	140.2	0.31 kg	BLUE
CPI-500-1-SA	1.00"(in)	[5.30]	[5.12]	[6.70]	[0.82 lb]	SILVER
CPI-140-25-SA	25mm	134.5	130.1	170.2	0.37 kg	BLUE
CPI-600-1-SA	1.00"(in)	[6.05]	[5.90]	[7.49]	[0.90 lb]	SILVER
CPI-160-25-SA	25mm	153.8	149.9	190.2	0.41 kg	BLUE
CPI-700-1-SA	1.00"(in)	[6.81]	[6.67]	[8.27]	[0.97 lb]	SILVER
CPI-180-25-SA	25mm	172.9	169.4	210.2	0.44 kg	BLUE
CPI-800-1-SA	1.00"(in)	[8.36]	[8.25]	[9.85]	[1.13 lb]	SILVER
CPI-200-25-SA	25mm	212.4	209.6	250.2	0.51 kg	BLUE

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Features:

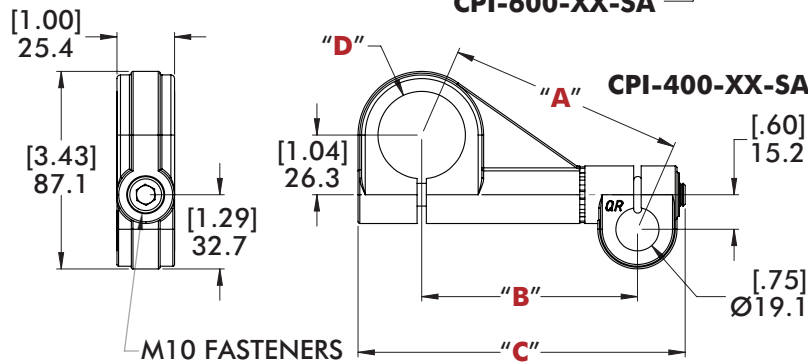
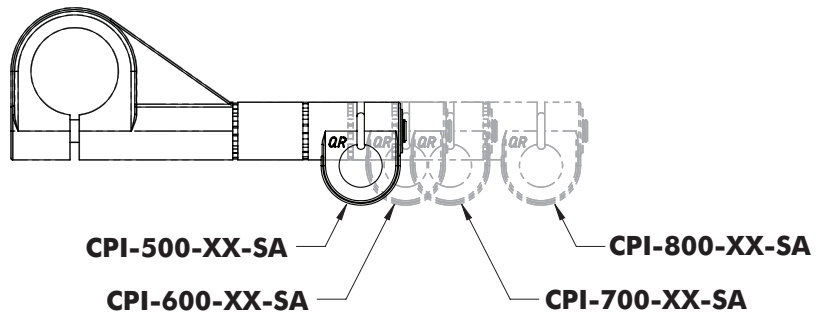
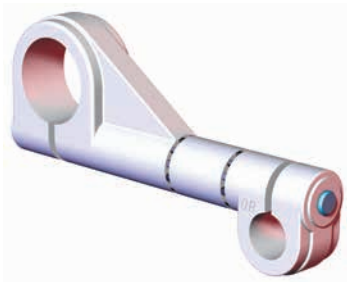
- Mounts apple core accessories to Ø40mm/1.50" round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Spacer:
Machined Aluminum



SA Ø40mm/1.50" for Ø19.1mm [.75"] Apple Core

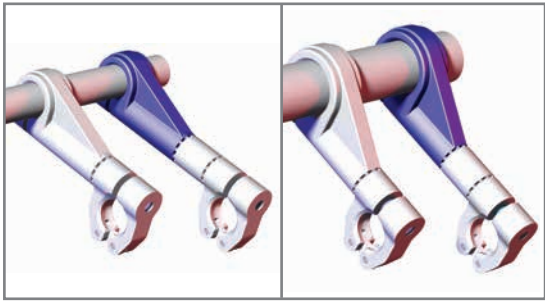


Model Number	(Ø)"D"	"A"	"B"	"C"	Weight	FINISH
CPI-400-15-SA	1.50"(in)	[4.09]	[3.75]	[5.68]	[0.78 lb]	SILVER
CPI-100-40-SA	40mm	103.8	95.2	144.3	0.35 kg	BLUE
CPI-500-15-SA	1.50"(in)	[5.23]	[4.97]	[6.86]	[0.89 lb]	SILVER
CPI-140-40-SA	40mm	132.8	126.1	174.3	0.41 kg	BLUE
CPI-600-15-SA	1.50"(in)	[5.97]	[5.75]	[7.65]	[0.97 lb]	SILVER
CPI-160-40-SA	40mm	151.8	146.0	194.3	0.44 kg	BLUE
CPI-700-15-SA	1.50"(in)	[6.72]	[6.52]	[8.44]	[1.05 lb]	SILVER
CPI-180-40-SA-SA	40mm	170.7	165.5	214.3	0.54 kg	BLUE
CPI-800-15-SA	1.50"(in)	[8.26]	[8.10]	[10.01]	[1.20 lb]	SILVER
CPI-200-40-SA	40mm	209.8	205.6	2.54	0.55 kg	BLUE

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size



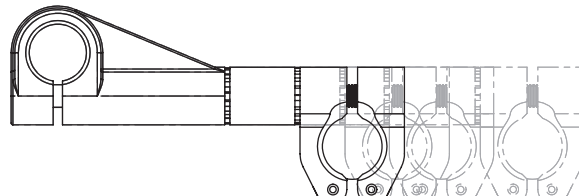
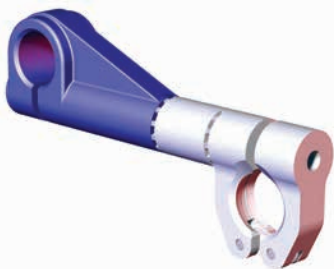
Features:

- Mounts swivel ball accessories to round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Spacer:
Machined Aluminum

SA-B112 Ø25mm/1.00" for Ø28.6mm [1.125"] Spherical Swivel Ball



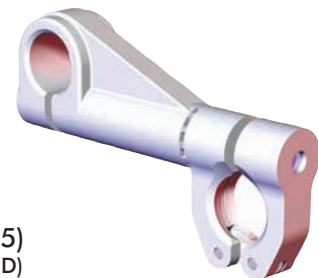
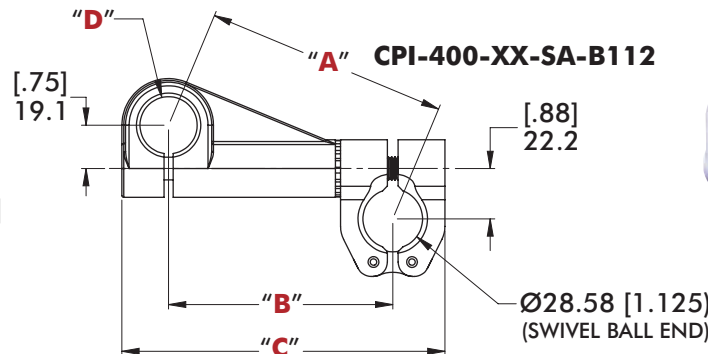
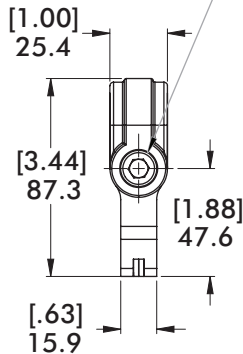
CPI-500-XX-SA-B112

CPI-800-XX-SA-B112

CPI-600-XX-SA-B112

CPI-700-XX-SA-B112

M10 FASTENER



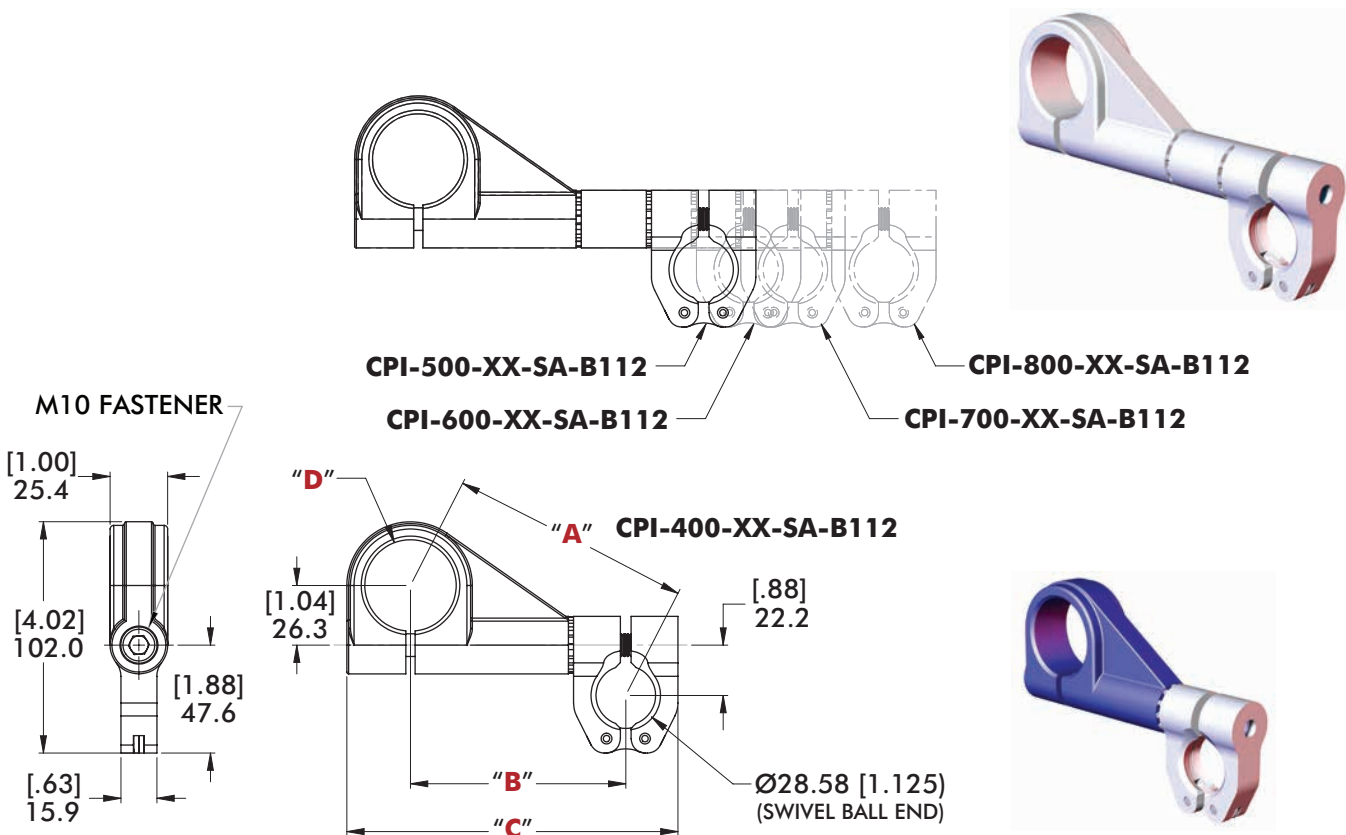
Model Number	(Ø) "D"	"A"	"B"	"C"	Weight	FINISH
CPI-400-1-SA-B112	1.00"(in)	[4.22]	[3.90]	[5.61]	[0.74 lb]	SILVER
CPI-100-25-SA-B112	25mm	107.2	98.9	142.6	0.34 kg	BLUE
CPI-500-1-SA-B112	1.00"(in)	[5.37]	[5.12]	[6.83]	[0.86 lb]	SILVER
CPI-140-25-SA-B112	25mm	136.3	129.9	173.5	0.39 kg	BLUE
CPI-600-1-SA-B112	1.00"(in)	[6.12]	[5.90]	[7.61]	[0.94 lb]	SILVER
CPI-160-25-SA-B112	25mm	155.3	149.7	193.4	0.43 kg	BLUE
CPI-700-1-SA-B112	1.00"(in)	[6.86]	[6.67]	[8.38]	[1.02 lb]	SILVER
CPI-180-25-SA-B112	25mm	174.3	169.3	212.9	0.46 kg	BLUE
CPI-800-1-SA-B112	1.00"(in)	[8.40]	[8.25]	[9.96]	[1.17 lb]	SILVER
CPI-200-25-SA-B112	25mm	213.5	209.4	253.0	0.53 kg	BLUE

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

SA-B112 Ø40mm/1.50" for Ø28.6mm [1.125"] Spherical Swivel Ball



Model Number	(Ø)"D"	"A"	"B"	"C"	Weight	FINISH
CPI-400-15-SA-B112	1.50"(in)	[4.20]	[3.74]	[5.75]	[0.82 lb]	SILVER
CPI-100-40-SA-B112	40mm	106.7	95.0	146.1	0.37 kg	BLUE
CPI-500-15-SA-B112	1.50"(in)	[5.32]	[4.96]	[6.97]	[0.94 lb]	SILVER
CPI-140-40-SA-B112	40mm	135.0	126.0	177.1	0.42 kg	BLUE
CPI-600-15-SA-B112	1.50"(in)	[6.05]	[5.74]	[7.75]	[1.02 lb]	SILVER
CPI-160-40-SA-B112	40mm	153.7	145.8	196.9	0.46 kg	BLUE
CPI-700-15-SA-B112	1.50"(in)	[6.78]	[6.51]	[8.52]	[1.09 lb]	SILVER
CPI-180-40-SA-B112	40mm	172.3	165.4	216.5	0.50 kg	BLUE
CPI-800-15-SA-B112	1.50"(in)	[8.31]	[8.09]	[10.10]	[1.25 lb]	SILVER
CPI-200-40-SA-B112	40mm	211.1	205.5	256.6	0.56 kg	BLUE

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size



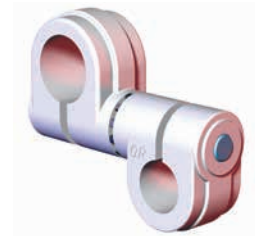
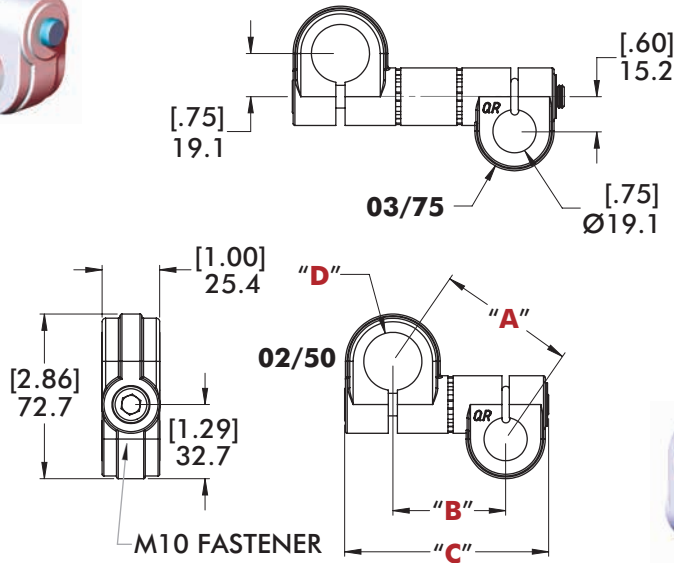
Features:

- Mounts apple core accessories to Ø25mm/1.00" round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Spacer:
Machined Aluminum

SAxx Single-Bolt Ø25mm/1.00" for Ø19.1mm [.75"] Apple Core



Model Number	(Ø)"D"	"A"	"B"	"C"	Weight	FINISH
CPI-SA10-100-075-02	1.00"(in)	[2.38]	[1.96]	[3.54]	[0.46 lb]	SILVER
CPI-SA25-25-19-50	25mm	60.4	49.8	90.0	0.21 kg	BLUE
CPI-SA10-100-075-03	1.00"(in)	[3.31]	[3.02]	[4.72]	[0.57 lb]	SILVER
CPI-SA25-25-19-75	25mm	84.1	76.8	120.0	0.26 kg	BLUE

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

STANDARD SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications



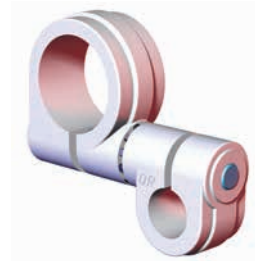
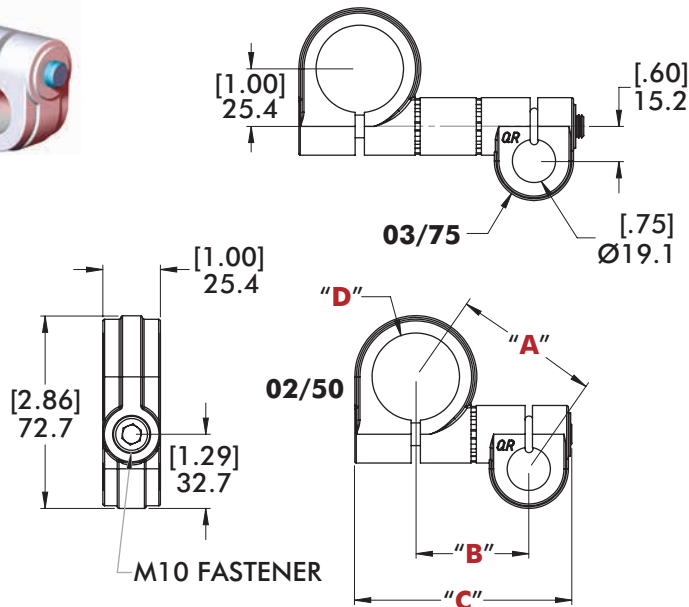
Features:

- Mounts apple core accessories to Ø40mm/1.50" round tube
- Provides 360° of rotational adjustments along (3) axes
- Used to mount venturi, bumpers, round locators, and proximity switches

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Spacer:
Machined Aluminum

SAxx Single-Bolt Ø40mm/1.50" for Ø19.1mm [.75"] Apple Core



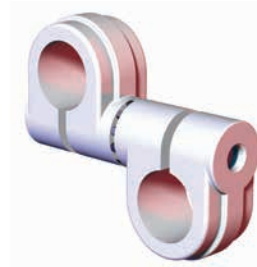
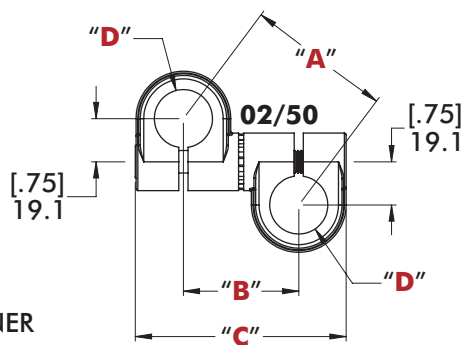
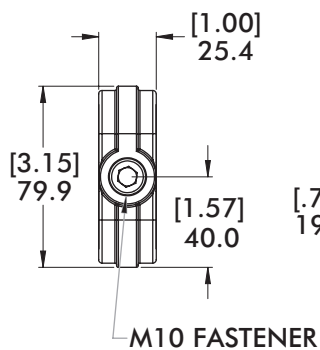
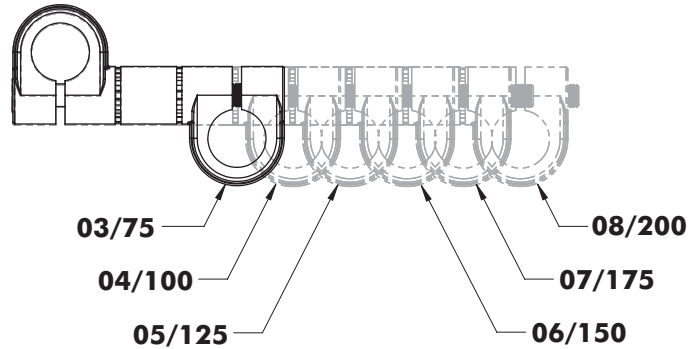
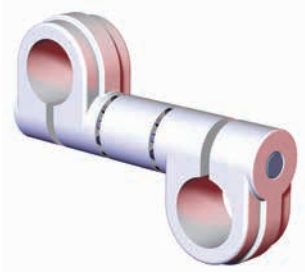
Model Number	(Ø)"D"	"A"	"B"	"C"	Weight	FINISH
CPI-SA10-150-075-02	1.50"(in)	[2.53]	[1.96]	[3.77]	[0.50 lb]	SILVER
CPI-SA25-40-19-50	40mm	64.3	49.8	95.9	0.23 kg	BLUE
CPI-SA10-150-075-03	1.50"(in)	[3.42]	[3.03]	[4.95]	[0.62 lb]	SILVER
CPI-SA25-40-19-75	40mm	87.0	76.9	125.9	0.28 kg	BLUE

TRANSITION SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (\emptyset) given
See chart on Page 72
for actual (\emptyset) size

SAxx Single-Bolt \emptyset 25mm/1.00" to 25mm/ \emptyset 1.00"



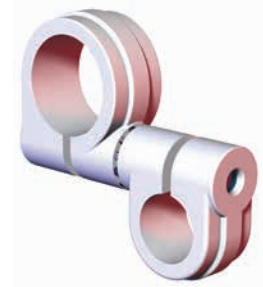
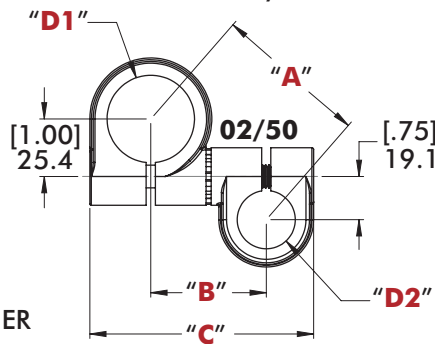
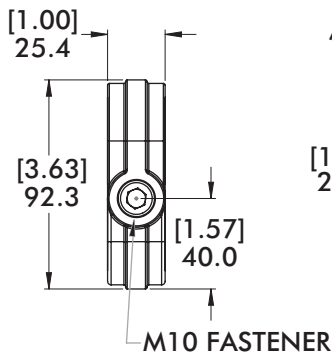
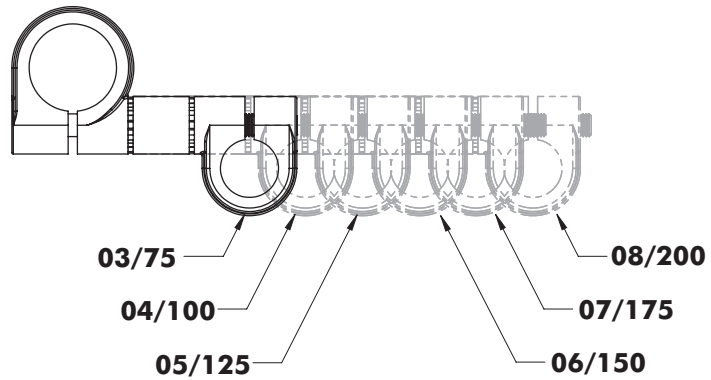
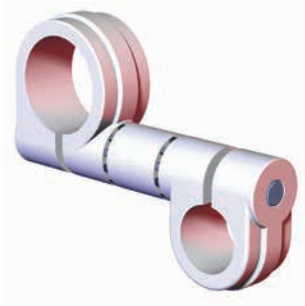
Model Number	(\emptyset) "D"	"A"	"B"	"C"	Weight	FINISH
CPI-SA10-100-100-02	1.00"(in)	[2.50]	[2.00]	[3.66]	[0.49 lb] 0.22 kg	SILVER
CPI-SA25-25-25-50	25mm	63.6	50.9	93.1		BLUE
CPI-SA10-100-100-03	1.00"(in)	[3.42]	[3.07]	[4.73]	[0.60 lb] 0.27 kg	SILVER
CPI-SA25-25-25-75	25mm	86.7	77.9	120.1		BLUE
CPI-SA10-100-100-04	1.00"(in)	[4.31]	[4.04]	[5.70]	[0.69 lb] 0.31 kg	SILVER
CPI-SA25-25-25-100	25mm	109.6	102.7	144.9		BLUE
CPI-SA10-100-100-05	1.00"(in)	[5.25]	[5.03]	[6.69]	[0.79 lb] 0.36 kg	SILVER
CPI-SA25-25-25-125	25mm	133.4	127.9	170.0		BLUE
CPI-SA10-100-100-06	1.00"(in)	[6.21]	[6.02]	[7.68]	[0.88 lb] 0.40 kg	SILVER
CPI-SA25-25-25-150	25mm	157.7	153.0	195.2		BLUE
CPI-SA10-100-100-07	1.00"(in)	[7.16]	[7.00]	[9.06]	[1.00 lb] 0.45 kg	SILVER
CPI-SA25-25-25-175	25mm	181.9	177.9	230.0		BLUE
CPI-SA10-100-100-08	1.00"(in)	[8.13]	[7.99]	[9.84]	[1.09 lb] 0.50 kg	SILVER
CPI-SA25-25-25-200	25mm	206.6	203.0	250.0		BLUE

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

TRANSITION SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

SAxx Single-Bolt Ø40mm/1.50" to Ø25mm/1.00"



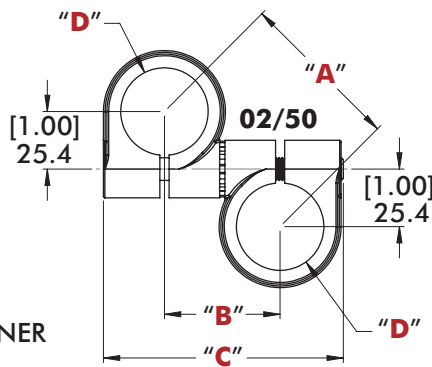
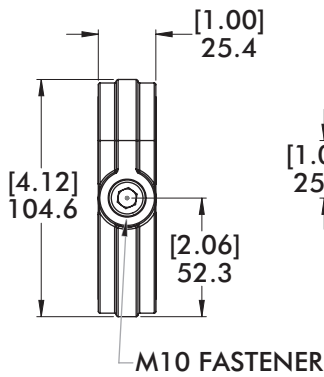
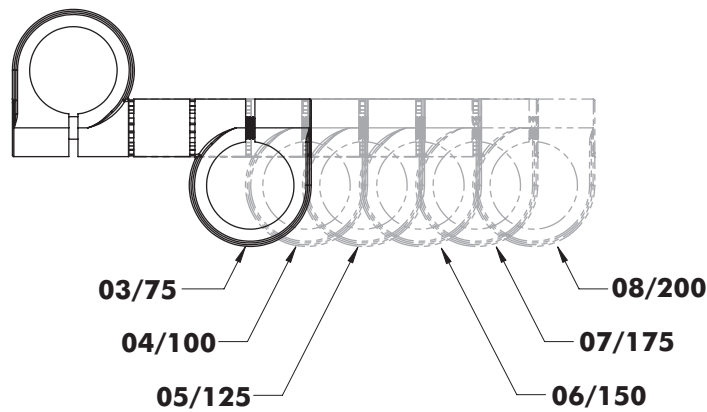
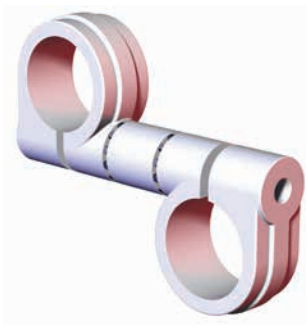
Model Number	(Ø)"D1"	(Ø)"D2"	"A"	"B"	"C"	Weight	FINISH
CPI-SA10-150-100-02	1.50"(in)	1.00"(in)	[2.66]	[2.01]	[3.89]	[0.53 lb]	SILVER
CPI-SA25-40-25-50	40mm	25mm	67.6	51.0	98.8	0.24 kg	BLUE
CPI-SA10-150-100-03	1.50"(in)	1.00"(in)	[3.53]	[3.07]	[4.95]	[0.64 lb]	SILVER
CPI-SA25-40-25-75	40mm	25mm	89.8	78.0	125.7	0.29 kg	BLUE
CPI-SA10-150-100-04	1.50"(in)	1.00"(in)	[4.41]	[4.05]	[5.93]	[0.73 lb]	SILVER
CPI-SA25-40-25-100	40mm	25mm	112.0	102.8	150.6	0.33 kg	BLUE
CPI-SA10-150-100-05	1.50"(in)	1.00"(in)	[5.33]	[5.04]	[6.92]	[0.83 lb]	SILVER
CPI-SA25-40-25-125	40mm	25mm	135.4	127.9	175.8	0.38 kg	BLUE
CPI-SA10-150-100-06	1.50"(in)	1.00"(in)	[6.28]	[6.03]	[7.91]	[0.93 lb]	SILVER
CPI-SA25-40-25-150	40mm	25mm	159.4	153.1	200.9	0.42 kg	BLUE
CPI-SA10-150-100-07	1.50"(in)	1.00"(in)	[7.22]	[7.01]	[8.89]	[1.04 lb]	SILVER
CPI-SA25-40-25-175	40mm	25mm	183.4	178.0	225.8	0.47 kg	BLUE
CPI-SA10-150-100-08	1.50"(in)	1.00"(in)	[8.19]	[8.00]	[9.88]	[1.13 lb]	SILVER
CPI-SA25-40-25-200	40mm	25mm	207.9	203.1	251.0	0.51 kg	BLUE

TRANSITION SWIVEL ARMS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

SAxx Single-Bolt Ø40mm/1.50" to Ø40mm/1.50"



Model Number	(Ø) "D"	"A"	"B"	"C"	Weight	FINISH
CPI-SA10-150-150-02	1.50"(in)	[2.84]	[2.01]	[4.17]	[0.59 lb]	SILVER
CPI-SA25-40-40-50	40mm	72.0	51.1	105.9	0.27 kg	BLUE
CPI-SA10-150-150-03	1.50"(in)	[3.67]	[3.07]	[5.19]	[0.69 lb]	SILVER
CPI-SA25-40-40-75	40mm	93.2	78.1	131.9	0.31 kg	BLUE
CPI-SA10-150-150-04	1.50"(in)	[4.52]	[4.05]	[6.17]	[0.79 lb]	SILVER
CPI-SA25-40-40-100	40mm	114.7	102.9	156.7	0.36 kg	BLUE
CPI-SA10-150-150-05	1.50"(in)	[5.42]	[5.04]	[7.16]	[0.88 lb]	SILVER
CPI-SA25-40-40-125	40mm	137.7	128.0	181.9	0.40 kg	BLUE
CPI-SA10-150-150-06	1.50"(in)	[6.35]	[6.03]	[8.15]	[0.97 lb]	SILVER
CPI-SA25-40-40-150	40mm	161.4	153.2	207.0	0.44 kg	BLUE
CPI-SA10-150-150-07	1.50"(in)	[7.29]	[7.01]	[9.13]	[1.09 lb]	SILVER
CPI-SA25-40-40-175	40mm	185.2	178.1	231.9	0.49 kg	BLUE
CPI-SA10-150-150-08	1.50"(in)	[8.25]	[8.00]	[10.12]	[0.54 lb]	SILVER
CPI-SA25-40-40-200	40mm	209.5	203.2	257.0	1.18 kg	BLUE

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

SINGLE END EXTENSIONS

Round Tooling | Dimensions | Technical Specifications

ES Rod End and Mounting Extensions

Features:

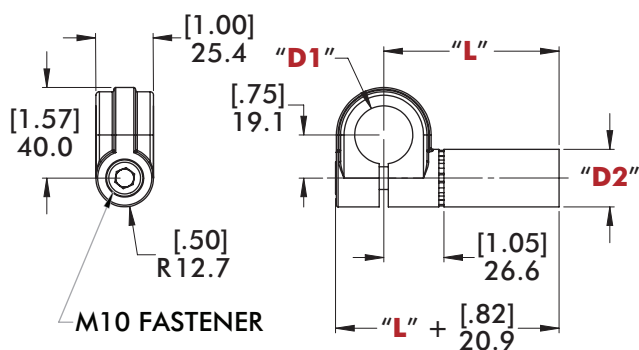
- Mounts to round tube for extended mounting options
- Provides 360° of rotational adjustments along a single axis

Specifications:

Maximum Clamp Load:
200 ft-lb [271 Nm]
Material:
Body:
Cast Aluminum
Extension:
Machined Aluminum



ES Ø25mm/1.00" Rod End Extensions



"L" = Specify Length from Below

English Lengths:

From **03**(3.00") to **28**(28.00")
in 1.00" Increments

Order Example

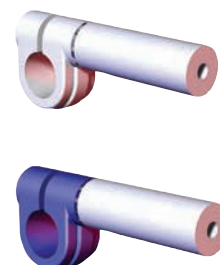
CPI-ES10-100-06 (6.00" Length)

Metric Lengths:

From **50**(50mm) to **400**(400mm)
in 50mm Increments

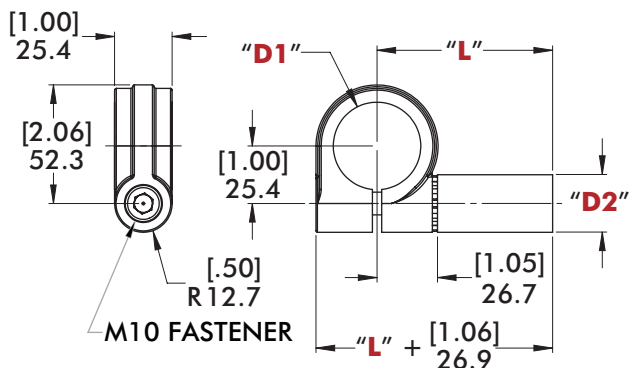
Order Example

CPI-ES25-25-250 (250mm Length)



Model Number	(Ø)"D1"	(Ø)"D2"	Weight (Base + Additional Increments)	FINISH
CPI-ES10-100-"L"	1.00"(in)	1.00"(in)	Base Length "L" 03 = 0.19 kg [0.42 lb] Add .031 kg [.068 lb] per additional increment	SILVER
CPI-ES25-25-"L"	25mm	25mm	Base Length "L" 100 = 0.22 kg [0.49 lb] Add .061 kg [.134 lb] per additional increment	BLUE

ES Ø40mm/1.50" Rod End Extensions



"L" = Specify Length from Below

English Lengths:

From **03**(3.00") to **28**(28.00")
in 1.00" Increments

Order Example

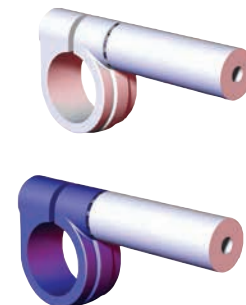
CPI-ES10-150-06 (6.00" Length)

Metric Lengths:

From **50**(50mm) to **400**(400mm)
in 50mm Increments

Order Example

CPI-ES25-40-250 (250mm Length)



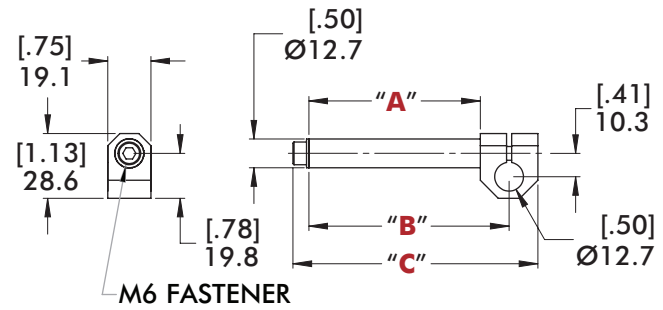
Model Number	(Ø)"D1"	(Ø)"D2"	Weight (Base + Additional Increments)	FINISH
CPI-ES10-150-"L"	1.50"(in)	1.00"(in)	Base Length "L" 03 = 0.21 kg [0.46 lb] Add .031 kg [.068 lb] per additional increment	SILVER
CPI-ES25-40-"L"	40mm	25mm	Base Length "L" 100 = 0.23 kg [0.51 lb] Add .061 kg [.134 lb] per additional increment	BLUE

SINGLE END EXTENSIONS

Round Tooling | Dimensions | Technical Specifications

Nominal (Ø) given
See chart on Page 72
for actual (Ø) size

MSE Ø12.7mm [.50"] Extension (Micro)



Model Number	"A"	"B"	"C"	Weight
CPI-MSE-50-50-03	[2.98] 75.6	[3.48] 88.3	[4.25] 108.1	[0.14 lb] 0.06 kg
CPI-MSE-50-50-06	[5.73] 145.5	[6.23] 158.2	[7.00] 177.9	[0.20 lb] 0.09 kg

Mounting End
Extensions
CPI-ES10-075-06
(Shown Above)

ES Ø25mm/1.00" Extension for Ø19.1mm [.75"] Apple Core

"L" = Specify Length from Below

English Lengths:

From **03**(3.00") to **28**(28.00")
in 1.00" Increments

Order Example

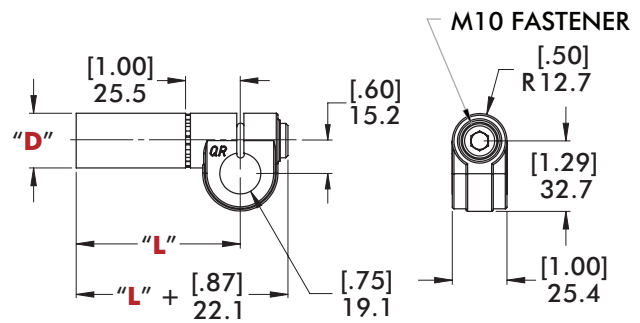
CPI-ES10-075-06 (6.00" Length)

Metric Lengths:

From **50**(50mm) to **400**(400mm)
in 50mm Increments

Order Example

CPI-ES25-19-250 (250mm Length)



Model Number	(Ø)"D"	Weight (Base + Additional Increments)	FINISH
CPI-ES10-075-"L"	1.00"(in)	Base Length "L" 03 = 0.17 kg [0.38 lb] Add .031 kg [.068 lb] per additional increment	SILVER
CPI-ES25-19-"L"	25mm	Base Length "L" 100 = 0.22 kg [0.49 lb] Add .031 kg [.068 lb] per additional increment	BLUE

ESxx Ø25mm/1.00" Extension for Ø28.6mm [1.125"] Spherical Swivel Ball

"L" = Specify Length from Below

English Lengths:

From **03**(3.00") to **18**(18.00")
in 1.00" Increments

Order Example

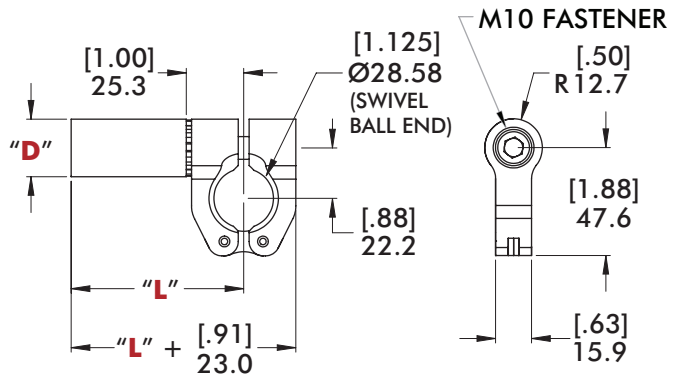
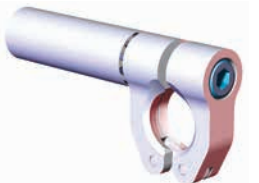
CPI-ES10-B112-06 (6.00" Length)

Metric Lengths

From **50** (50mm) to **400**(400mm)
in 25mm Increments

Order Example

CPI-ES25-B112-75 (75mm Length)

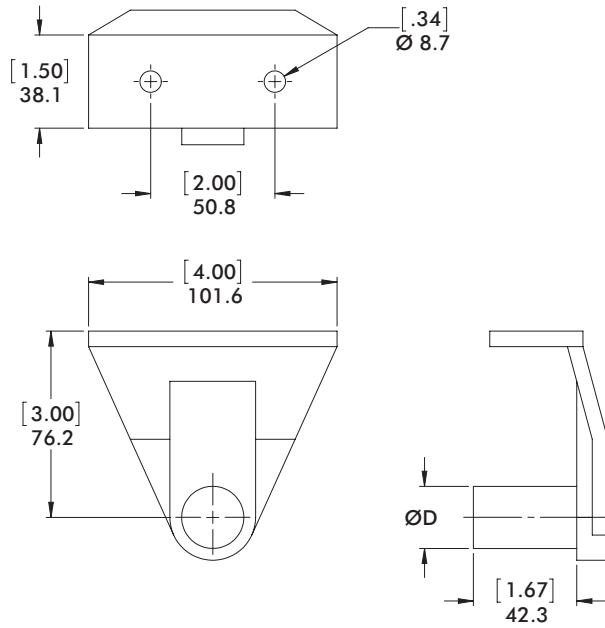


Model Number	(Ø)"D"	Weight (Base + Additional Increments)	FINISH
CPI-ES10-B112-"L"	1.00"(in)	Base Length "L" 03 = 0.23 kg [0.51 lb] Add .031 kg [.068 lb] per additional increment	SILVER
CPI-ES25-B112-"L"	25mm	Base Length "L" 100 = 0.23 kg [0.51 lb] Add .029 kg [.064 lb] per additional increment	BLUE

NEST PAD BRACKETS

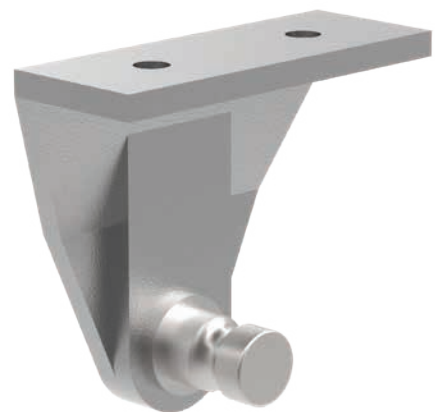
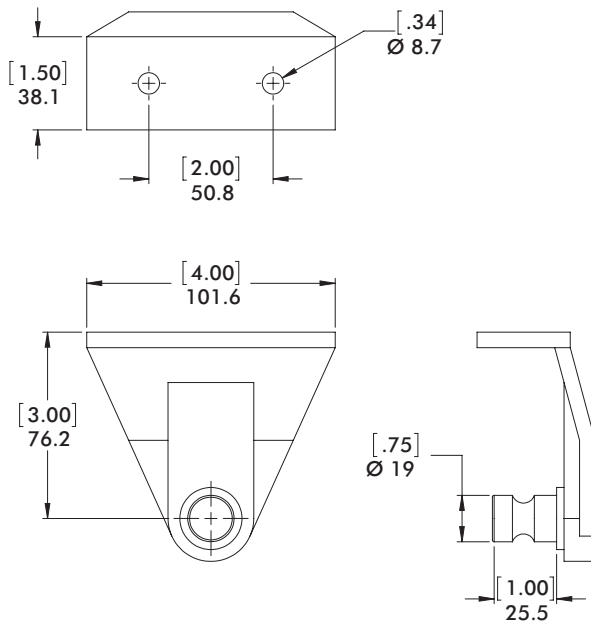
Round Tooling | Dimensions | Technical Specifications

EST



Model Number	ØD	Weight
CPI-EST-00-1E-24	1 in	142 g [5 oz.]
CPI-EST-00-25-410	25mm	142 g [5 oz.]

EST Apple Core Version

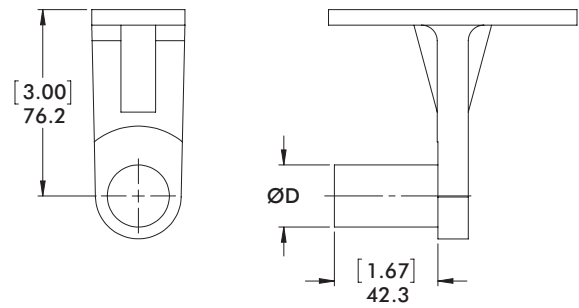
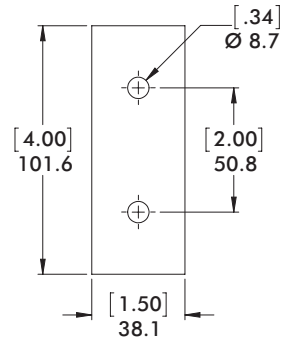


Model Number	Weight
CPI-EST-00-075-24	142 g [5 oz.]
CPI-EST-00-19-410	142 g [5 oz.]

NEST PAD BRACKETS

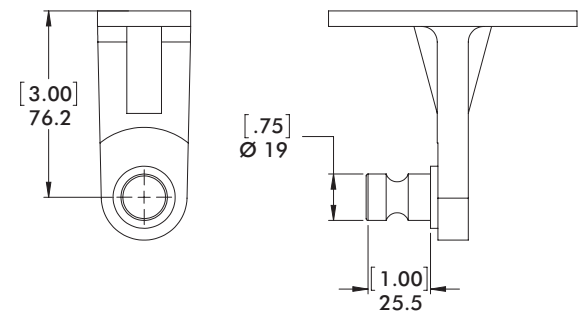
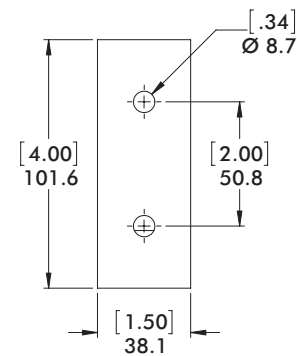
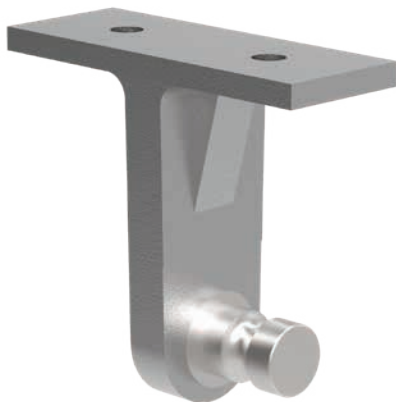
Round Tooling | Dimensions | Technical Specifications

EST 90° Version



Model Number	$\varnothing D$	Weight
CPI-EST-90-1E-24	1 in	142 g [5 oz.]
CPI-EST-90-25E-410	25mm	142 g [5 oz.]

EST Apple Core 90° Version

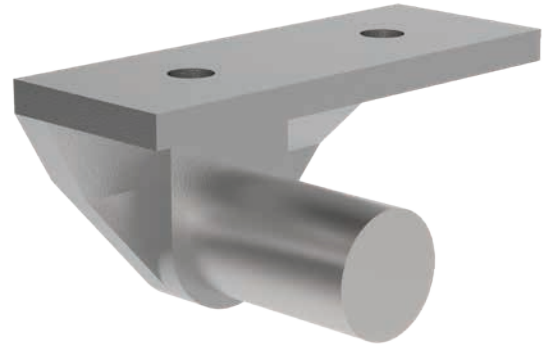
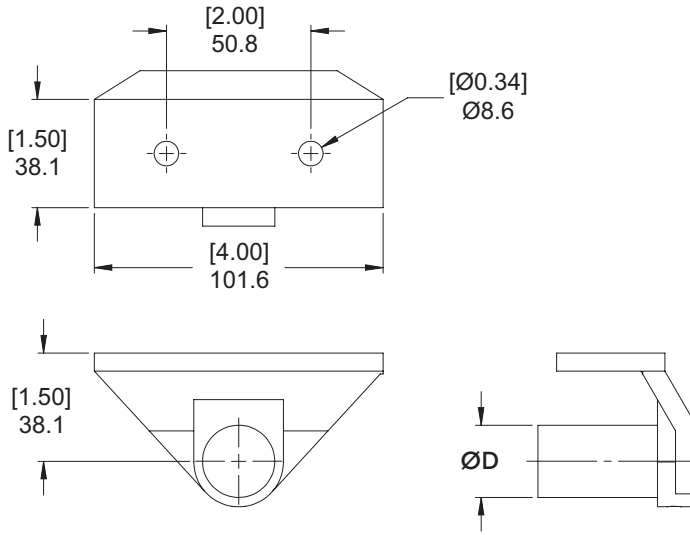


Model Number	Weight
CPI-EST-90-075-24	142 g [5 oz.]
CPI-EST-90-19-410	142 g [5 oz.]

NEST PAD BRACKETS

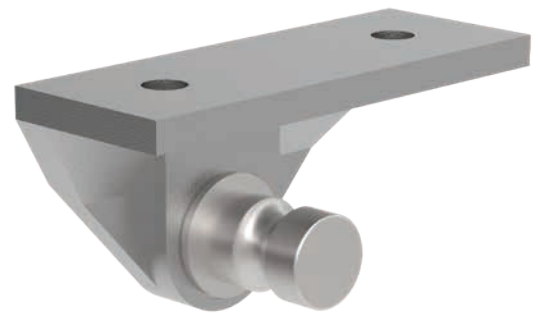
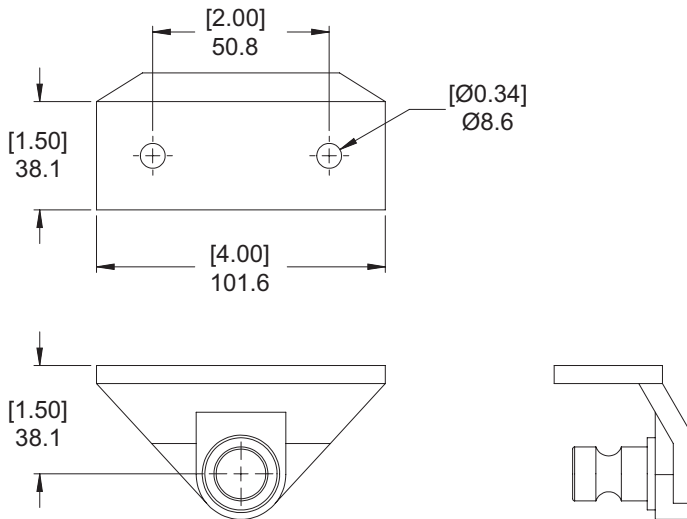
Round Tooling | Dimensions | Technical Specifications

AB Version



Model Number	$\varnothing D$	Weight
CPI-AB-00-1E-24	1 in	142 g [5 oz.]
CPI-AB-25-410	25mm	142 g [5 oz.]

AB Apple Core Version

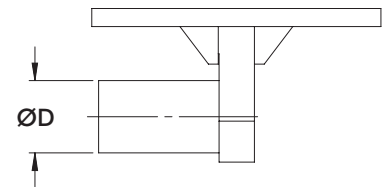
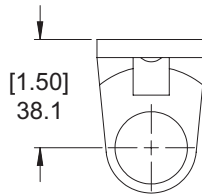
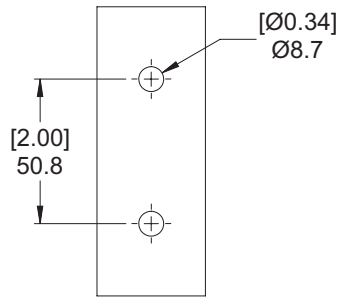


Model Number	Weight
CPI-AB-750-24	142 g [5 oz.]
CPI-AB-19-410	142 g [5 oz.]

NEST PAD BRACKETS

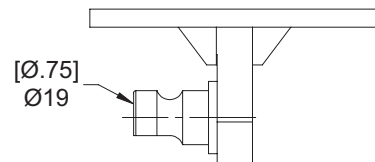
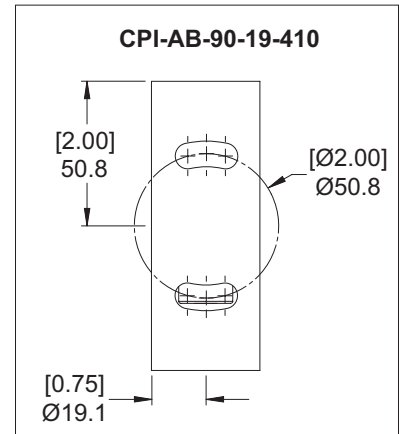
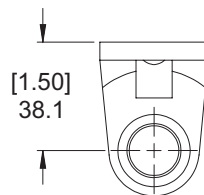
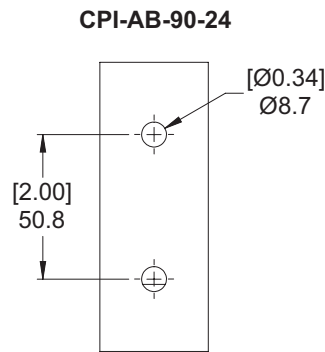
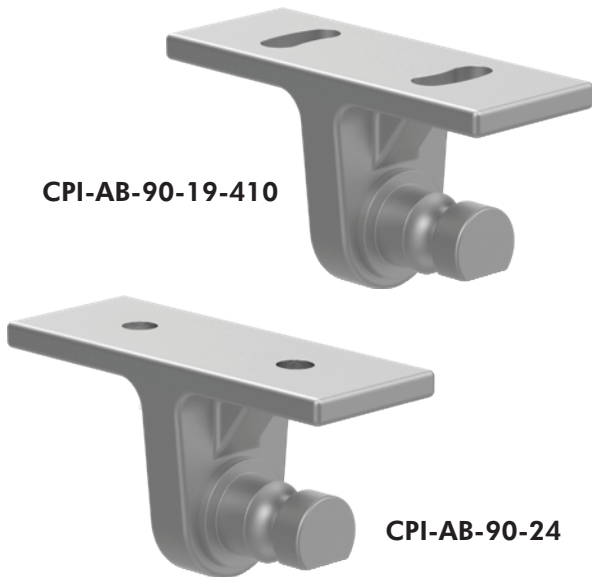
Round Tooling | Dimensions | Technical Specifications

AB 90° Version



Model Number	ØD	Weight
CPI-AB-90-1E-24	1 in	142 g [5 oz.]
CPI-AB-90-25-410	25mm	142 g [5 oz.]

AB Apple Core 90° Version

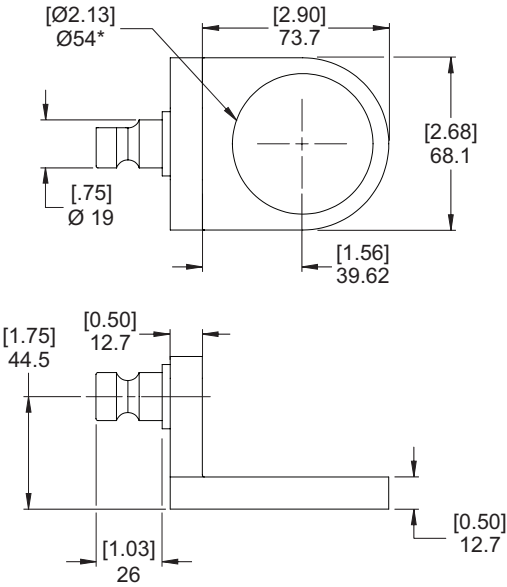
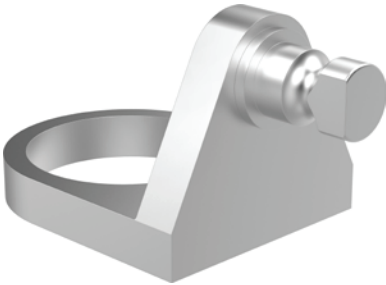


Model Number	Weight
CPI-AB-90-24	142 g [5 oz.]
CPI-AB-90-19-410	142 g [5 oz.]

PROXIMITY SWITCH MOUNT

Round Tooling | Dimensions | Technical Specifications

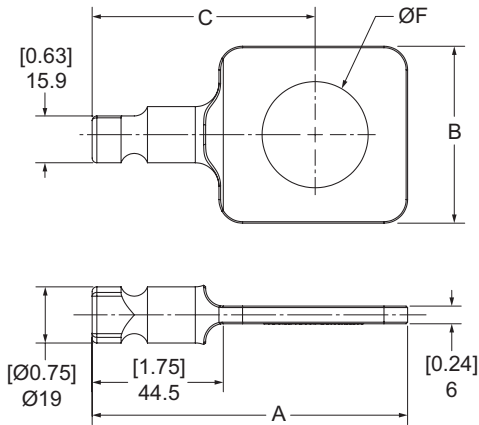
SAP Series with Apple Core



Model Number	Weight
CPI-SAP-54	[0.3 lb] 136 g

*Nominal Sensor Diameter

BGA Series with Apple Core

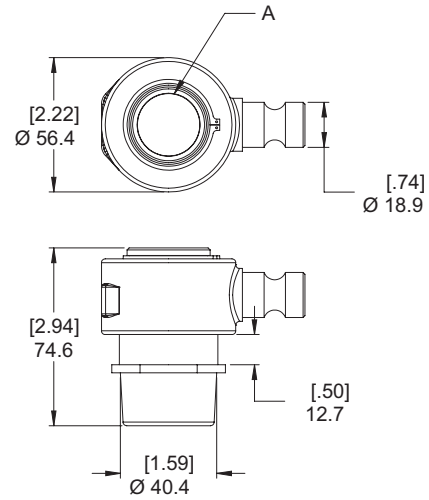


Model Number	A	B	C	(Ø)"F"*	Weight
GT-BGA-750-10M				[0.39] 10	[0.13 lb] 57.5 g
GT-BGA-750-18M	[3.58] 91	[1.57] 40	[2.66] 67.6	[0.71] 18	[0.12 lb] 54.7 g
GT-BGA-750-30M				[1.18] 30	[0.10 lb] 47.2 g
GT-BGA-750-36M				[1.42] 36	[0.16 lb] 73.2 g
GT-BGA-750-42M	[4.21] 107	[2.36] 60	[2.98] 75.6	[1.65] 42	[0.15 lb] 67.3 g
GT-BGA-750-47M	[4.37] 111	[2.68] 68	[3.06] 77.6	[1.85] 47	[0.16 lb] 74.3 g

PROXIMITY SWITCH BUMPER

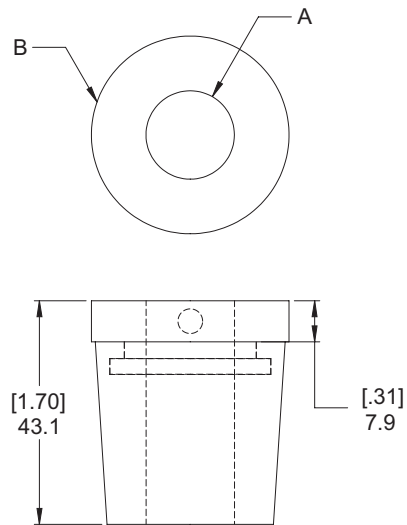
Round Tooling | Dimensions | Technical Specifications

PSM Spring Loaded Bumper



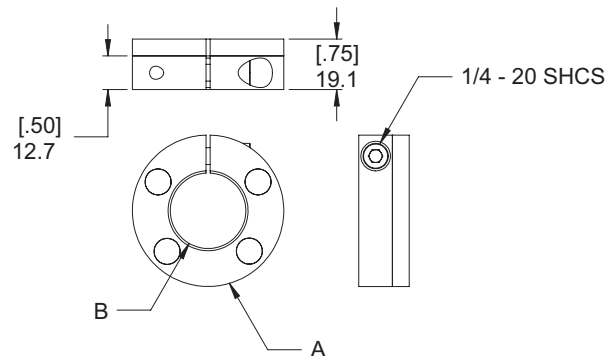
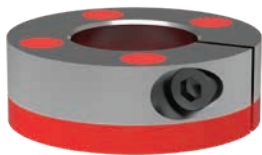
Model Number	(Ø) "A"	Weight
CPI-PSM-18-75	[18] 0.71"	[7 oz.] 198 g
CPI-PSM-30-75	[30] 1.18"	[7 oz.] 198 g

PB Friction Style Bumper



Model Number	(Ø) "A"	(Ø) "B"	Weight
CPI-PB-18-I	[18] 0.71	[38.1] 1.50	[2 oz.] 57 g
CPI-PB-30-I	[30] 1.18	[50.8] 2.00	[3 oz.] 85 g

PB Locking Collar Style Bumper

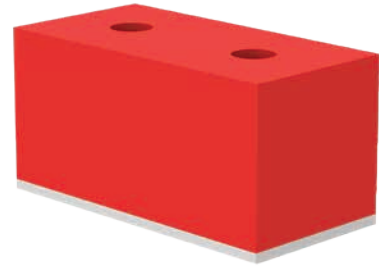
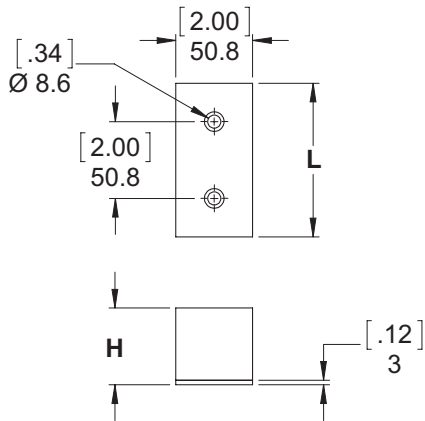


Model Number	(Ø) "A"	(Ø) "B"	Weight
CPI-PB-30M	[57.2] 2.25	[30] 1.18	[3 oz.] 85 g
CPI-PB-36M	[63.5] 2.50	[36] 1.42	[3 oz.] 85 g
CPI-PB-42M	[69.9] 2.75	[42] 1.65	[4 oz.] 113 g
CPI-PB-47M	[76.2] 3.00	[47] 1.85	[5 oz.] 141 g
CPI-PB-54M	[85.9] 3.38	[54] 2.13	[5 oz.] 141 g

NEST PAD BLOCKS

Round Tooling | Dimensions | Technical Specifications

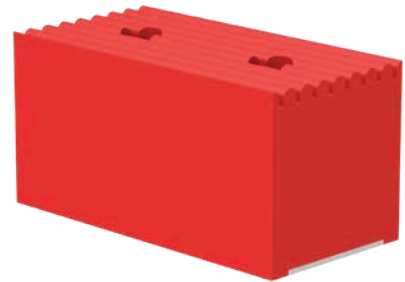
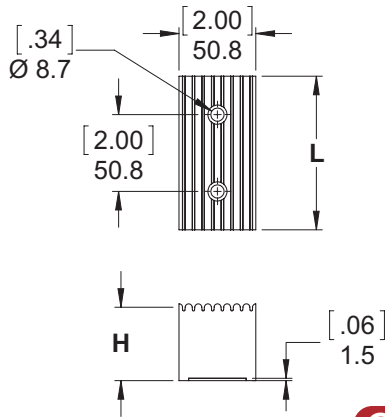
Urethane Pads



85 Durometer (Shore A) Urethane

Model	"H"	"L"	Weight
CPI-UT-1-4-85	1.00"(in)	4.00"(in)	9oz. [255g]
CPI-UT-2-4-85	2.00"(in)	4.00"(in)	14oz. [397g]
CPI-UT-2-6-85	2.00"(in)	6.00"(in)	19oz. [539g]

Ribbed Pads Neoprene

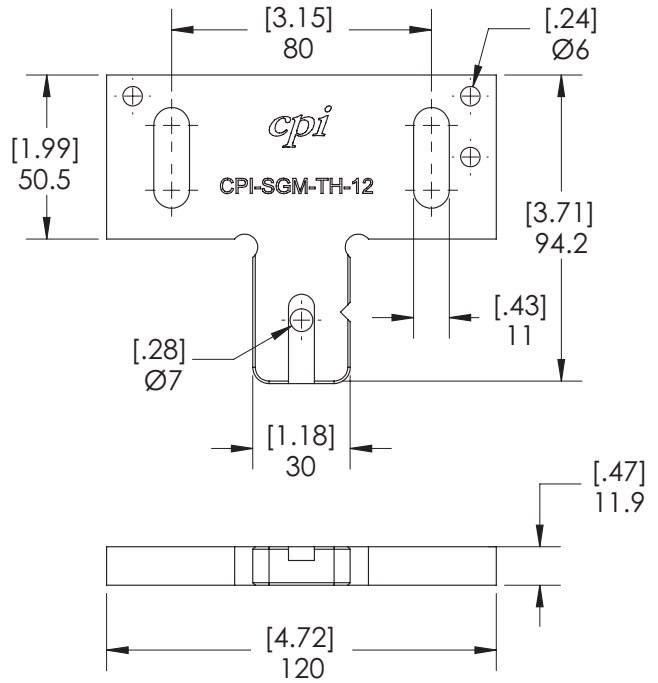
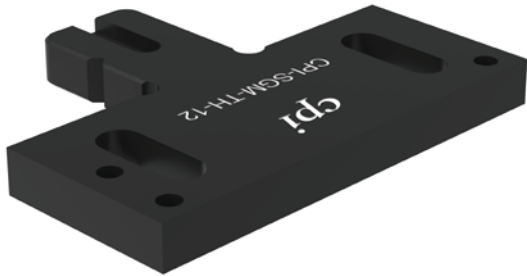


Base Model	Overall Height	Length			Durometer			
RT	H	L			(Shore A)			
Ribbed Pads	1/2	0.50"	12.7 mm	4	4.00"	101.6 mm	15	Tan
Neoprene	1	1.00"	25.4 mm	6	6.00"	152.4 mm	30	Teal
	2	2.00"	50.8 mm	8	8.00"	203.2 mm	45	Red
	3	3.00"	76.2 mm	12	12.00"	304.8 mm	60	Black
	4	4.00"	101.6 mm					

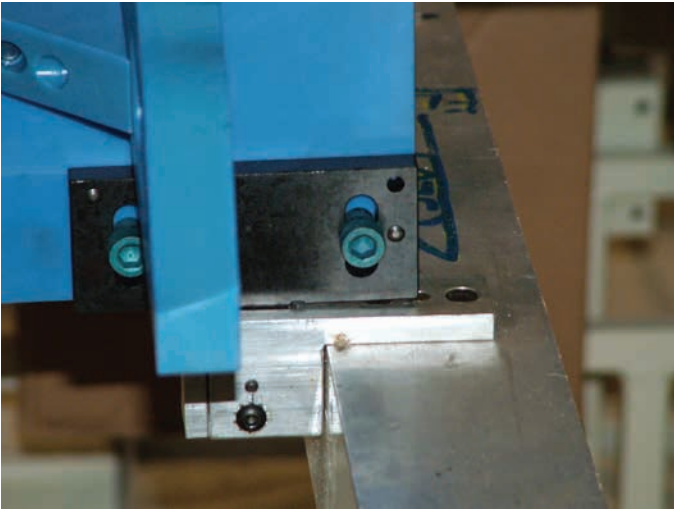
		Length															
		4				6				8				12			
Durometer >		15	30	45	60	15	30	45	60	15	30	45	60	15	30	45	60
Overall Height	1/2					●	●	●	●	●	●	●	●				
	1	●				●		●	●	●			●	●		●	
	2	●				●				●			●				
	3				●			●	●	●	●	●	●				●
	4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

PLASTICS - BLUE SLICE

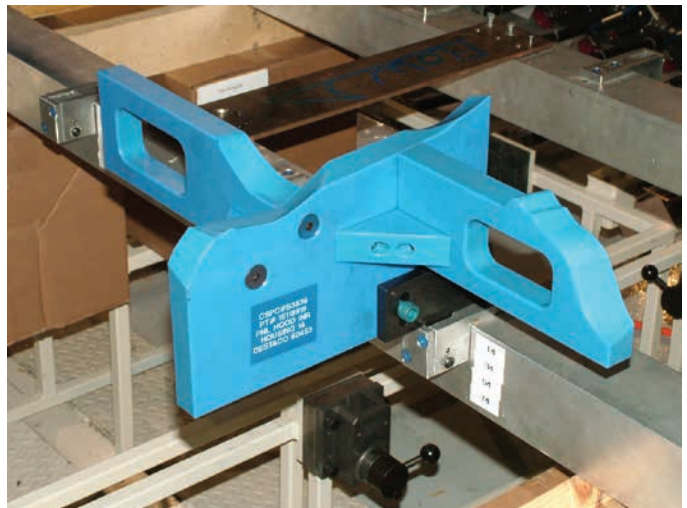
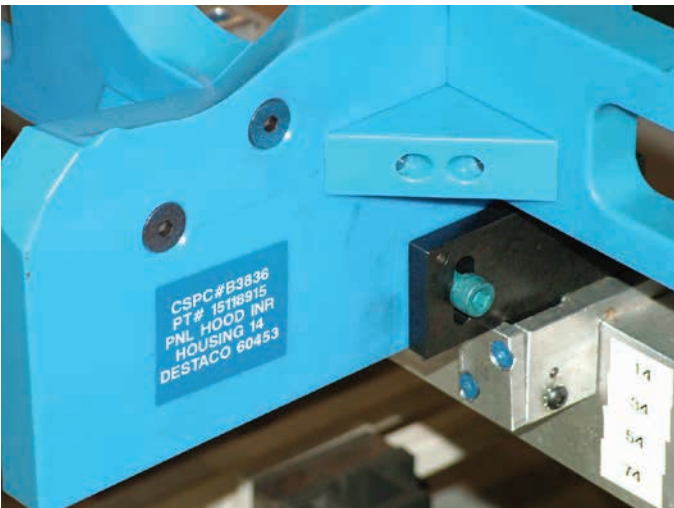
Round Tooling | Dimensions | Technical Specifications



Model Number	Material	Weight
CPI-SGM-TH-12	Steel	604g [1.33 lb]



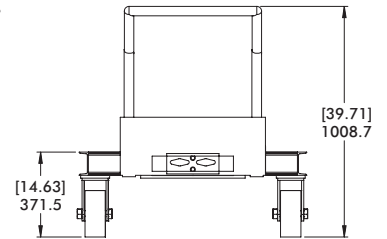
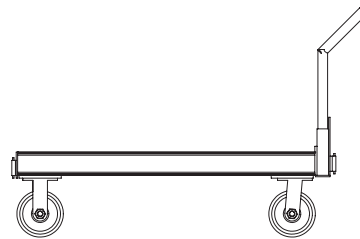
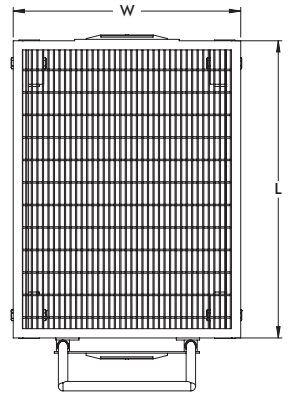
Name: Blue Slice Nest Tooling
Material: Blue Nylon, 1" (25.4mm) thickness
Benefits: Lightweight, durable, machinable material
Process: Machined from 3D CAD



TOOL STORAGE

Round Tooling | Dimensions | Technical Specifications

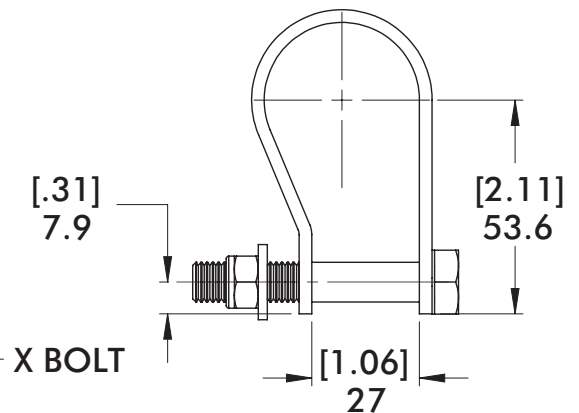
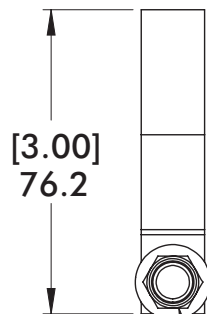
Tool Storage Cart



CPI - TC - [] - [] - DP - FP

Base Model	Width			Length		
TC	36	36.00"	0.9 m	48	48.00"	1.2 m
Tool Storage Carts	48	48.00"	1.2 m	60	60.00"	1.5 m
				72	72.00"	1.8 m
				84	84.00"	2.1 m
				96	96.00"	2.4 m

Tool Hanger



Material: Steel

Model Number	Weight
CPI-THR-516	91g [0.20 lb]

TOOL STORAGE

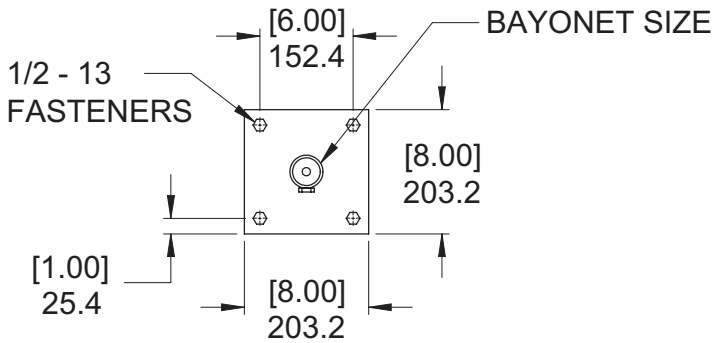
Round Tooling | Dimensions | How To Order

Tool Holder Strap

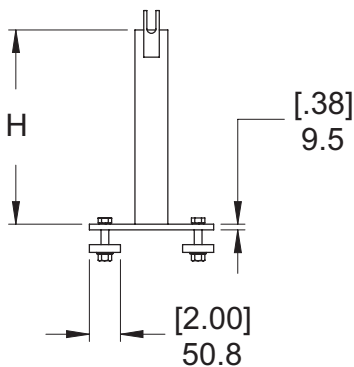


Model Number	Weight
CPI-SGM-TH-CABLE-08	68g [0.15 lb]

Tool Storage Can









Material: Steel



Base Model	Bayonet Size		Height			
TH	150	1.5"	40 mm	6.5	6.5"	165 mm
Tool Holder	250	2.5"	60 mm	12.5	12.5"	318 mm
				18.5	18.5"	470 mm

VACUUM SOLUTIONS

Table of Contents

	Vacuum Cups.....	3
	Magnets.....	28
	Vacuum Generation	31
	Spring Cup Mounts	37
	Double Blank Detector Mounts	43
	Manifolds.....	49

VACUUM PRODUCTS

DESTACO vacuum cups can be ordered in different types, sizes, materials and durometers to be used in a broad array of applications, ranging from sheet metal handling to plastics to glass.



DESTACO also provides vacuum cups for extreme temperatures and hot-forming applications

EcoCup™ is the world's first electric vacuum cup, creating vacuum without air. The EcoCup™ is ideal for pick-and-place applications of flat, rigid, non-porous parts, including plastic, glass, and other consumer goods with smooth, flat surfaces.



ARV®

ARV® The original, patented Auto-Release Venturi offers users the fastest vacuum and blow-off in the industry with single line operation, integrated blow-off and standard silencer.

Destacker Double Blank Detectors (DBD) allows compliance to blanks within $\pm 15^\circ$ without needing to adjust the robot, automation or tooling.



NITRILE VACUUM CUPS

Vacuum Products | Families and Features

Round Destacker Vacuum Cup

- Designed specifically for pogo-style destacking applications.
- High compressive-strength and shock-resistance extends cup life.
- High vertical lifting capacity prior to part release.
- Provides low-impact part release during pull-off by utilizing the patented stress relief port.



Round Traction Vacuum Cups

- For applications with slick/oily surfaces or for destackers.
- Internal cleats holds part more securely in high speed applications.
- Bellows add flexibility for minor misalignments.



Round Flatfoot Vacuum Cups

- For applications with flat to medium curvature and dry to medium slick/oily surfaces.
- Cleats provide full support to prevent damage to thin outer panels.
- Maximizes lifting capacity and minimizes slip.



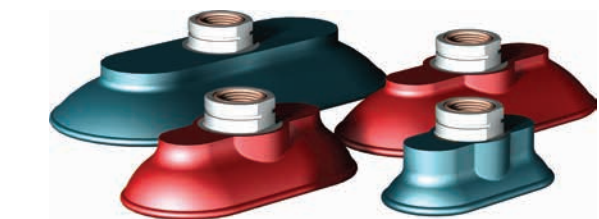
Round Belcup Vacuum Cups

- For applications with flat to mild contoured surfaces.
- Bellows add flexibility for minor misalignments.
- Ideal for general purpose.



Round Deepdish Vacuum Cups

- For applications with contoured surfaces.
- Thin lip wraps and seals curved surfaces tightly.
- Bell structure and internal design works best on materials with convex surfaces.



Oval Flatfoot Vacuum Cups

- For applications with medium slick/oily to dry surfaces.
- Oval shape maximizes contact on narrow panels and maximizes vertical lifting capacity.
- Cleats provide full support to prevent damage to thin outer panels.



Oval Deepdish Vacuum Cups

- For applications with contoured surfaces as well as wet or oily surfaces.
- Oval shape maximizes contact on narrow panels and bell structure works well on materials with convex surfaces.

POLYURETHANE VACUUM CUPS

Vacuum Products | Families and Features



Round Bellows Vacuum Cups

- For applications with slick/oily surfaces or for destackers
- Bellows add flexibility for minor misalignments
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)
- Optional TCT (Triple durometer) style cup offers extra soft internal cleat to eliminate possible dimples on thin sheet metal



Round Flat Foot Vacuum Cups

- Works well on flat to slightly contoured parts
- Maximizes lifting capacity and minimizes slip
- Excellent for transverse loads with high acceleration and deceleration applications
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)



Round Deepdish Vacuum Cups

- Interchangeable with existing/competitor vacuum cups
- New bell shape design is excellent for highly contoured surfaces
- Optional lightweight plastic mount available
- Designed to handle higher acceleration/deceleration speeds
- Shape and design offers better transverse loading



Oval Bellows Vacuum Cups

- Works well on flat and contoured parts
- Maximum lifting capacity where limited space is available
- Bellows add flexibility for minor misalignments
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)











Oval Flat Foot Vacuum Cups

- Works well on flat to slightly contoured parts.
- Long oval shape maximizes contact on narrow surfaces
- Cleats provide full support to prevent damage to thin outer panel
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)

CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | Application, Characteristics and Usage Chart for Vacuum Cups






Nitrile Vacuum Cups		DESTACKER APPLICATION	FLAT CONTOURS	MILD CONTOURS	HIGH CONTOURS	SLICK/OILY SURFACES	DRY SURFACES	HOT FORMING	Application Direction
 <p>Covered under one or more U.S./International Patents</p> <p>Destacker Vacuum Cups</p>		5	5	N/A	N/A	3	5	N/A	VERTICAL
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	HORIZONTAL
 <p>Round Traction Vacuum Cups</p>		4	5	4	2	5	5	N/A	VERTICAL
		N/A	5	3	1	5	5	N/A	HORIZONTAL
 <p>Round Flatfoot Vacuum Cups</p>		4	4	5	3	4	4	N/A	VERTICAL
		N/A	4	5	3	4	4	N/A	HORIZONTAL
 <p>Round Belcup Vacuum Cups</p>		4	5	4	2	3	4	N/A	VERTICAL
		N/A	3	3	1	2	4	N/A	HORIZONTAL
 <p>Round Deepdish Vacuum Cups</p>		1	1	3	5	3	3	N/A	VERTICAL
		N/A	1	3	5	3	3	N/A	HORIZONTAL
 <p>Oval Deepdish Vacuum Cups</p>		1	3	4	2	4	3	N/A	VERTICAL
		N/A	3	4	2	3	3	N/A	HORIZONTAL
 <p>Oval Flatfoot Vacuum Cups</p>		3	4	3	1	4	4	N/A	VERTICAL
		N/A	4	3	1	3	4	N/A	HORIZONTAL
 <p>Hot Forming Vacuum Cups</p>		3	3	2	1	3	4	5	VERTICAL
		N/A	3	2	1	2	3	5	HORIZONTAL

Worst Cup for the Job **1** **2** **3** **4** **5** Best Cup for the Job **N/A** Not Advised for the application

This chart is a guide to aid in selecting the right family of cup for general surfaces, contours, and applications.

CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | Application, Characteristics and Usage Chart for Vacuum Cups

Polyurethane Vacuum Cups		DESTACKER APPLICATION	FLAT CONTOURS	MILD CONTOURS	HIGH CONTOURS	SLICK OILY SURFACES	DRY SURFACES	HOT FORMING	Application Direction
		4	5	4	2	5	5	N/A	VERTICAL
	Round Bellows Vacuum Cups	N/A	5	3	1	5	5	N/A	HORIZONTAL
		4	4	5	2	4	5	N/A	VERTICAL
	Round Flat Foot Vacuum Cups	N/A	4	5	2	4	5	N/A	HORIZONTAL
		3	4	5	5	4	5	N/A	VERTICAL
	Round Deepdish Vacuum Cups	3	4	5	5	4	5	N/A	HORIZONTAL
		3	4	4	2	4	5	N/A	VERTICAL
	Oval Bellows Vacuum Cups	N/A	4	3	2	3	5	N/A	HORIZONTAL
		3	4	3	2	3	5	N/A	VERTICAL
	Oval Flat Foot Vacuum Cups	N/A	3	3	2	2	5	N/A	HORIZONTAL

Worst Cup for the Job **1** **2** **3** **4** **5** Best Cup for the Job
N/A Not Advised for the application

This chart is a guide to aid in selecting the right family of cup for general surfaces, contours, and applications.

CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | ACU Index, How Vacuum Cups Work, Cup Usage, and Safety Factor

Application, Characteristics, and Usage (ACU) Index

Determining the type and durometer of vacuum cup appropriate for a particular application is typically based on three criteria.

- How oily or slick the part surface is.
- How much contour or curvature the part has.
- How long you can expect the cup to last (Longevity)?

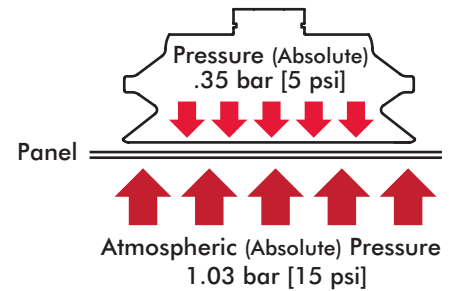


A set of vacuum cups of the same size and type, each having different durometers may handle oily/slick or contoured parts differently. However, cup longevity of each may be affected as a result of durometer, application and usage. The ACU Index is a reference shown with each type of vacuum cup and is used to illustrate the differences between vacuum cup types and durometers, when considering the above criteria.

How Vacuum Cups work

A panel adheres to a vacuum cup because the surrounding pressure (atmospheric pressure) is greater than the pressure inside the vacuum cup. The greater pressure pushes the panel onto the cup.

To create the low pressure in the vacuum cup, it is connected to a vacuum generator. The lower the pressure (higher vacuum) inside the cup; the greater the lifting force of the suction cup.



Vacuum Cup Usage

It is important to use the proper size and quantity of vacuum cups needed for your application. There are five steps which will help you make sure your application has the appropriate vacuum cup usage.

- Step 1:** Determine application and find appropriate cup family type.
- Step 2:** Determine panel weight.
- Step 3:** Find maximum cup size based on panel contour and shape.
- Step 4:** Find the appropriate cup size lifting capacity in the chart, found on the catalog page featuring the cup family type chosen.
- Step 5:** Determine safety factor determined on application (See Below).

Use the formula on the right to determine the proper amount of cups needed to move your panel.

Formula

$$n = \frac{w \times s}{f}$$

- w = Weight of Panel
- f = Lifting force of cup
- s = Safety factor
- n = Number of cups

Weight and lifting force must be in the same units, either English or Metric.

Safety Factor

Ideal plant conditions*: (2)

- Fast moving robot: (+1)
- Slick or Oily Panel: (+1)
- Flexing Panel: (+2)
- Small cups: (+1)
- High Horizontal Loads: (+1)

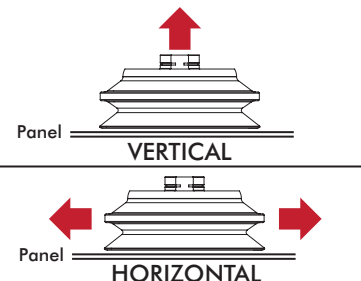
Starting with Ideal conditions (2), add each additional conditions to determine total safety factor.

For example:

Ideal conditions:	2
Fast moving robots:	+1
Flexing Panel:	+2
Total Safety Factor	5

(*Ideal conditions are defined as having no surface, operational, or environmental conditions which could adversely effect the performance to the vacuum cup.

Relative Cup Motion



VACUUM CUP OPTIONS

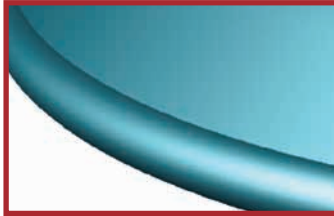
Vacuum Products | Durometer and Mounting Options

DESTACO Vacuum Cups are offered in different families, and may be offered in different durometers. Vacuum cups are also offered in Imperial and Metric mounting options which may vary according to the size and type of the vacuum cup.

Vacuum cups can be ordered as follows:
CPI-"MODEL"-"Mounting"-"DuRometer"



Vacuum Cup Durometers ("DR") (Color equals Durometer (Shore A Scale))



30

This soft durometer is useful for dryer, contoured panels. However, this durometer has less life.



45

This medium hard durometer will seal and adapt to contours well and is good for all around usage. This durometer has a longer life than the 30 durometer.



60

This hard durometer is helpful for extremely oily panels and flat surfaces such as a destacker operation. It has a longer life than the 45 durometer.



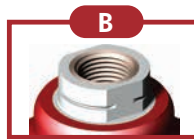
PU55/PU60

This durable long-lasting polyurethane material is resistant to oils, UV light and oxygen. No dry rotting or cracking with better elastic memory.

Imperial Vacuum Cup Mounting Options ("M")



1/4" NPT

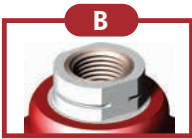


3/8" NPT



1.25" SQUARE

Metric Vacuum Cup Mounting Options ("M")



3/8" G



1.25" SQUARE

Micro Industrial Mounting Options ("M")



10-32 MALE



1/8" G FEMALE



1/8" G MALE

Polyurethane Mounting Options ("M")



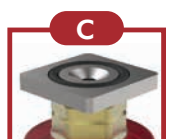
3/8 NPT



Nylon G3/8



G3/8

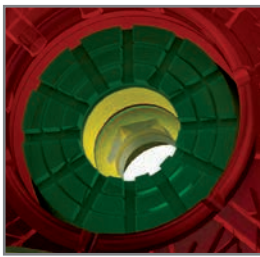


1.25 in. Square

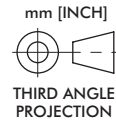
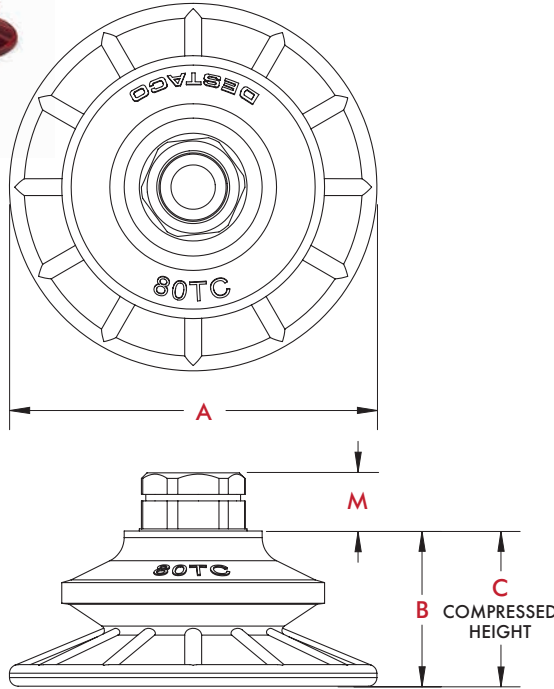
ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

TC Polyurethane Round Bellows



TCT (triple durometer) style cup offers extra soft, 30 durometer, internal cushion (yellow) to eliminate possible dimples on thin sheet metal.



Specifications:

Temperature:

10°-49° C [50°-120° F]

Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

Mount	M
U38/G38	[0.57]
	14.5
P38	[0.85]
	21.5
C	[0.73]
	18.5

Dimensions shown "[inch] mm"

TC Dimensions

Model	A	B	C	Weight
30TC	[1.18]	[0.57]	[0.37]	[1.00 oz]
	30	14.5	9.5	28 g
40TC	[1.77]	[0.69]	[0.41]	[1.20 oz]
	45	17.5	10.5	34 g
60TC	[2.40]	[0.85]	[0.45]	[2.15 oz]
	61	21.5	11.5	61 g
80TC/ 80TCT	[3.35]	[1.40]	[0.85]	[4.97 oz]
	85	35.5	21.5	141 g
110TC/ 110TCT	[4.53]	[2.03]	[1.20]	[9.70 oz]
	115	51.5	30.5	275 g

Dimensions shown "[inch] mm"

TC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
30TC	[6]	[3]	[1.75]
	2.72	1.36	0.79
40TC	[18]	[13]	[10]
	8.16	5.90	4.54
60TC	[25]	[27]	[20]
	11.34	12.25	9.07
80TC/ 80TCT	[53]	[54]	[36]
	24.04	24.49	16.33
110TC/ 110TCT	[85]	[78]	[57]
	38.56	35.38	25.86

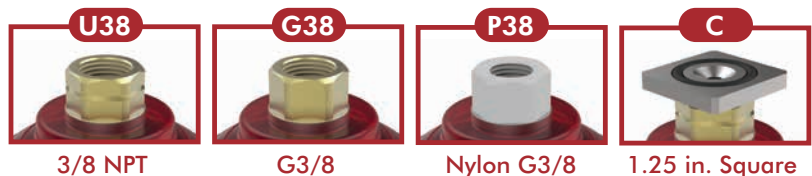
Holding capacities shown "[lbs] kg"

TC Round Bellows Ordering Information

Metric

Ø30mm.....	VC-30TC-(M)-PU55
Ø45mm.....	VC-40TC-(M)-PU55
Ø61mm.....	VC-60TC-(M)-PU55
Ø85mm.....	VC-80TC-(M)-PU55
Ø85mm.....	VC-80TCT-(M)-PU55
Ø115mm.....	VC-110TC-(M)-PU55
Ø115mm.....	VC-110TCT-(M)-PU55

Mounting Options ("M")



ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

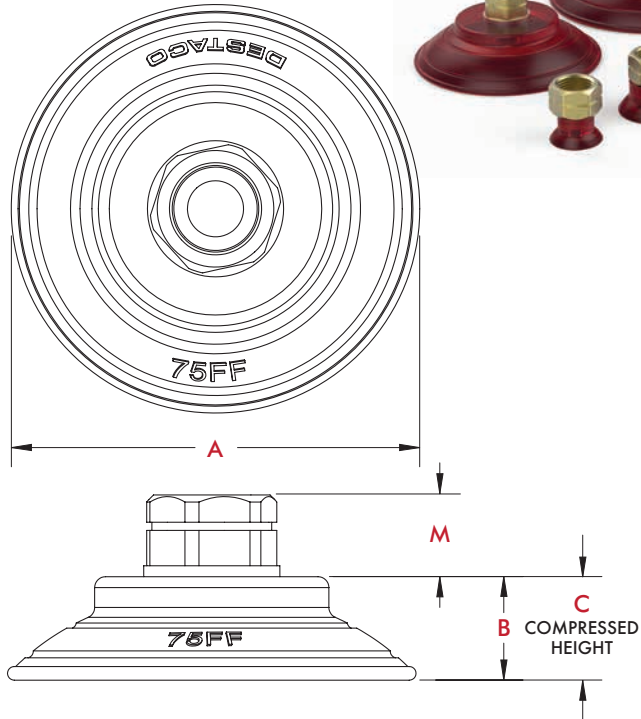
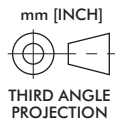
Temperature:

10°-49° C [50°-120° F]

Materials: Dual Durometer

Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

FF Polyurethane Round Flat



Mount	M
U38/G38	[0.57] 14.5
P38	[0.85] 21.5
C	[0.73] 18.5

Dimensions shown "[inch] mm"

FF Dimensions

Model	A	B	C	Weight
25FF	[0.98] 25	[0.57] 14.5	[0.49] 12.5	[0.36 oz] 10 g
35FF	[1.38] 35	[0.61] 15.5	[0.51] 13	[1.48 oz] 42 g
50FF	[1.97] 50	[0.26] 6.5	[0.51] 13	[2.36 oz] 67 g
75FF	[2.95] 75	[0.77] 19.5	[0.59] 15	[3.21 oz] 91 g
100FF	[3.94] 100	[0.96] 24.5	[0.73] 18.5	[6.06 oz] 172 g
125FF	[4.92] 125	[1.20] 30.5	[0.89] 22.5	[9.88 oz] 280 g

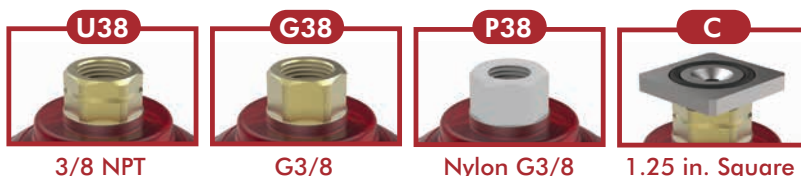
Dimensions shown "[inch] mm"

FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
25FF	[6] 2.72	[2] 0.91	[1.5] 0.68
35FF	[13] 5.90	[9] 4.08	[7] 3.18
50FF	[24] 10.89	[23] 10.43	[16] 7.26
75FF	[53] 24.04	[47] 21.32	[31] 14.06
100FF	[110] 49.90	[109] 49.44	[46] 20.87
125FF	[146] 66.23	[135] 61.24	[53] 24.04

Holding capacities shown "[lbs] kg"

Mounting Options ("M")



FF Round Flat Ordering Information

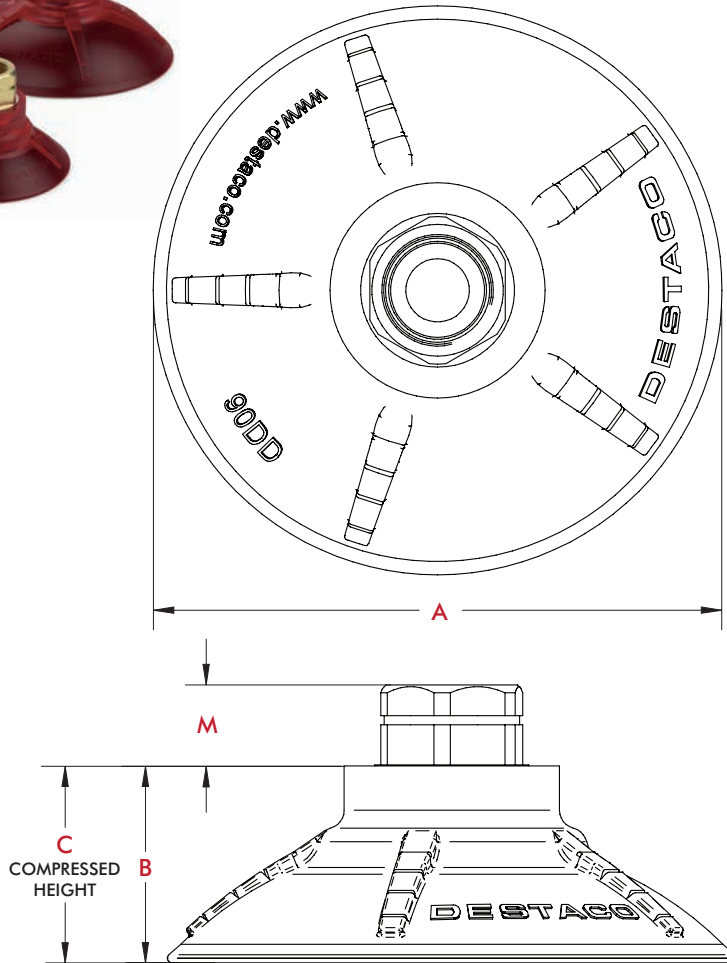
Metric

Ø25mm.....	VC-25FF-(M)-PU55
Ø35mm.....	VC-35FF-(M)-PU55
Ø50mm.....	VC-50FF-(M)-PU55
Ø75mm.....	VC-75FF-(M)-PU55
Ø100mm.....	VC-100FF-(M)-PU55
Ø125mm.....	VC-125FF-(M)-PU55

ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

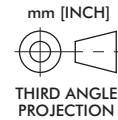
DD Polyurethane Round Deepdish



Specifications:

Temperature:
10°-49° C [50°-120° F]

Materials:
60 durometer (red)



Mount	M
U38	[0.51] 13
G38	[0.77] 19.5
P38	[0.68] 17.3
C	[0.37] 9.5

Dimensions shown "[inch] mm"

DD Dimensions

Model	A	B	C	Weight with U38/G38/C	Weight with P38
65DD	[2.66]	[1.11]	[0.67]	[2.08 oz]	[0.9 oz]
	67.5	28.2	17.0	59 g	25 g
90DD	[3.64]	[1.27]	[0.75]	[2.72 oz]	[1.5 oz]
	92.5	32.2	19.0	77 g	43 g
110DD	[4.43]	[1.60]	[0.83]	[3.60 oz]	[2.4 oz]
	112.5	40.6	21.0	102 g	68 g

Dimensions shown "[inch] mm"

DD Holding Capacity

@ -0.9 bar [25.6 inhg] vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
65DD	[42.8]	[44.1]	[30.2]
	19.4	20.0	13.7
90DD	[69.7]	[80.5]	[55.8]
	31.6	36.5	25.3
110DD	[97.4]	[129.0]	[80.5]
	44.2	58.5	36.5

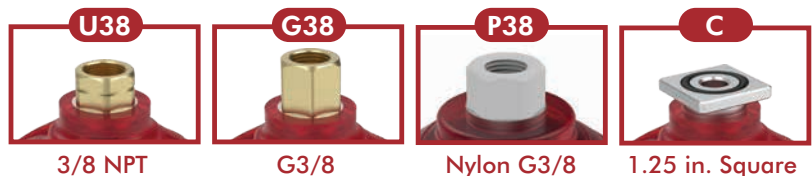
Holding capacities shown "[lbs] kg"

DD Round Deepdish Ordering Information

Metric

Ø67.5mm..... VC-65DD-(M)-PU60
 Ø92.5mm..... VC-90DD-(M)-PU60
 Ø112.5mm..... VC-110DD-(M)-PU60

Mounting Options ("M")



ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

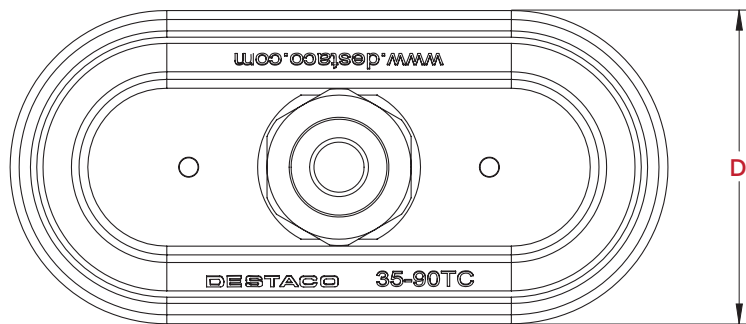
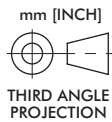


Positioning Kit (for G38 and P38 thread mounts only). Sold separately. Order No. **CPI-LNB-VSA-19** Includes (1) O-ring and (1) locknut.

Specifications:

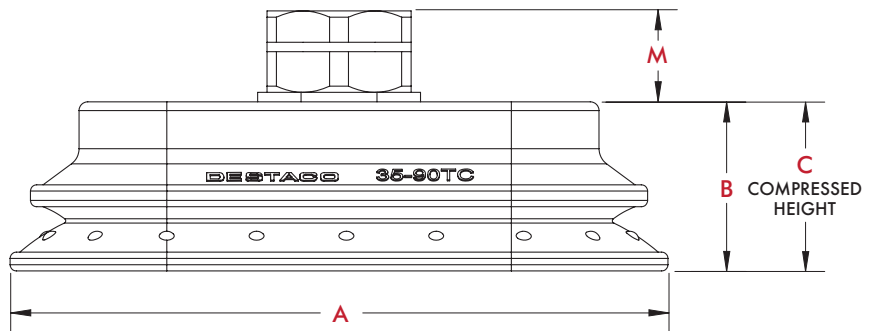
Temperature: 10°-49° C [50°-120° F]
 Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

TC Polyurethane Oval Bellows



Mount	M
U38/G38	[0.57] 14.5
P38	[0.85] 21.5
C	[0.73] 18.5

Dimensions shown "[inch] mm"



TC Dimensions

Model	A	B	C	D	Weight
35-90TC	[4.13] 105	[1.08] 27.5	[0.65] 16.5	[1.97] 50	[3.42 oz] 97 g
	[6.18] 157	[1.40] 35.5	[0.85] 21.5	[2.64] 67	[6.70 oz] 190 g
65-170TC	[7.36] 187	[1.63] 41.5	[1.04] 26.5	[3.23] 82	[10.93 oz] 310 g

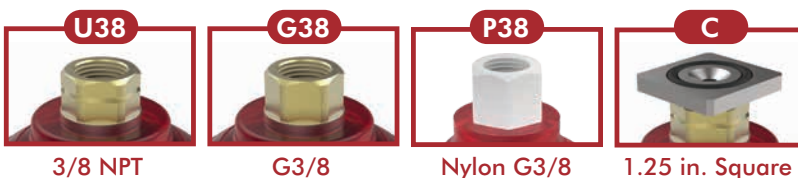
Dimensions shown "[inch] mm"

TC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
35-90TC	[45] 20.41	[40] 18.14	[34] 15.42
	[99] 44.91	[93] 42.18	[78] 35.38
65-170TC	[128] 58.06	[139] 63.05	[149] 67.59

Holding capacities shown "[lbs] kg"

Mounting Options ("M")



TC Oval Bellows Ordering Information

Metric	tion
Ø50x105mm.....	VC-35-90TC-(M)-PU55
Ø67x157mm.....	VC-50-140TC-(M)-PU55
Ø82x187mm.....	VC-65-170TC-(M)-PU55

ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

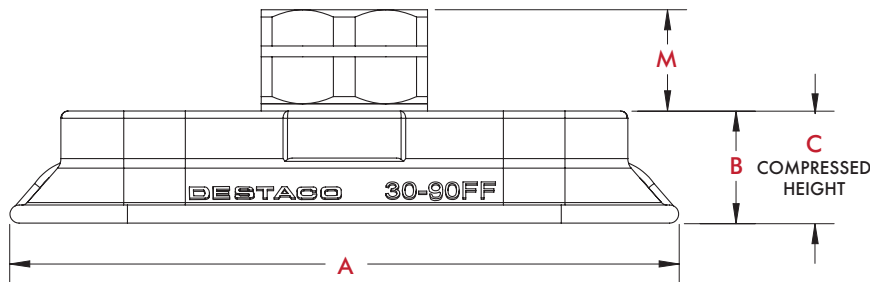
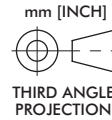
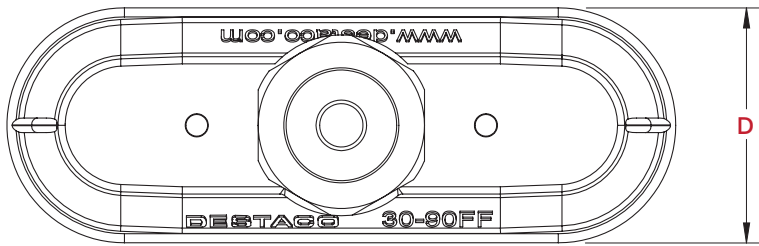
FF Polyurethane Oval Flat



Specifications:

Temperature:
10°-49° C [50°-120° F]
Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

Positioning Kit
(for G38 and P38 thread mounts only).
Sold separately.
Order No. **CPI-LNB-VSA-19**
Includes (1) O-ring and (1) locknut.



Mount	M
U38/G38	[0.57]
	14.5
P38	[0.85]
	21.5
C	[0.73]
	18.5

Dimensions shown "[inch] mm"

FF Dimensions

Model	A	B	C	D	Weight
20-80FF	[3.31]	[0.61]	[0.49]	[0.94]	[0.85 oz]
	84	15.5	12.5	24	24 g
30-90FF	[3.66]	[0.61]	[0.45]	[1.30]	[1.05 oz]
	93	15.5	11.5	33	30 g
40-110FF	[4.45]	[0.85]	[0.65]	[1.69]	[1.94 oz]
	113	21.5	16.5	43	55 g

Dimensions shown "[inch] mm"

FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
20-80FF	[25]	[25]	[11]
	11.34	11.34	4.99
30-90FF	[35]	[36]	[17]
	15.88	16.33	7.71
40-110FF	[55]	[52]	[18]
	24.95	23.59	8.16

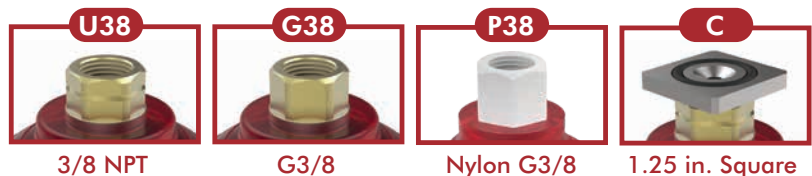
Holding capacities shown "[lbs] kg"

FF Oval Flat Ordering Information

Metric

Ø24x84mm..... VC-20-80FF-(M)-PU55
 Ø33x93mm..... VC-30-90FF-(M)-PU55
 Ø43x113mm..... VC-40-110FF-(M)-PU55

Mounting Options ("M")



VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

15-59 Sec: -20° to 250° F [-29° to 121° C]

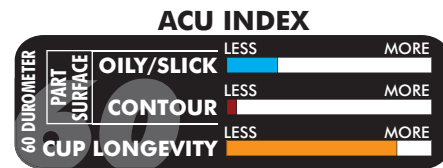
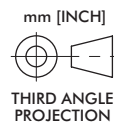
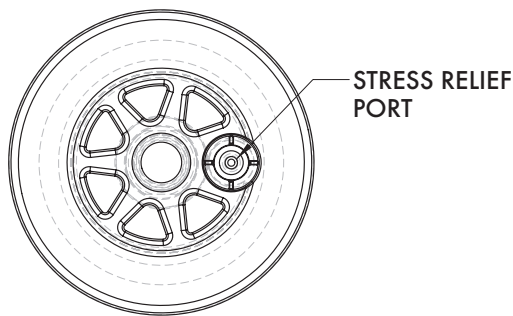
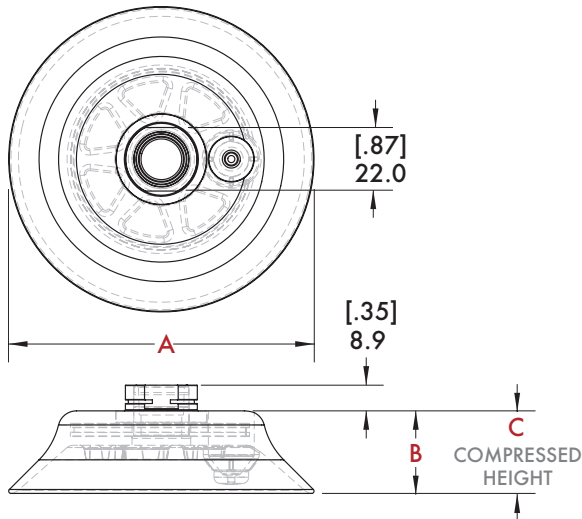
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

DC Destacker Stress Relieving



Covered under one or more U.S./International Patents

DC Dimensions

Model	A	B	C	Weight
75DC	84.8	25.4	16.7	84 g
[30DC]	[3.34]	[1.00]	[.68]	[3.0 oz]
100DC	105.9	28.6	16.7	120 g
[40DC]	[4.16]	[1.11]	[.68]	[4.2 oz]

Dimensions shown "mm [inch]"

DC Capacity

Appl.	Ver. Lift
75DC	15.9 kg
[30DC]	[35 lb]
100DC	63.1 kg
[40DC]	[139 lb]

Holding capacities shown "N [lbf]"

DC Destacker Stress Relieving Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) In.	Mount (M) →			•	•	•
	K	B	C			
Ø3.00	30DC	•	•	•		
Ø4.00	40DC	•	•	•		

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →		•	•
	B	C		
Ø75	75DC	•	•	
Ø100	100DC	•	•	

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

TC/HT Round Traction



Specifications:

Temperature:

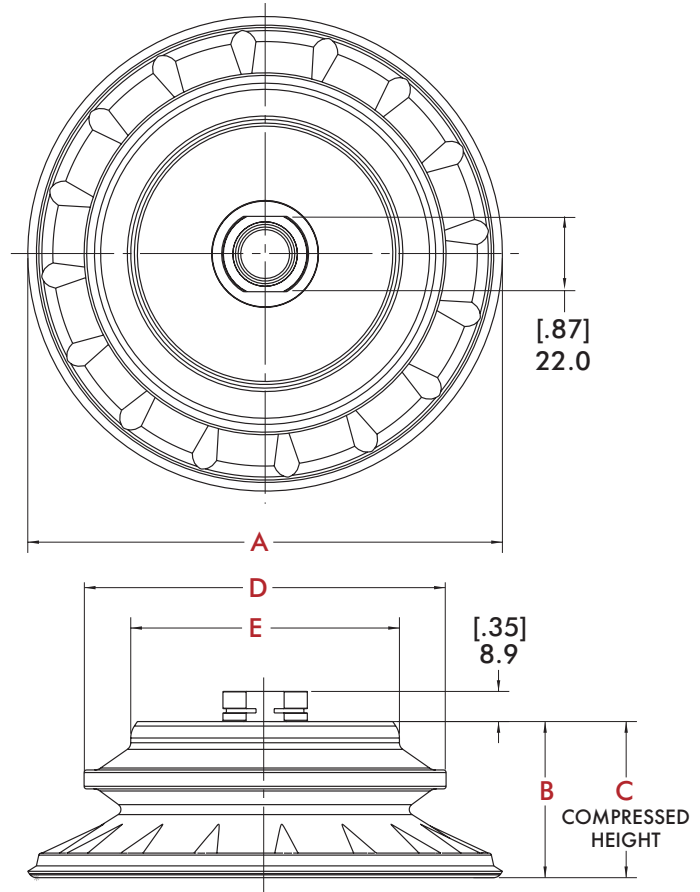
15-59 Sec: -29° to 121° C [-20° to 250° F]

1-5 min: -9° to 82° C [15° to 180° F]

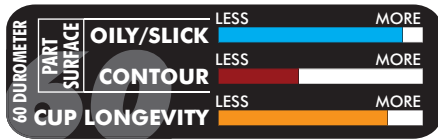
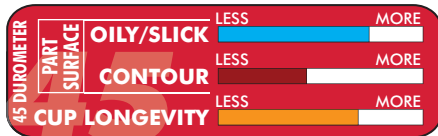
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



ACU INDEX



TC/HT Dimensions

Model	A	B	C	D	E	Weight
[20TC]	[2.06]	[1.02]	[.68]	[1.64]	[1.25]	[1.3 oz]
50HT	52.3	25.7	17.3	41.7	31.8	37 g
[35TC]	[3.50]	[1.71]	[.82]	[2.50]	[1.65]	[2.6 oz]
90HT	88.9	43.44	20.8	63.5	41.9	73 g
[45TC]	[4.50]	[1.81]	[.87]	[3.25]	[2.25]	[4.4 oz]
115HT	114.3	46.1	22.1	82.4	57.2	125 g
[55TC]	[5.50]	[1.81]	[.87]	[4.00]	[3.04]	[7.2 oz]
140HT	139.7	46.1	22.1	101.4	77.1	204 g

Dimensions shown "mm [inch]"

TC/HT Holding Capacity

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
[20TC]	[8.5 lb]	[7 lb]	[22.7 lb]
50HT	3.9 kg	3.2 kg	10.3 kg
[35TC]	[30 lb]	[20 lb]	[66 lb]
90HT	13.6 kg	9.1 kg	29.9 kg
[45TC]	[45 lb]	[30 lb]	[103 lb]
115HT	20.4 kg	13.6 kg	46.7 kg
[55TC]	[100 lb]	[45 lb]	[164 lb]
140HT	45.5 kg	20.4 kg	74.4 kg

Holding capacities shown "N [lbf]"

TC/HT Round Traction Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.	Mount (M) →	Durometer (DR) →	K		B		C	
			45	60	45	60	45	60
			45	60	45	60	45	60
Ø2.00	20TC	•	•	•	•	•	•	
Ø3.50	35TC	•	•	•	•	•	•	
Ø4.50	45TC	•	•	•	•	•	•	
Ø5.50	55TC	•	•	•	•	•	•	

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) >	Durometer (DR) >	B		C	
			45	60	45	60
			45	60	45	60
Ø50	50HT	•	•	•	•	
Ø90	90HT	•	•	•	•	
Ø115	115HT	•	•	•	•	
Ø140	140HT	•	•	•	•	

VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

Specifications:

Temperature:

15-59 Sec: -20° to 250° F [-29° to 121° C]

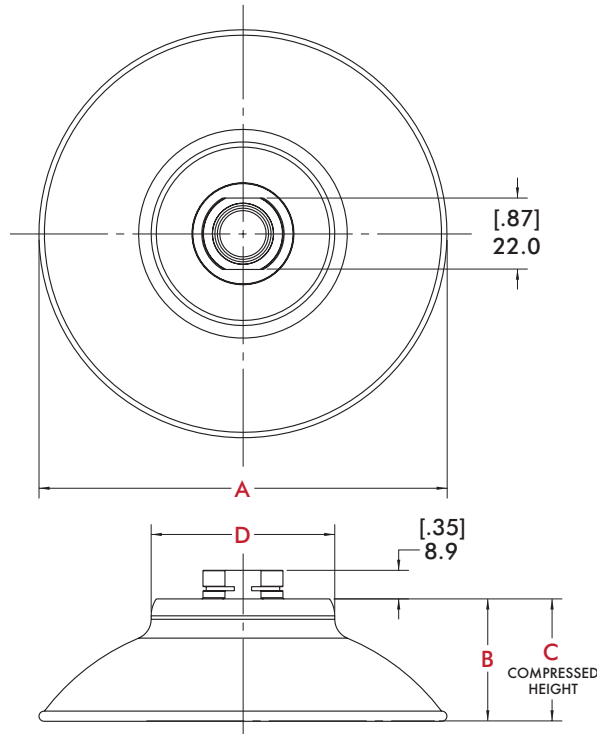
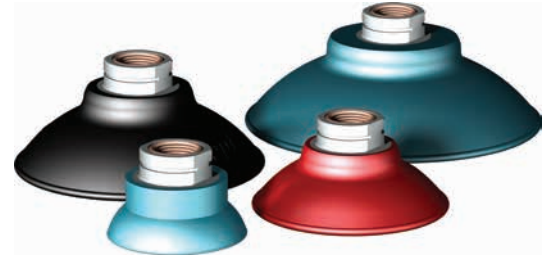
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

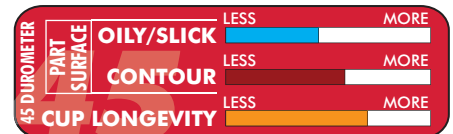
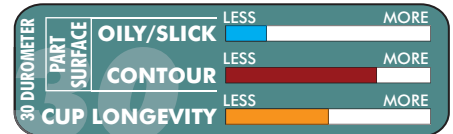
Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

FF/PF Round Flatfoot



ACU INDEX



FF/PF Round Flatfoot

Model	A	B	C	D	Weight
50PF	50.8	22.5	13.0	19.1	40 g
[20FF]	[2.00]	[.89]	[.51]	[.75]	[1.4 oz]
75PF	76.2	25.4	18.2	39.6	57 g
[30FF]	[3.00]	[1.00]	[.72]	[1.56]	[2.0 oz]
100PF	101.6	33.3	22.2	39.6	96 g
[40FF]	[4.00]	[1.31]	[.88]	[1.56]	[3.4 oz]
125PF	127.0	38.2	25.4	57.2	159 g
[50FF]	[5.00]	[1.50]	[1.00]	[2.25]	[5.6 oz]

Dimensions shown "mm [inch]"

FF/PF Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
50PF	6.4 kg	2.7 kg	9.1 kg
[20FF]	[14 lb]	[6 lb]	[20 lb]
75PF	13.6 kg	5.9 kg	27.2 kg
[30FF]	[30 lb]	[13 lb]	[60 lb]
100PF	15.9 kg	9.1 kg	46.3 kg
[40FF]	[35 lb]	[20 lb]	[102 lb]
125PF	31.8 kg	25.8 kg	74.8 kg
[50FF]	[70 lb]	[55 lb]	[165 lb]

Holding capacities shown "N [lbf]"

FF/PF Round Flatfoot Vacuum Cups Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.	Mount (M) →		K			B			C		
	Durometer (DR) →		30	45	60	30	45	60	30	45	60
	Ø2.00	20FF	●	●	●	●	●	●	●	●	●
Ø3.00	30FF	●	●	●	●	●	●	●	●	●	
Ø4.00	40FF	●	●	●	●	●	●	●	●	●	
Ø5.00	50FF	●	●	●	●	●	●	●	●	●	

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) >		B			C		
	Durometer (DR) >		30	45	60	30	45	60
	Ø50	50PF	●	●	●	●	●	●
Ø75	75PF	●	●	●	●	●	●	
Ø100	100PF	●	●	●	●	●	●	
Ø125	125PF	●	●	●	●	●	●	

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

AC/BT Round Belcup



Specifications:

Temperature:

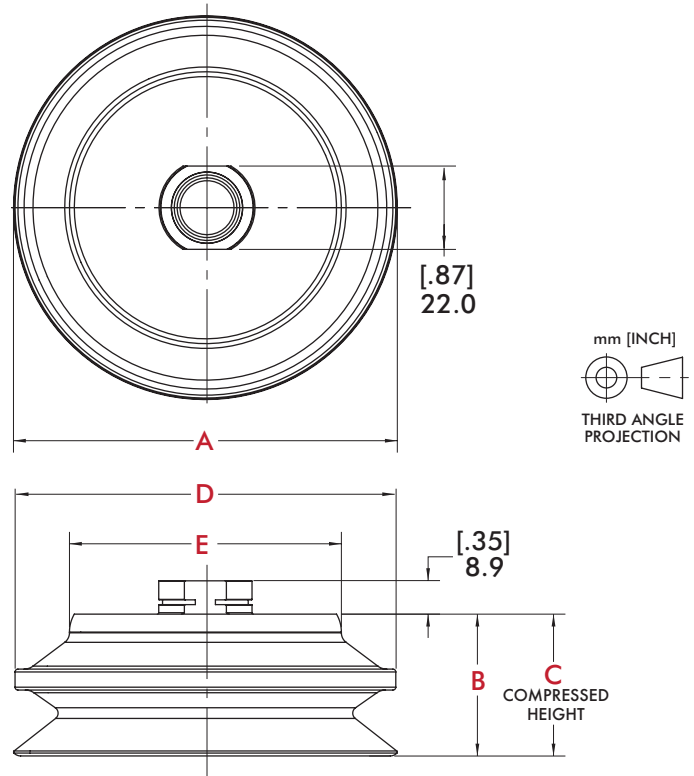
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

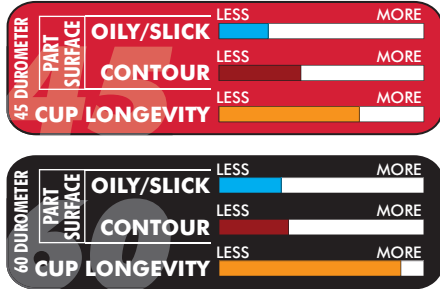
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



ACU INDEX



AC/BT Round Belcup

Model	A	B	C	D	E	Weight
40BT	41.1	25.9	11.9	41.1	31.8	35 g
[15AC]	[1.62]	[1.02]	[.47]	[1.63]	[1.25]	[1.2 oz]
50BT	57.4	37.4	18.3	57.9	38.1	57 g
[20AC]	[2.26]	[1.47]	[.72]	[2.28]	[1.50]	[2.0 oz]
75BT	78.9	38.8	19.8	80.0	56.6	91 g
[30AC]	[3.11]	[1.53]	[.78]	[3.15]	[2.23]	[3.2 oz]
100BT	102.4	37.8	18.6	101.6	72.6	159 g
[40AC]	[4.03]	[1.49]	[.73]	[4.00]	[2.85]	[5.6 oz]
125BT	127.0	38.1	19.0	127.0	97.8	232 g
[50AC]	[5.00]	[1.50]	[.75]	[5.00]	[3.85]	[8.2 oz]

Dimensions shown "mm [inch]"

AC/BT Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
40BT	2.7 kg	1.4 kg	3.6 kg
[15AC]	[6 lb]	[3 lb]	[8 lb]
50BT	3.9 kg	2.0 kg	11.8 kg
[20AC]	[8.5 lb]	[4.5 lb]	[26 lb]
75BT	5.4 kg	2.7 kg	25.4 kg
[30AC]	[12 lb]	[6 lb]	[56 lb]
100BT	15.0 kg	3.6 kg	40.4 kg
[40AC]	[33 lb]	[8 lb]	[89 lb]
125BT	24.0 kg	6.8 kg	62.6 kg
[50AC]	[53 lb]	[15 lb]	[138 lb]

Holding capacities shown "N [lbf]"

AC/BT Round Belcup Vacuum Cups Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.	Mount (M) →	K		B		C	
	Durometer (DR) →	45	60	45	60	45	60
	Ø1.50	15AC	•	•	•	•	•
Ø2.00	20AC	•	•	•	•	•	•
Ø3.00	30AC	•	•	•	•	•	•
Ø4.00	40AC	•	•	•	•	•	•
Ø5.00	50AC	•	•	•	•	•	•

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) >	B		C	
	Durometer (DR) >	45	60	45	60
	Ø40	40BT	•	•	•
Ø50	50BT	•	•	•	•
Ø75	75BT	•	•	•	•
Ø100	100BT	•	•	•	•
Ø125	125BT	•	•	•	•

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

DD/DM Round Deepdish

Specifications:

Temperature:

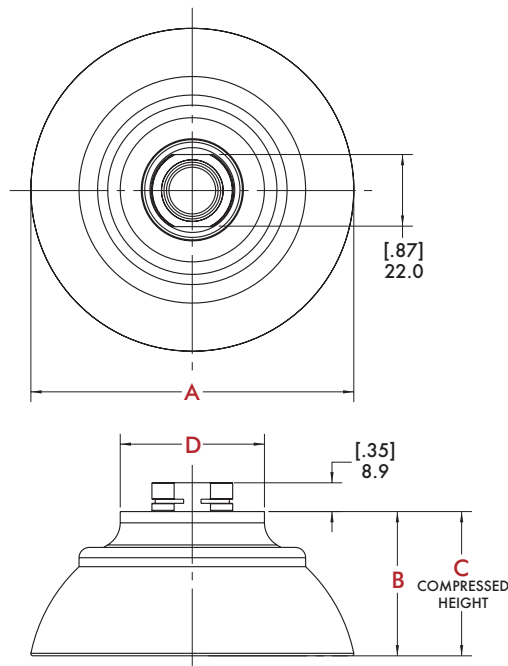
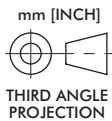
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

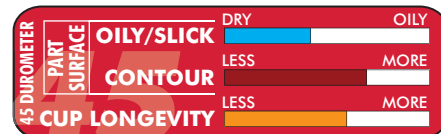
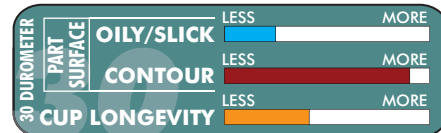
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



ACU INDEX



DD/DM Round Deepdish

Model	A	B	C	D	Weight
50DM	50.8	29.1	18.3	38.1	40 g
[20DD]	[2.00]	[1.14]	[.72]	[1.50]	[1.4 oz]
75DM	76.2	40.4	24.3	44.0	57 g
[30DD]	[3.00]	[1.59]	[.96]	[1.73]	[2.0 oz]
100DM	101.6	44.5	20.8	44.5	96 g
[40DD]	[4.00]	[1.75]	[.82]	[1.75]	[3.4 oz]

Dimensions shown "mm [inch]"

DD/DM Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
50DM	4.1 kg	3.2 kg	5.4 kg
[20DD]	[9 lb]	[7 lb]	[12 lb]
75DM	6.4 kg	2.7 kg	9.1 kg
[30DD]	[14 lb]	[6 lb]	[20 lb]
100DM	11.3 kg	3.2 kg	15.8 kg
[40DD]	[25 lb]	[7lb]	[35 lb]

Holding capacities shown "N [lbf]"

DD/DM Round Deepdish Vacuum Cups Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.	Mount (M) →	K		B		C	
	Durometer (DR) →	30	45	30	45	30	45
	Ø2.00	20DD	•	•	•	•	•
Ø3.00	30DD	•	•	•	•	•	•
Ø4.00	40DD	•	•	•	•	•	•

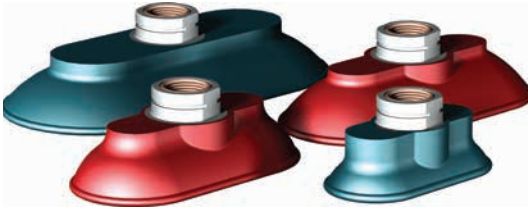
Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →	B		C	
	Durometer (DR) →	30	45	30	45
	Ø50	50DM	•	•	•
Ø75	75DM	•	•	•	•
Ø100	100DM	•	•	•	•

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

FF/PF Oval FlatFoot



Specifications:

Temperature:

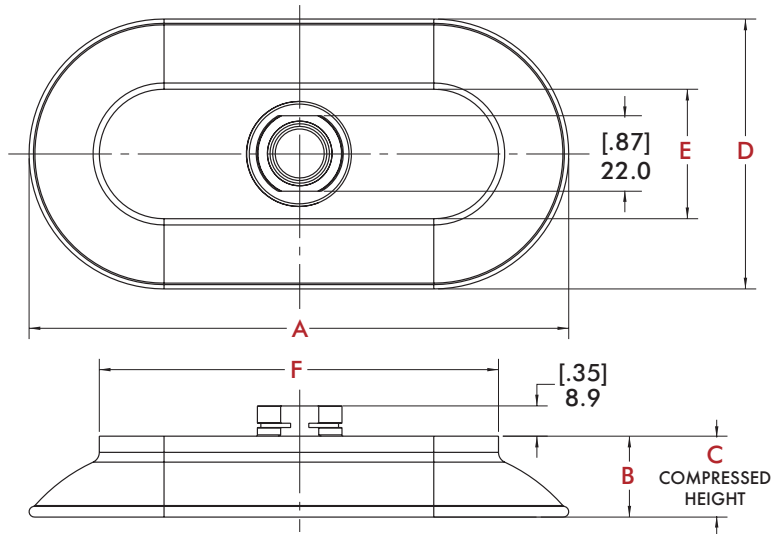
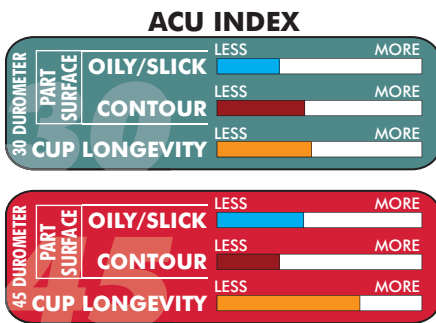
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



FF/PF Oval Flatfoot

Model	A	B	C	D	E	F	Weight
40-75PF [153FF]	76.2 [3.00]	22.3 [.88]	16.2 [.64]	38.1 [1.50]	22.2 [.88]	60.3 [2.37]	35 g [1.2 oz]
50-100PF [24FF]	101.6 [4.00]	23.8 [.94]	16.2 [.64]	50.8 [2.00]	22.2 [.88]	73.0 [2.88]	119 g [4.2 oz]
60-125PF [255FF]	127.0 [5.00]	22.3 [.88]	16.2 [.64]	63.5 [2.50]	22.2 [.88]	85.7 [3.38]	147 g [5.2 oz]
75-150PF [36FF]	152.9 [6.00]	25.4 [1.00]	18.3 [.72]	76.2 [3.00]	38.1 [1.50]	114.3 [4.50]	201 g [7.1 oz]

Dimensions shown "mm [inch]"

FF/PF Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
40-75PF [153FF]	6.8 kg [15 lb]	2.3 kg [5 lb]	8.2 kg [18 lb]
50-100PF [24FF]	8.2 kg [18 lb]	2.7 kg [6 lb]	19.1 kg [42 lb]
60-125PF [255FF]	20.4 [45 lb]	3.2 kg [7 lb]	25 kg [55 lb]
75-150PF [36FF]	24.9 [55 lb]	4.1 kg [9 lb]	32.7 kg [72 lb]

Holding capacities shown "N [lbf]"

FF/PF Oval FlatFoot Vacuum Cups Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.		Mount (M) →	K		B		C	
			Durometer (DR) →					
			30	45	30	45	30	45
1.50 x 3.00	153FF	●	●	●	●	●	●	
2.00 x 4.00	24FF	●	●	●	●	●	●	
2.50 x 5.00	255FF	●	●	●	●	●	●	
3.00 x 6.00	36FF	●	●	●	●	●	●	

Metric: CPI-(S)-(M)-(DR)

Size (S) mm		Mount (M) →	B		C	
			Durometer (DR) →			
			30	45	30	45
40 x 75	40-75PF	●	●	●	●	
50 x 100	50-100PF	●	●	●	●	
60 x 125	60-125PF	●	●	●	●	
75 x 150	75-150PF	●	●	●	●	

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

DD/DM Oval Deepdish

Specifications:

Temperature:

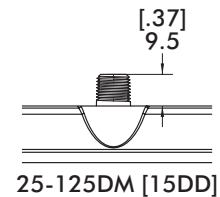
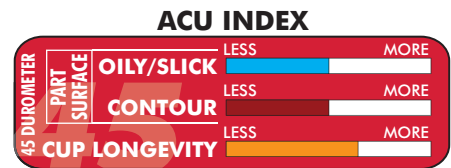
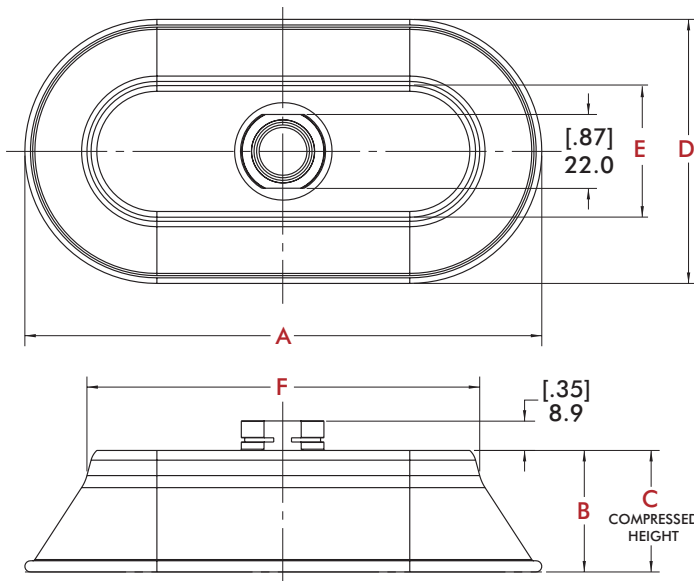
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



DD/DM Oval Deepdish

Model	A	B	C	D	E	F	Weight
25-125DM [15DD]	128.7 [5.06]	17.1 [.67]	8.7 [.34]	27.0 [1.06]	12.9 [.51]	114.5 [4.51]	35 g [1.2 oz]
75-150DM [36DD]	155.8 [6.13]	36.7 [1.44]	16.51 [.65]	79.6 [3.13]	39.7 [1.56]	118.4 [4.65]	201 g [7.1 oz]

Dimensions shown "mm [inch]"

DD/DM Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
25-125DM [15DD]	10.0 kg [22 lb]	3.2 kg [7 lb]	15.9 kg [35 lb]
75-150DM [36DD]	24.9 kg [55 lb]	10.4 kg [23 lb]	63.1 kg [139 lb]

Holding capacities shown "N [lbf]"

DD/DM Oval Deepdish Vacuum Cups Ordering Information

Imperial: CPI-(S)-(M)-(DR)

Size (S) in.	Mount (M) →			
	K	B	C	U18
1.00 x 5.00	15DD	•	•	•
3.00 x 6.00	36DD	•	•	•

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →		
	B	C	U18
25 x 125	25-125DM	•	•
75 x 150	75-150DM	•	•



HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MFF Round Flat



Specifications:

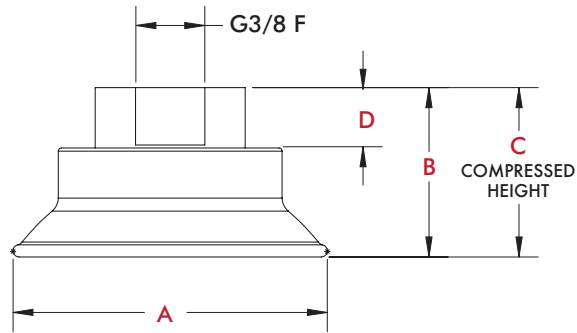
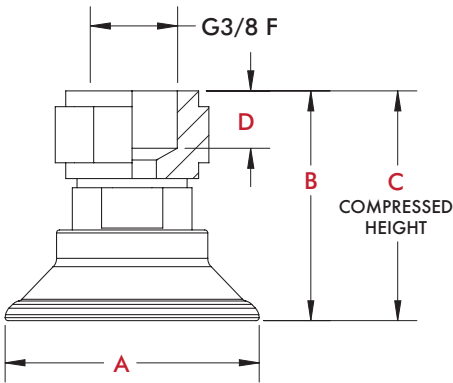
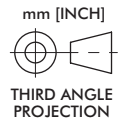
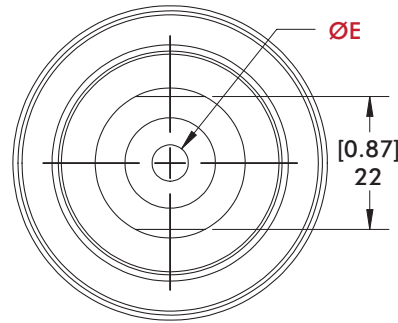
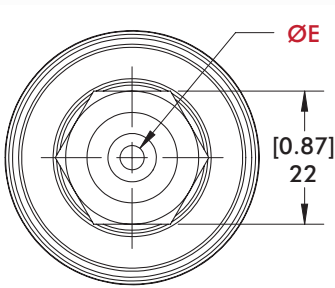
Temperature:

Resistant up to 250° C [482° F]
(sheet metal temperature)

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



MFF Dimensions

Model	A	B	C	D	E	Weight
30MFF	[1.34]	[1.42]	[1.30]	[0.35]	[0.16]	[1.64 oz]
	34	36	33	9	4	46.5 g
40MFF	[1.81]	[1.50]	[1.34]	[0.35]	[0.16]	[1.77 oz]
	46	38	34	9	4	50.1 g
50MFF	[2.20]	[1.10]	[0.91]	[0.59]	[0.24]	[1.35 oz]
	56	28	23	15	6	38.2 g
60MFF	[2.64]	[1.22]	[0.98]	[0.59]	[0.24]	[0.95 oz]
	67	31	25	15	6	27 g

Dimensions shown "mm [inch]"

MFF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
30MFF	[8.5]	[6.7]	[6.3]
	38	30	28
40MFF	[15.5]	[11.7]	[11.2]
	69	52	50
50MFF	[22.5]	[18.0]	[17.1]
	100	80	76
60MFF	[33.7]	[23.6]	[19.1]
	150	105	85

Holding capacities shown "N [lbf]"

MFF Round Flat Ordering Information

Metric

- Ø30mm..... CPI-30MFF-B-HT
- Ø40mm..... CPI-40MFF-B-HT
- Ø50mm..... CPI-50MFF-B-HT
- Ø60mm..... CPI-60MFF-B-HT

HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

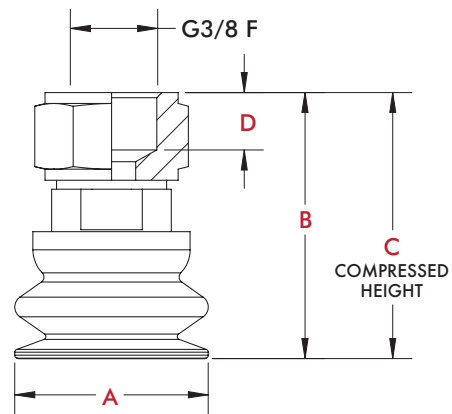
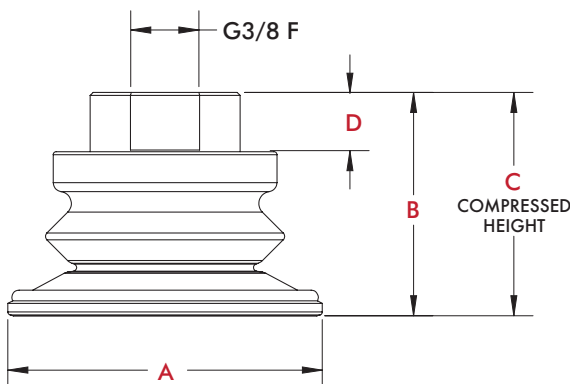
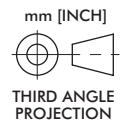
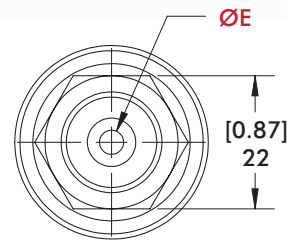
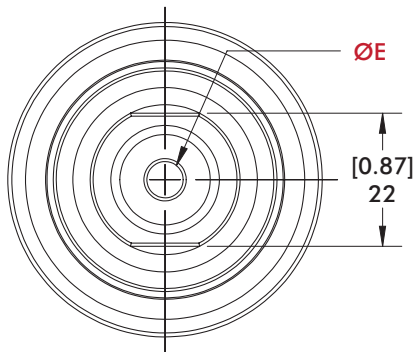
Resistant up to 250° C [482° F]
(sheet metal temperature)

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

MTC Round Bellows



MTC Dimensions

Model	A	B	C	D	E	Weight
22MTC	[0.87] 22	[1.61] 41	[1.39] 35.2	[0.35] 9.5	[0.14] 3.5	[1.54 oz] 43.6 g
30MTC	[1.34] 34	[1.73] 44	[1.38] 35	[0.35] 9	[0.16] 4	[1.74 oz] 49.3 g
40MTC	[1.77] 45	[1.73] 44	[1.34] 34	[0.35] 9	[0.16] 4	[1.79 oz] 50.8 g
50MTC	[2.20] 56	[1.46] 37	[1.00] 25.5	[0.59] 15	[0.24] 6	[1.40 oz] 39.6 g
60MTC	[2.64] 67	[1.63] 41.5	[1.06] 27	[0.59] 15	[0.24] 6	[1.83 oz] 51.8 g

Dimensions shown "mm [inch]"

MTC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
22MTC	[3.6] 16	[4.0] 18	[1.3] 6
30MTC	[4.9] 22	[6.7] 30	[2.9] 13
40MTC	[8.5] 38	[8.1] 36	[7.4] 33
50MTC	[11.9] 53	[12.4] 55	[11.7] 52
60MTC	[18.4] 82	[18.4] 82	[17.3] 77

Holding capacities shown "N [lbf]"

MTC Round Bellows Ordering Information

Metric

Ø22mm.....	CPI-22MTC-B-HT
Ø30mm.....	CPI-30MTC-B-HT
Ø40mm.....	CPI-40MTC-B-HT
Ø50mm.....	CPI-50MTC-B-HT
Ø60mm.....	CPI-60MTC-B-HT

HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MFF Oval Flat



Specifications:

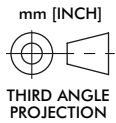
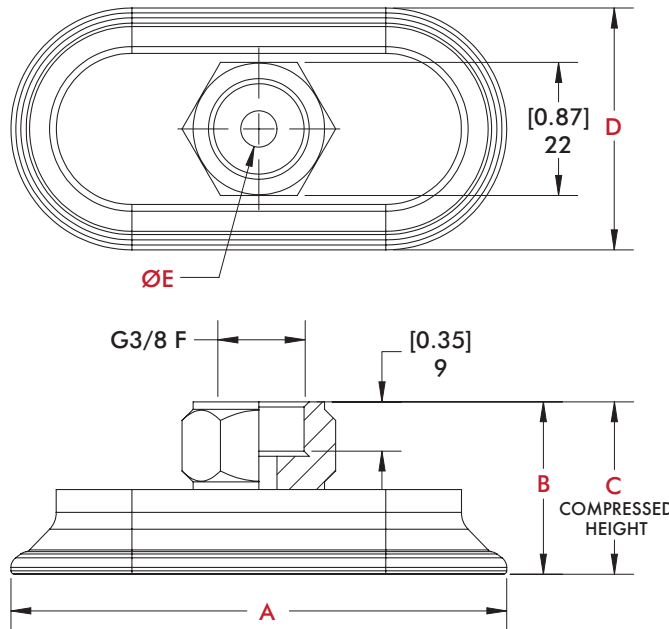
Temperature:

Resistant up to 250° C [482° F]
(sheet metal temperature)

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



MFF Dimensions

Model	A	B	C	D	E	Weight
6023MFF	[2.52] 64	[1.02] 26	[0.91] 23	[0.98] 25	[0.24] 6	[1.57 oz] 44.6 g
9030MFF	[3.70] 94	[1.06] 27	[0.94] 24	[1.34] 34	[0.24] 6	[2.42 oz] 68.5 g
8040MFF	[3.35] 85	[1.10] 28	[0.94] 24	[1.69] 43	[0.24] 6	[2.30 oz] 65.1 g
10050MFF	[4.17] 106	[1.22] 31	[1.02] 26	[2.13] 54	[0.31] 8	[3.68 oz] 104.2 g

Dimensions shown "mm [inch]"

MFF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
6023MFF	[12.8] 57	[8.3] 37	[7.4] 33
9030MFF	[27.4] 122	[21.6] 96	[14.4] 64
8040MFF	[31.5] 140	[24.7] 110	[22.5] 100
10050MFF	[48.8] 217	[40.7] 181	[27.2] 121

Holding capacities shown "N [lbf]"

MFF Oval Flat Ordering Information

Metric

- Ø60x23mm..... CPI-6023MFF-B-HT
- Ø90x30mm..... CPI-9030MFF-B-HT
- Ø80x40mm..... CPI-8040MFF-B-HT
- Ø100x50mm..... CPI-10050MFF-B-HT

HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MAC Oval Bellows

Specifications:

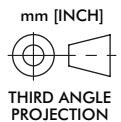
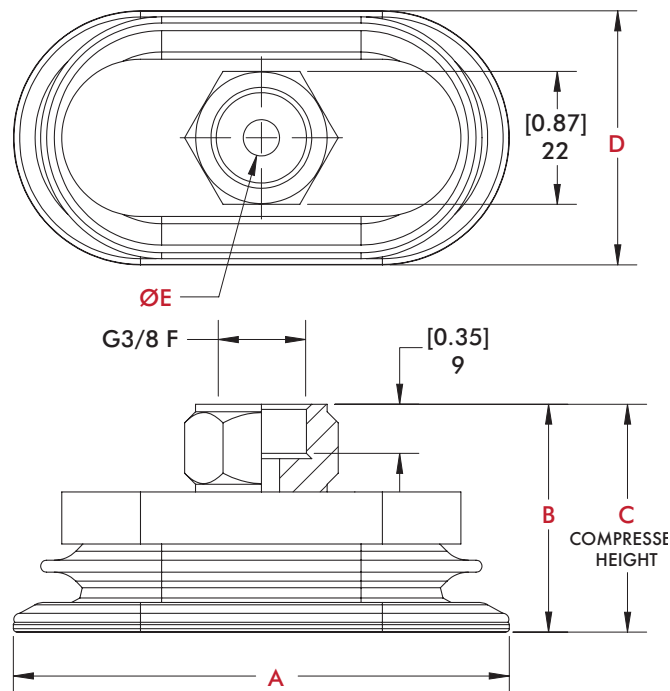
Temperature:

Resistant up to 250° C [482° F]
(sheet metal temperature)

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



MAC Dimensions

Model	A	B	C	D	E	Weight
6030MAC	[2.48]	[1.38]	[1.10]	[1.30]	[0.24]	[2.32 oz]
	63	35	28	33	6	65.9 g
8040MAC	[3.27]	[1.48]	[1.13]	[1.69]	[0.24]	[2.78 oz]
	83	37.7	28.7	43	6	78.7 g

Dimensions shown "mm [inch]"

MAC Holding Capacity @ -0.6 bar vacuum

Model	Vert. Lift	Horz. Dry	Horz. Wet
6030MAC	[8.5]	[12.8]	[11.7]
	38	57	52
8040MAC	[14.6]	[22.5]	[21.3]
	65	100	95

Holding capacities shown "N [lbf]"

MAC Oval Bellows Ordering Information

Metric

Ø60x30mm..... CPI-6030MAC-B-HT

Ø80x40mm..... CPI-8040MAC-B-HT

MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

VC-F Round Flat



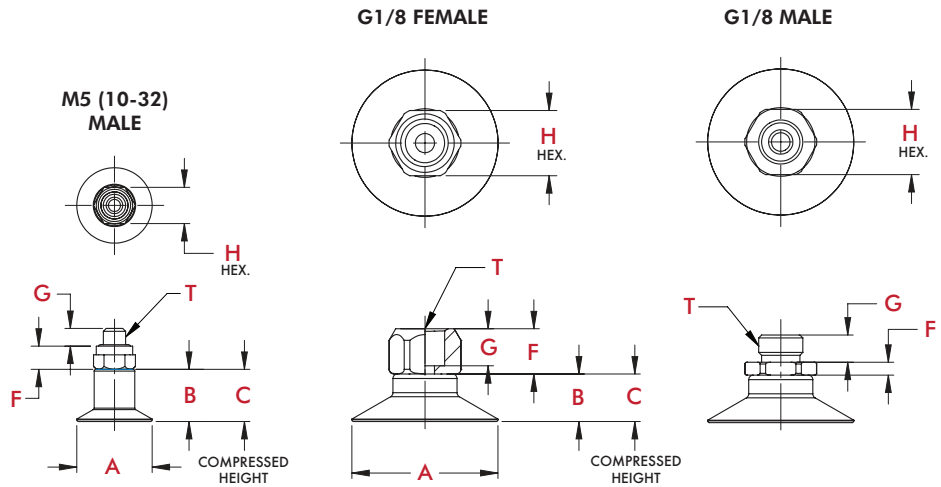
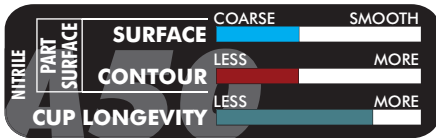
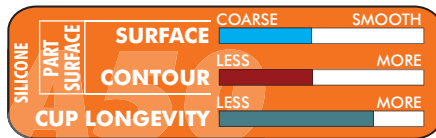
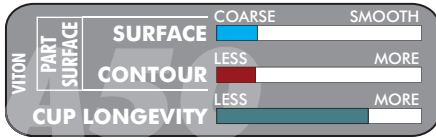
Applications:

- Relatively flat surfaces.
- Dry to moderate oily/slippery surfaces.
- Low Compression distances.
- Higher precision applications.

Specifications:

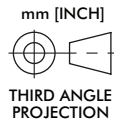
Material Operating Temperature:
Viton: -40° to 450° F
 [-40° to 232° C]
Silicone: -100° to 400° F
 [-73° to 204.4° C]
Nitrile: -40° to 275° F
 [-40° to 135° C]
Durometer: A50

ACU INDEX



(DR) = Durometer/Material

- V** Viton Hi-Temp Applications where silicon is not allowed
- S** **Silicon** Extremely hot or cold environments
- N** Nitrile General Purpose



VC-F Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

VC-F Dimensions

Model	A	B	C	CUP WT	LOAD
VC-F15	16.5 [.65]	11.4 [.45]	10.4 [.41]	3.4 g [.11 oz]	.85 kg [1.88 lb]
VC-F20	22.1 [.87]	8.6 [.34]	7.1 [.28]	7.8 g [.25 oz]	1.47 kg [3.25 lb]
VC-F30	32.0 [1.26]	10.4 [.41]	8.1 [.32]	6.2 g [.20 oz]	2.55 kg [5.63 lb]
VC-F40	42.2 [1.66]	14.0 [.55]	11.4 [.45]	11.8 g [.38 oz]	4.08 kg [9.00 lb]
VC-F50	53.1 [2.08]	17.5 [.69]	14.5 [.57]	19.6 g [.63 oz]	7.54 kg [16.6 lb]

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →	10M			18M			18F		
		Durometer (DR) →								
		V	S	N	V	S	N	V	S	N
Ø15	VC-F15	●	●	●	●	●	●	●	●	●
Ø20	VC-F20	●	●	●	●	●	●	●	●	●
Ø30	VC-F30				●	●	●	●	●	●
Ø40	VC-F40				●	●	●	●	●	●
Ø50	VC-F50				●	●	●	●	●	●

MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

VC-B Micro Series Round Bellows

Applications:

- Moderately flat surfaces.
- Best performance on dry surfaces.
- Moderate compression distance.
- Bellows allows for minor misalignments.

Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

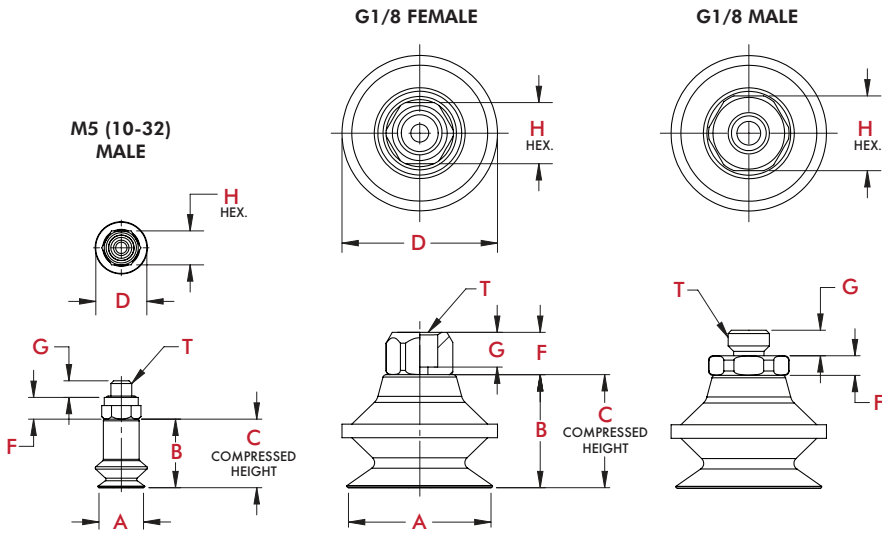
Silicone: -100° to 400° F

[-73° to 204.4° C]

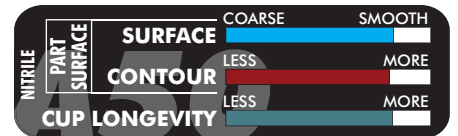
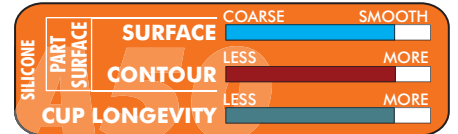
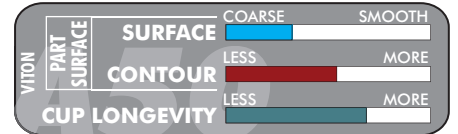
Nitrile: -40° to 275° F

[-40° to 135° C]

Durometer: A50



ACU INDEX



VC-B Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

(DR) = Durometer/Material

V Viton Hi-Temp Applications where silicon is not allowed

S Silicon Extremely hot or cold environments

N Nitrile General Purpose

VC-B Dimensions

Model	A	B	C	D	Cup Wt	Load
VC-B05	5.6 [.22]	9.1 [.36]	7.6 [.30]	6.1 [.24]	5.8 g [.09 oz]	.04 kg [.10 lb]
VC-B10	10.9 [.43]	16.0 [.63]	11.4 [.45]	12.2 [.48]	3.4 g [.11 oz]	.39 kg [.87 lb]
VC-B15	16.0 [.63]	19.8 [.78]	13.2 [.52]	17.5 [.69]	3.7 g [.12 oz]	.57 kg [1.25 lb]
VC-B20	22.4 [.88]	17.5 [.69]	7.6 [.30]	23.9 [.94]	6.2 g [.20 oz]	1.02 kg [2.25 lb]
VC-B30	34.0 [1.34]	26.4 [1.04]	11.4 [.45]	36.3 [1.43]	11.5 g [.37 oz]	2.21 kg [4.88 lb]
VC-B40	42.9 [1.69]	27.4 [1.08]	12.4 [.49]	46.2 [1.82]	18.7 g [.60 oz]	3.97 kg [8.75 lb]
VC-B50	52.8 [2.08]	34.5 [1.36]	14.5 [.57]	59.4 [2.34]	30.5 g [.98 oz]	6.63 kg [14.6 lb]

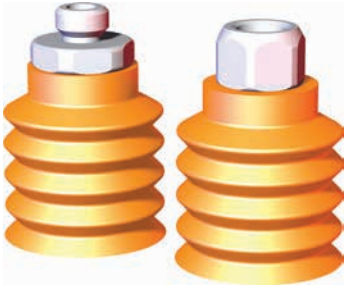
Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →	10M			18M			18F		
		Durometer (DR) →								
		V	S	N	V	S	N	V	S	N
Ø05	VC-B05	●	●	●	●	●	●	●	●	●
Ø10	VC-B10	●	●	●	●	●	●	●	●	●
Ø15	VC-B15	●	●	●	●	●	●	●	●	●
Ø20	VC-B20	●	●	●	●	●	●	●	●	●
Ø30	VC-B30				●	●	●	●	●	●
Ø40	VC-B40				●	●	●	●	●	●
Ø50	VC-B50				●	●	●	●	●	●

MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

VC-BM Micro Series Round Multi-Bellows



Applications:

- Angled/curved/bumpy surfaces.
- Best performance on dry surfaces.
- Higher compression distance. (Reach in Box)
- Bellows allow for minor
- Provides Partial extraction.

Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

Silicone: -100° to 400° F

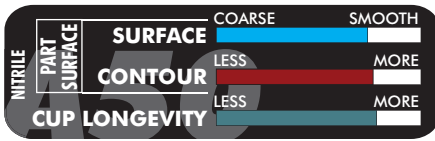
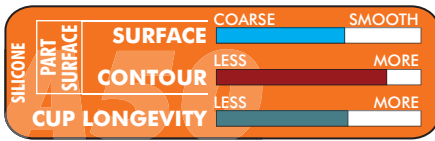
[-73° to 204.4° C]

Nitrile: -40° to 275° F

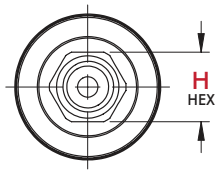
[-40° to 135° C]

Durometer: A50

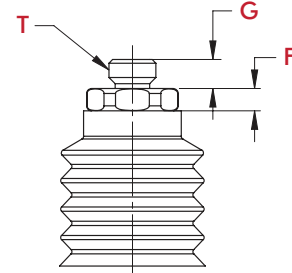
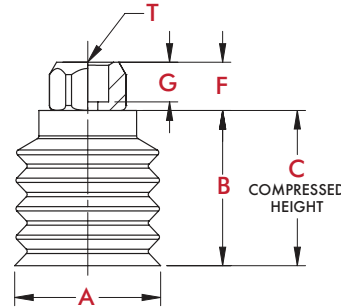
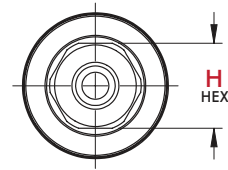
ACU INDEX



G1/8 FEMALE



G1/8 MALE



(DR) = Durometer/Material

S Silicon Extremely hot or cold environments

N Nitrile General Purpose

VC-BM Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

VC-BM Dimensions

Model	A	B	C	Cup Wt	Load
VC-BM20	20.1 [.79]	21.9 [.86]	8.9 [.35]	5.3 g [17 oz]	.68 kg [1.50 lb]
VC-BM30	30.0 [1.18]	30.7 [1.21]	10.7 [.42]	10.3 g [.33 oz]	1.64 kg [3.63 lb]
VC-BM40	39.8 [1.57]	40.9 [1.61]	12.9 [.51]	19.6 g [.63 oz]	2.21 kg [4.88 lb]
VC-BM50	50.0 [1.97]	51.1 [2.01]	23.1 [.91]	32.7 g [1.05 oz]	4.37 kg [9.63 lb]

Metric: CPI-(S)-(M)-(DR)

Size (S) mm	Mount (M) →	10M		18M		18F	
		Durometer (DR) →					
		S	N	S	N	S	N
Ø20	VC-BM20	●	●	●	●	●	●
Ø30	VC-BM30			●	●	●	●
Ø40	VC-BM40			●	●	●	●
Ø50	VC-BM50			●	●	●	●

TPLP Mag-Lift Part Lifting Magnets

Features:

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

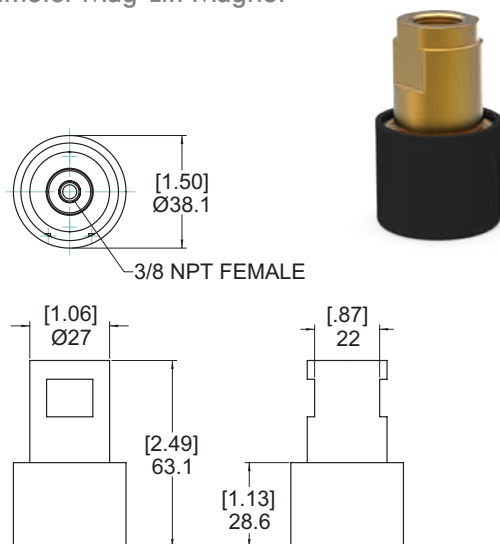
Benefits:

- NPT mount allows retrofit to existing assemblies.

Specifications:

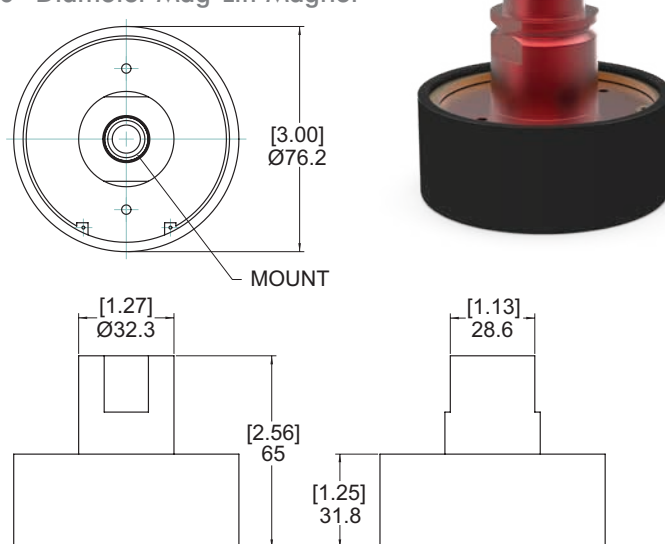
Recommended Operating Pressure:
2.4 bar [35 psi]
Port: 3/8" NPT Compressed Air Port
Material: Machined, Anodized Aluminum, Urethane Pad (50 durometer - low skid)

1.50" Diameter Mag-Lift Magnet



Model	Pad Only
CPI-TPLP15RB	RB15-CPI

3.00" Diameter Mag-Lift Magnet



Mount	Model	Pad Only
3/8 NPT	CPI-TPLP50373	RB30-CPI
G3/8	CPI-TPLP30BS	

Note: The minimum air pressure required for the Mag-Lift to release parts is 25 psi. The suggested air pressure for normal operation is 35 psi. If part do not release immediately, increase the air pressure in 5 psi increments until the part releases. Do not exceed 60 psi. Air pressure should be measured at the inlet of the Mag-Lift to ensure effective operation.

TPLP 1.50" Diameter Mag-Lift Magnet - CPI-TPLP15RB - Capacities

Gage Of Steel (Ferrous Only)	26 GA (0.018")	22 GA (0.030")	16 GA (0.050")	12 GA (0.100")	3/16" (0.187")	Weight
With Pad	3.18 kg [7.0 lb]	4.08 kg [9.0 lb]	4.54 kg [10.0 lb]	4.54 kg [10.0 lb]	4.54 kg [10.0 lb]	136g [5 oz]
Without Pad	4.54 kg [10.0 lb]	6.35 kg [14.0 lb]	7.26 kg [16.0 lb]	[7.71 kg] 17.0 lb	7.71 kg [17.0 lb]	136g [5 oz]

TPLP 3.00" Diameter Mag-Lift Magnet - CPI-TPLP50373 - Capacities

Gage Of Steel (Ferrous Only)	26 GA (0.018")	22 GA (0.030")	16 GA (0.050")	12 GA (0.100")	3/16" (0.187")	Weight
With Pad	8.62 kg [19.0 lb]	13.61 kg [30.0 lb]	19.96 kg [44.0 lb]	19.96 kg [44.0 lb]	20.87 kg [46.0 lb]	363g [13 oz]
Without Pad	9.53 kg [21.0 lb]	14.97 kg [33.0 lb]	26.76 kg [59.0 lb]	27.22 kg [60.0 lb]	29.03 kg [64.0 lb]	363g [13 oz]

Note: Capacity values are stated at approximately 30% of the maximum holding value. Use this value for determining the quantity of Mag-Lift magnets required for an application.

ARV AND VSA SERIES VENTURIES

Vacuum Products | Features and Specifications

ARV® Series Auto-Release Venturi Cup Mount

Requiring (1) air line, (1) valve:

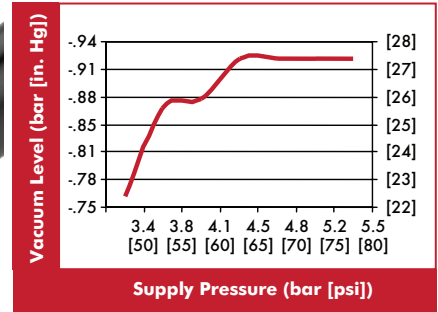
Offers integrated automatic quick panel release and exhaust silencer in one part. Mounting options include right or left hand apple core mounting or no apple core mount for use with DESTACO's spring cup mounts.

The ARV® Series is also available in a block style for remote mounting and each mount can be ordered with Imperial or Metric ports.



Covered under one or more U.S./International Patents

ARV® Performance:



Specifications @ 4 bar [60psi]:

Speed to Vacuum: 0.2-0.3 seconds

Speed to Release: 0.02 seconds

Air Consumption:

Vacuum: 40 l/m [1.4 scfm]

Blow-off: 0

Noise Level (at one meter): 68dBA

Material: Aluminum

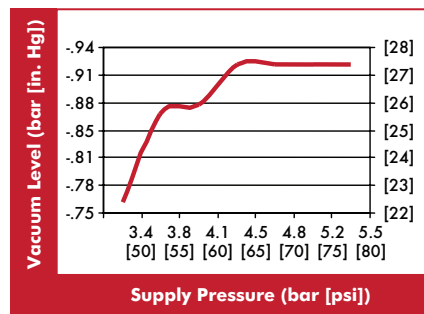
VSA Series Venturi Cup Mount



Blow-off typically requires two air lines and multiple valves. The VSA series offers a low-profile version as shown. Additional options include silencer and sensor port options. Mounting threads can also be ordered in Imperial or Metric ports.

We also offers PA Series cup mounts.

VSA Performance:



Specifications @ 4 bar [60psi]:

Speed to Vacuum: .36 seconds

Speed to Release: 0.08 seconds

Air Consumption:

Vacuum: 40 l/m [1.4 scfm]

Blow-off: 2.6 liters [0.09 ft³]

(156 l/m [5.5scfm] @ 1 sec. duration)

Noise Level (At one meter):

Inline to exhaust: 76dBA

Inline to exhaust with Silencer: 68dBA

Material: Aluminum

ARV SERIES VENTURIES

Vacuum Products | Dimensions | Ordering Information



Left Hand Apple Core
CPI-VSA-ARVL-750-(X)
114g [0.25lb]



Right Hand Apple Core
CPI-VSA-ARVR-750-(X)
114g [0.25lb]



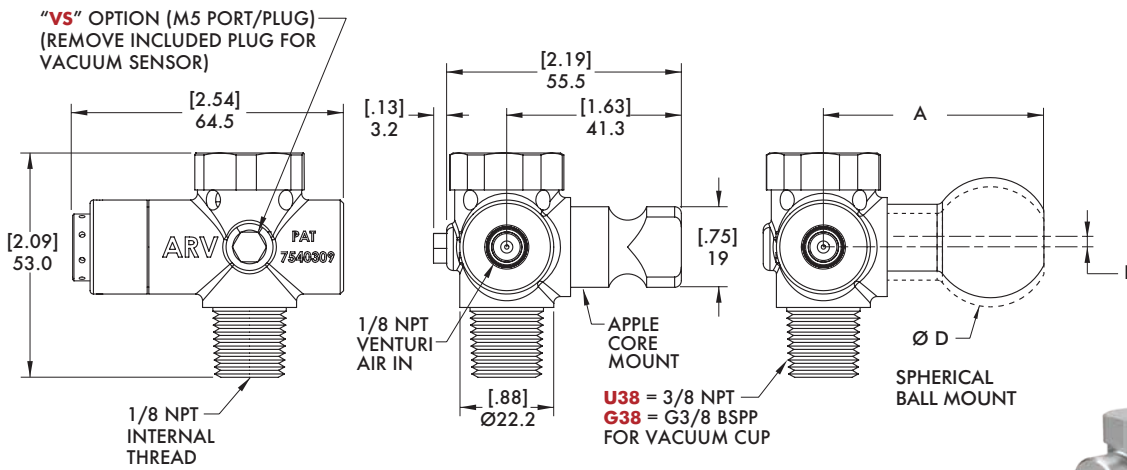
Without Apple Core
CPI-VSA-ARV-000-(X)
86g [0.19lb]



RH/LH Spherical Ball
CPI-VSA-ARV(R/L)-B112-(X)
CPI-VSA-ARV(R/L)-B32-(X)



(X)
Mounting Thread
U38 = 3/8" NPT Male
G38 = 3/8" G Male



Vacuum Sensor Option
Add "-VS" to end of "ARV" order code



Covered under one or more U.S./International Patents

Model Number	A	B	ØD	Weight
CPI-VSA-ARV(R/L)-B112-(X)	[1.85] 47.1	0	[1.13] 28.5	[0.28 lb] 126g
CPI-VSA-ARV(R/L)-B32-(X)	[1.93] 49	[0.12] 3.2	[1.26] 32	[0.30 lb] 134g

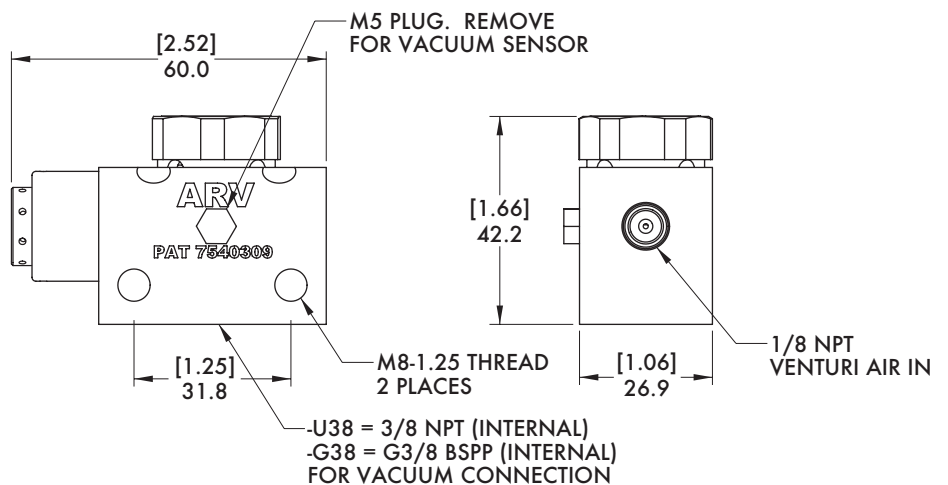
B112-01
28.58mm ball only
B112-32-01
32mm ball only

Venturi Style Vacuum Generator Cup Mounts ARV® Block Style Dimensions and Ordering Information



Block Style
CPI-VSA-ARVR-312-(X)
(X) = Vacuum Port Thread
U38 = 3/8" NPT Female
G38 = 3/8" G Female

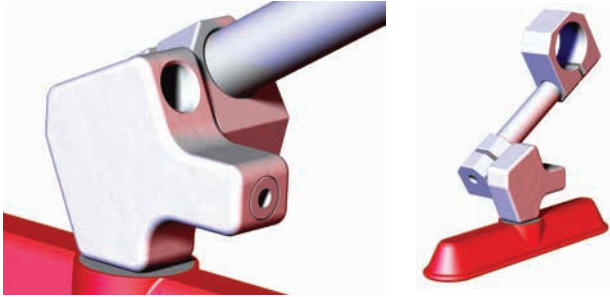
Weight
104g [0.23lb]



MICRO TOOLING VENTURI

Vacuum Products | Dimensions | Technical Specifications

VSA 500 Series MicroTool Apple Core

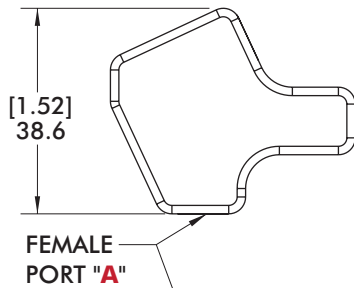
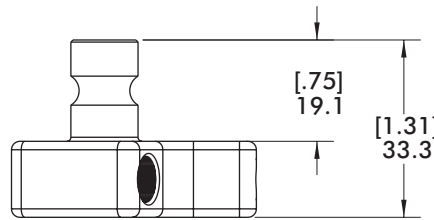
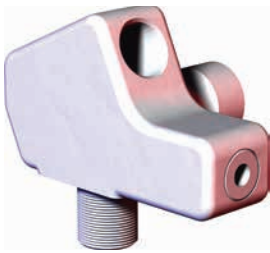


Features:

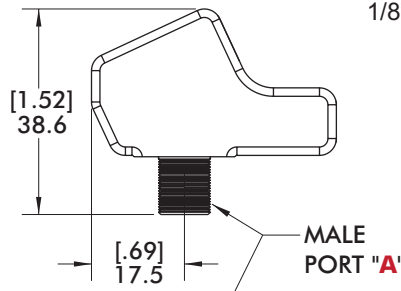
- MicroTool sized venturi.
- 1/8" NPT, 1/8" G Ports.

Benefits:

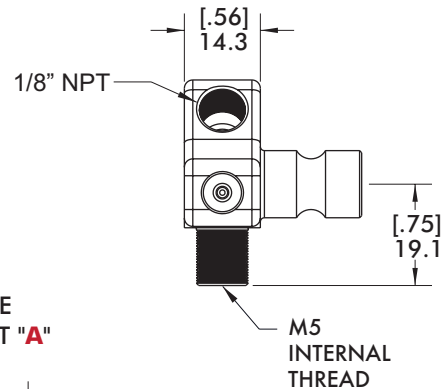
- Small and lightweight.
- Convenient mounts for most small vacuum cups.



FEMALE PORT "A"



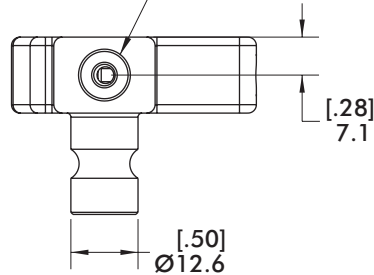
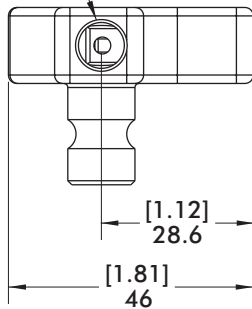
MALE PORT "A"



1/8" NPT

[.75]
19.1

M5 INTERNAL THREAD



Weight
57g [2 oz.]

500 Series Venturi MicroTool - CPI-VSA-500-"A"

Description	Port A
Female 1/8" NPT to Female 1/8" NPT	F18
Female 1/8" NPT to Male 1/8" NPT	M18

Covered under one or more U.S./International Patents

VSA SERIES VENTURIES

Vacuum Products | Dimensions | Technical Specifications

VSA Low-Profile 750/19 Series Apple-Core with Blow-Off

Features:

- Low profile construction.
- Integrated blow-off.
- Optional vacuum sensing port.
- Optional exhaust silencer.
- Imperial or Metric ports.

Benefits:

- Lower tool profile to fit in smaller spaces.
- Quick release of panels.
- Vacuum level or part present sensing.
- Quiet operation.



Low-Profile 750/19 w/
Blow Off No Options
CPI-VSA-(X)-BO-LP



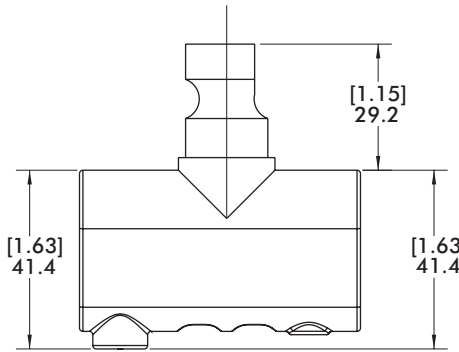
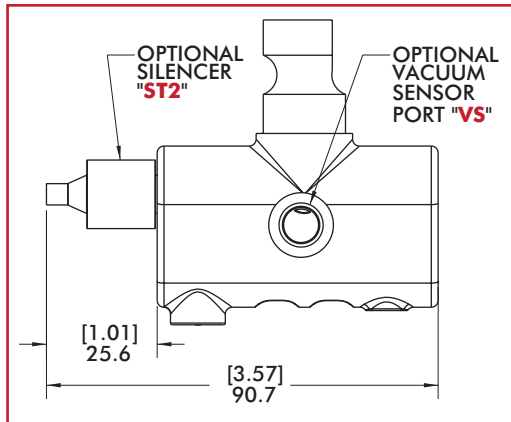
Low-Profile 750/19 with
Blow Off with Detector Option
CPI-VSA-(X)-BO-LP-DET



Low-Profile 750/19 with
Blow Off with "VS" Option
CPI-VSA-(X)-BO-LP-VS



For Silencer Option;
add "ST2" to the end
of order code (as shown).
CPI-VSA-(X)-BO-LP-VS-ST2

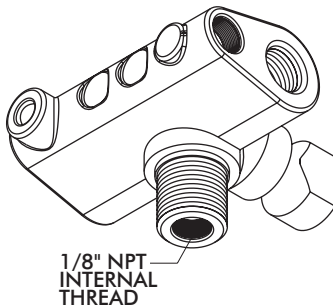


VS/DET Thread

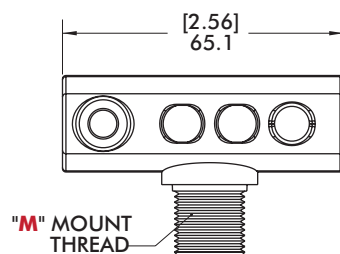
DET = M5
VS = 1/8 NPT

Weight

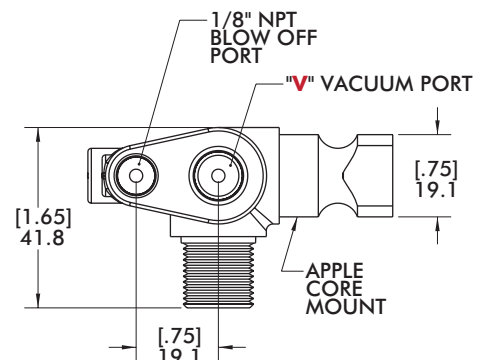
170g [6 oz.]



1/8" NPT
INTERNAL
THREAD



"M" MOUNT
THREAD



Low Profile 750/19 Series w/blow-off - CPI-VSA-(X)-BO-LP

Version	Mount Thread "M"	Vacuum Port "V"	(X)
Metric	3/8" G Male	1/4" G	19
Imperial	3/8" NPT Male	1/4" NPT	750

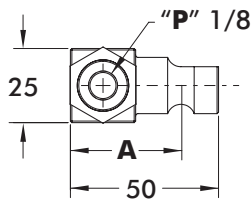
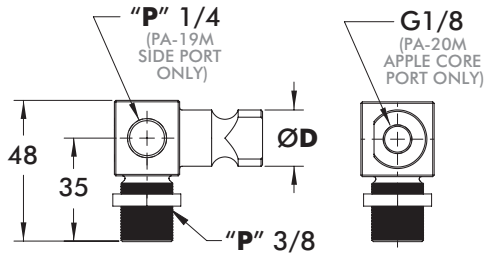
ACCELERATE® PORT ONLY ADAPTORS

Vacuum Products | Dimensions | Technical Specifications



PA Series

Apple Core Mount



PA-19M



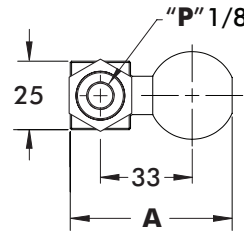
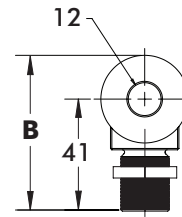
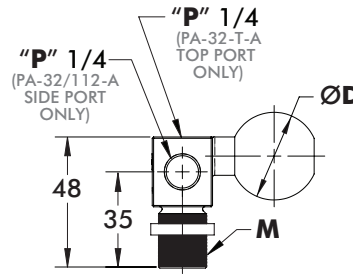
PA-20M

Material: Aluminum
Load: 150Nm

Weight includes locking nut*
and plug (not shown)
*Except U38 models

Model Number	A	ØD	P	Weight
PA-19M-G38-A	[1.46] 37	[0.75] 19	G	[0.17 lb] 77g
PA-19M-U38-A			NPT	[0.15 lb] 68g
PA-20M-G38-AC-A	[1.34] 34	[0.79] 20	G	[0.16 lb] 71g

Ball Mount



PA-B32/B112

PA-B32-G38-T-A

Material: Aluminum
Load: 150Nm

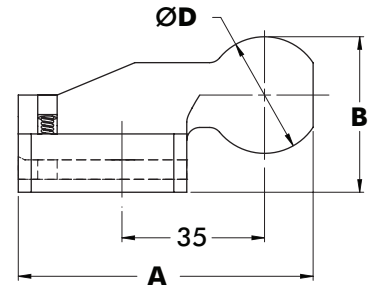
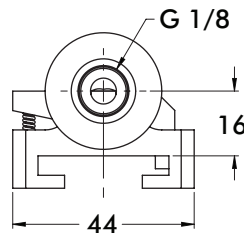
Weight includes locking nut* and plug
(not shown) *Except U38 models

Model Number	A	B	ØD	M	P	Weight
PA-B32-G38-A				G3/8	G	[0.23 lb] 103g
PA-B32-G38-T-A	[2.32] 59	[2.24] 57	[1.26] 32		G	[0.21 lb] 96g
PA-B32-U38-A				3/8 NPT	NPT	[0.21 lb] 94g
PA-B32-G14-A				G1/4	G	[0.21 lb] 95g
PA-B112-G38-A	[2.24] 57	[2.17] 55	[1.12] 28	G3/8	G	[0.20 lb] 89g
PA-B112-U38-A				3/8 NPT	NPT	[0.18 lb] 80g

PA 28mm - 32mm Ball for C-Mount



Material: Aluminum
Load: 150Nm

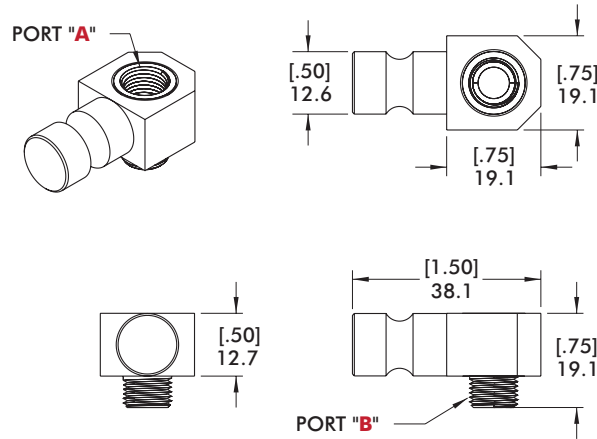


Model Number	A	B	ØD	Weight
CPI-PA-B112-CM	[2.84] 72.1	[1.50] 38.1	[1.13] 28.5	[0.23 lb] 106g
CPI-PA-B32-CM	[2.98] 75.7	[1.69] 42.9	[1.26] 32	[0.27 lb] 122g

MICRO TOOLING PORT ONLY ADAPTER

Vacuum Products | Dimensions | Technical Specifications

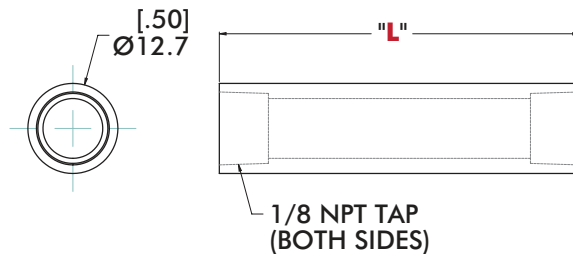
PA 500 Series



CPI-PA-500-"A"- "B" Ordering Information

Description		A	B	Weight
	Female 1/8" NPT/Female 1/8" NPT	F18	F18	23g [0.8 oz.]
	Female 1/8" G/Female 1/8" G	FG18	FG18	
	Female M5/Female M5	FM5	FM5	
	Female 1/8" NPT/Male 1/8" NPT	F18	M18	
	Female 1/8" G/Male 1/8" G	FG18	MG18	
	Female M5/Male M5	FM5	MM5	

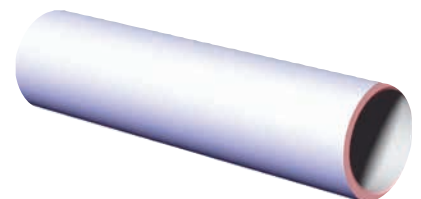
PAT 1/8 NPT Vacuum Extension



"L"

Standard Lengths

- 02 = 2.00"
- 03 = 3.00"
- 04 = 4.00"
- 05 = 5.00"
- 06 = 6.00"

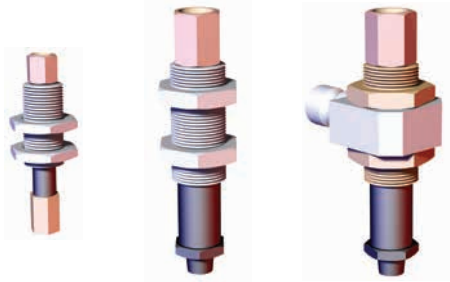


Model Number	Weight
CPI-PAT-50T-"L"-U18	[0.13 lb/ft] 193.0 g/m

SPRING-LOADED CUP MOUNTS

Vacuum Products | Dimensions | Technical Specifications

LC Bulk Head Style Micro Series Level Compensators



Specifications:
Material: Aluminum

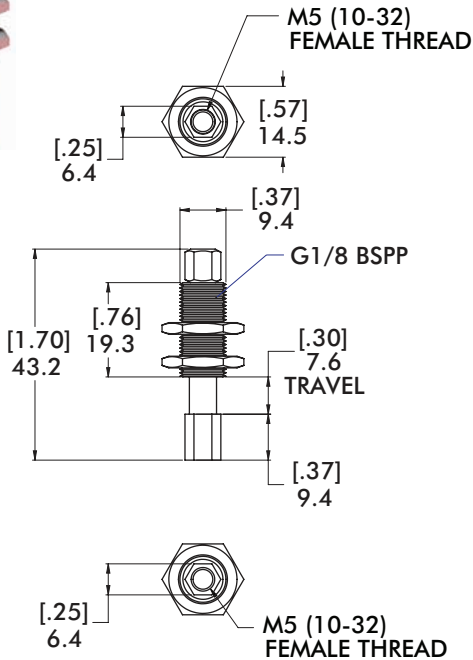
Features:

- M5 or G mounting threads and vacuum ports.

Note: To be used in vertical orientations only.



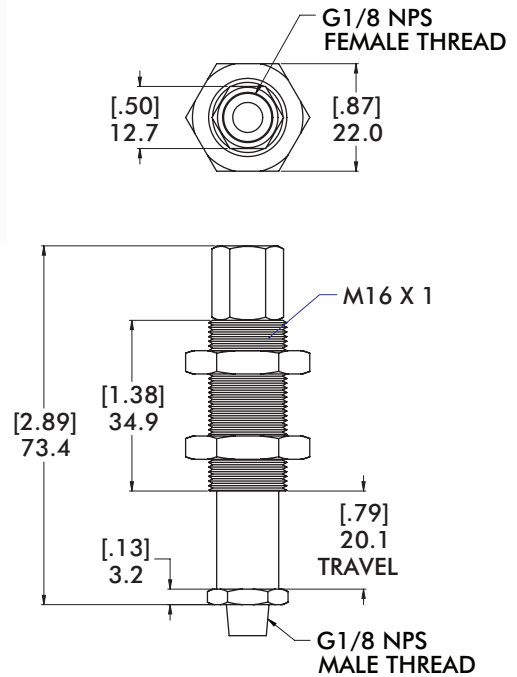
0.30" TRAVEL
ORDERING INFORMATION
CPI-LC10



Weight
5.7 g [0.2 oz.]

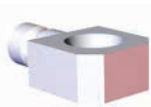


0.75" TRAVEL
ORDERING INFORMATION
CPI-LC18



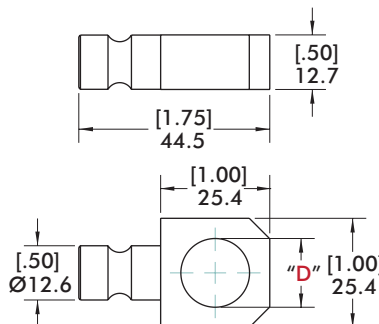
Weight
28.3 g [1.0 oz.]

LCM Series Mount



CPI-LCM-10-"D"

Weight
23 g [0.8 oz.]



"D" = (Ø) Diameter
16 = Ø16mm [.63"]
10 = Ø10mm [.39"]

SPRING-LOADED CUP MOUNTS

Vacuum Products | Dimensions | Technical Specifications

Features:

- Available in three different travel lengths.
- NPT or G mounting threads and vacuum ports.

Specifications:

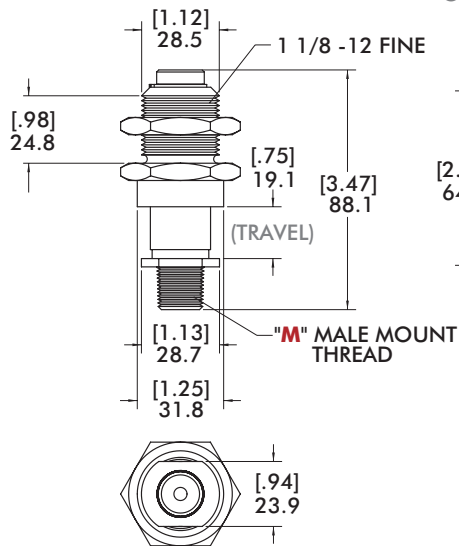
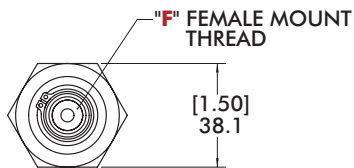
Material: Aluminum

RCM Bulkhead Style Standard Travel

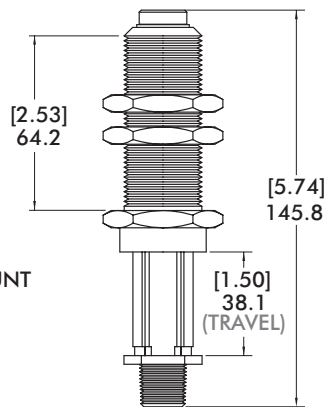


Note: To be used in vertical orientations only.

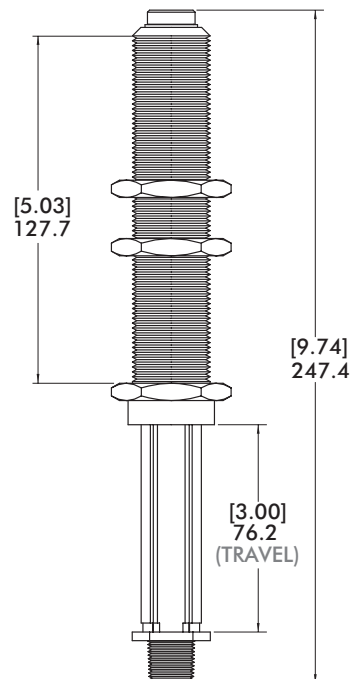
0.75" TRAVEL ORDERING INFORMATION CPI-RCM-30



1.50" TRAVEL ORDERING INFORMATION CPI-RCM-150-U14-NR



3.00" TRAVEL ORDERING INFORMATION CPI-RCM-300-U14-NR



CPI-RCM-150-U14-NR
Shown with
GT-BGA-750-30M

Bulkhead Mount - CPI-RCM-XXX

Version	Mount Thread M	Vacuum Port F
Imperial	3/8" NPT Male	1/4" NPT

Weight
.75" Travel = 142g [5 oz]
1.50" Travel = 227g [8 oz]
3.00" Travel = 340g [12 oz]

SPRING-LOADED CUP MOUNTS

Vacuum Products | Dimensions | Technical Specifications | Ordering Information

SCM Apple-Core Style



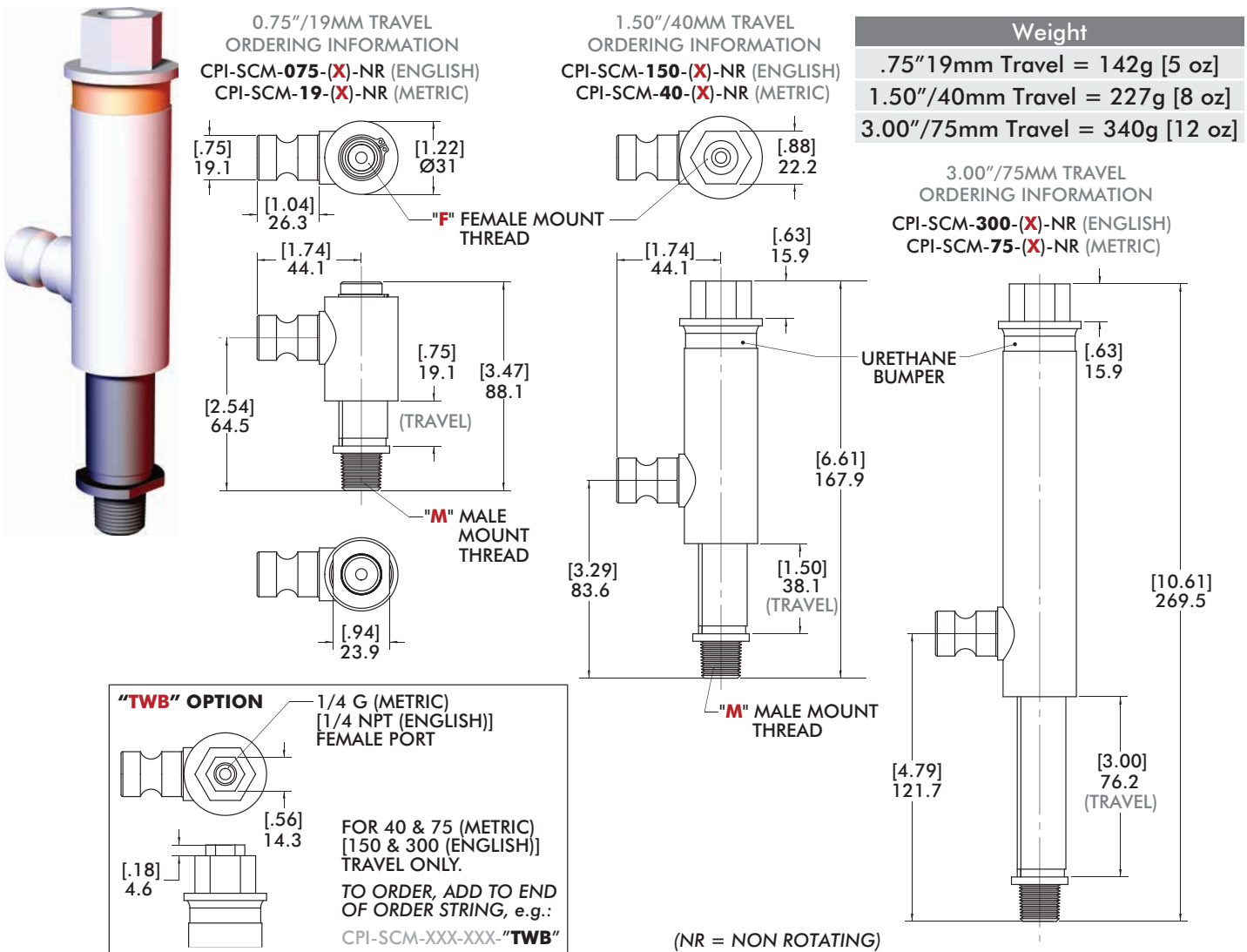
Specifications:

Material: Aluminum used on 1.50"/40mm and 3.00"/75mm travel.

Features:

- Available in three different travel lengths.
- Apple core .75" [19mm] mounting for adjustment along on axis.
- NPT or G mounting threads and vacuum ports.

Note: To be used in vertical orientations only.



CPI-SCM-(19/075)-(X)-NR Ports

Version	M	F	(X)
Metric	3/8" G	1/4" G	G14
Imperial	3/8" NPT	1/4" NPT	U14

CPI-SCM-(40/150 & 75/300)-(X)-NR Ports

Version	M	F	(X)
Metric	3/8" G	3/8" G	G14
Imperial	3/8" NPT	3/8" NPT	U14

SPRING-LOADED CUP MOUNTS

Vacuum Products | Features and Options

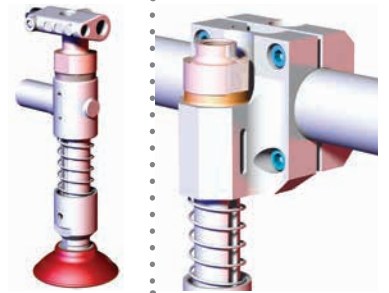
Features:

- Two mounting options.
- Three travel lengths.
- NPT or G mounting threads and vacuum ports.
- Urethane shock absorber.
- Teflon coated shaft.
- Fully modular construction.

Benefits:

- Urethane shock absorber reduces "pick-up" shock.
- Extensive use of polymers reduce weight and cost.
- Extended travel cup mounts can be reconfigured or rebuilt.
- Smooth operation, reduced wear.

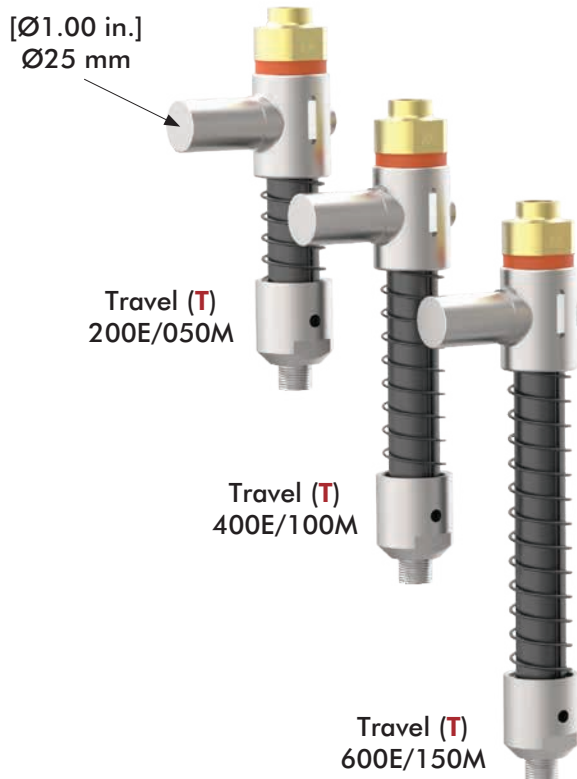
TCL T-Clamp Ø1.00" (in)



Note: To be used in vertical orientations only.

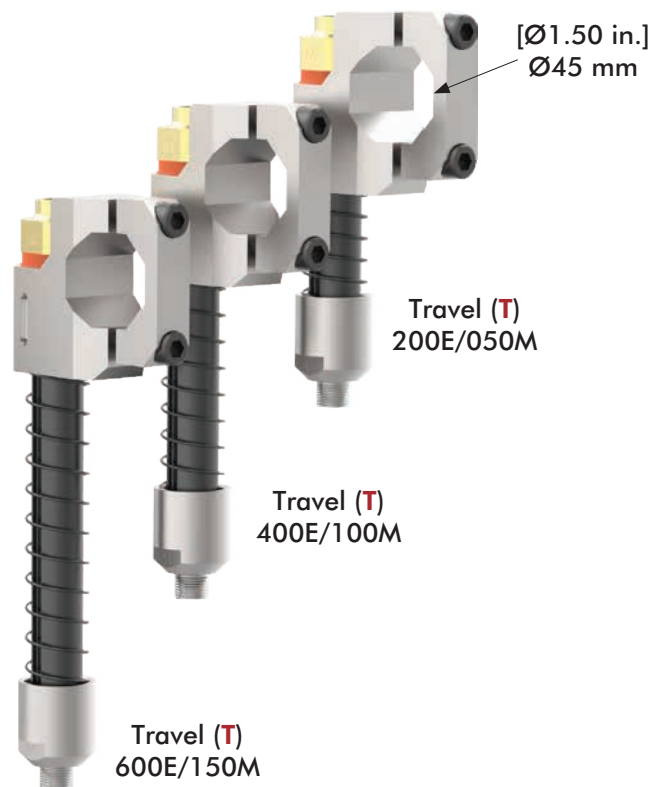
Extension Style Mount

Ø1.00 in. / 25 mm
CPI-SCM10-(T) Imperial
CPI-SCM25-(T) Metric



BodyBuilder Boom Mount

CPI-SCMS-45B-(T)



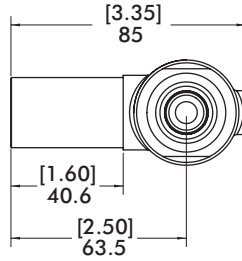
SPRING LOADED VACUUM CUP MOUNTS

Vacuum Products | Extended Travel Dimensions

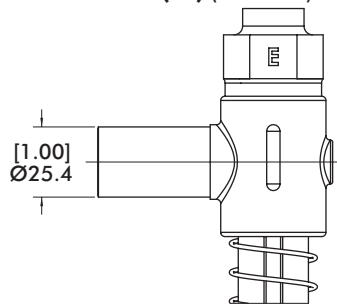
SCM Bulkhead/Apple Core/Extension Style

Note: To be used in vertical orientations only.

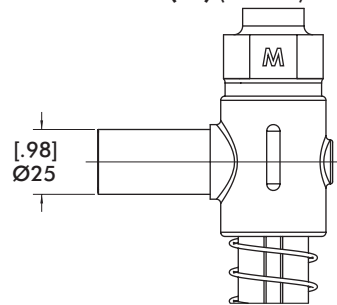
SCM(10) & SCM(25)





SCM(10) (ENGLISH)



SCM(25) (METRIC)



SCM Travel and Length - CPI-SCM(X)-"T"

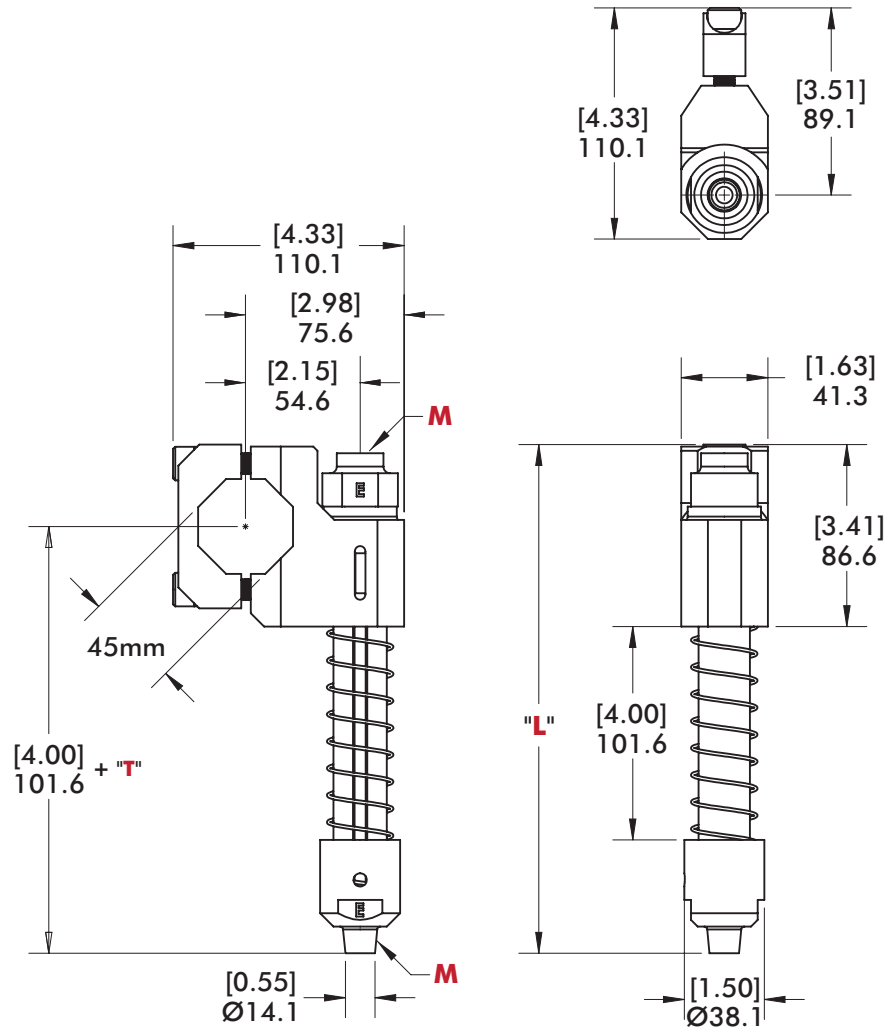
Version	Travel "T"	L	M	Weight
 Imperial	200E (2.00" Vertical Travel)	187.3 [7.38]	3/8" NPT	.48kg [1.06 lb]
	400E (4.00" Vertical Travel)	238.2 [9.38]	3/8" NPT	.53kg [1.16 lb]
	600E (6.00" Vertical Travel)	288.9 [11.38]	3/8" NPT	.58kg [1.27 lb]
 Metric	050M (50mm Vertical Travel)	187.3 [7.38]	3/8" G	.48kg [1.06 lb]
	100M (100mm Vertical Travel)	238.2 [9.38]	3/8" G	.53kg [1.16 lb]
	150M (150mm Vertical Travel)	288.9 [11.38]	3/8" G	.58kg [1.27 lb]

BODY BUILDER SPRING LOADED VACUUM CUP MOUNTS

Vacuum Products | Extended Travel Dimensions

SCM BodyBuilder Mounted

Note: To be used in vertical orientations only.



SCM Travel and Length - CPI-SCMS-45B-"T"

Version	Travel "T"	L	M	Weight
Imperial	200E (2.00" Vertical Travel)	191.5 [7.54]	3/8" NPT	.77kg [1.7 lb]
	400E (4.00" Vertical Travel)	242.2 [9.54]	3/8" NPT	.82kg [1.8 lb]
	600E (6.00" Vertical Travel)	293.1 [11.54]	3/8" NPT	.87kg [1.9 lb]
Metric	050M (50mm Vertical Travel)	191.5 [7.54]	3/8" G	.77kg [1.7 lb]
	100M (100mm Vertical Travel)	242.2 [9.54]	3/8" G	.82kg [1.8 lb]
	150M (150mm Vertical Travel)	293.1 [11.54]	3/8" G	.87kg [1.9 lb]

SPRING LOADED VACUUM CUP MOUNT ACCESSORIES

Vacuum Products | Extended Travel Dimensions

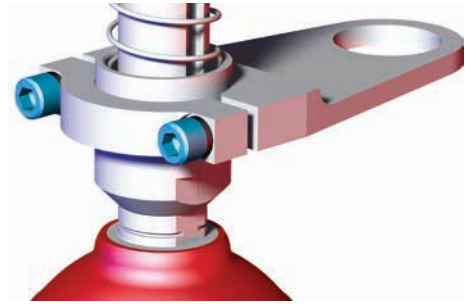
SAP Extended Travel Proximity Switch Mounts

Specifications:

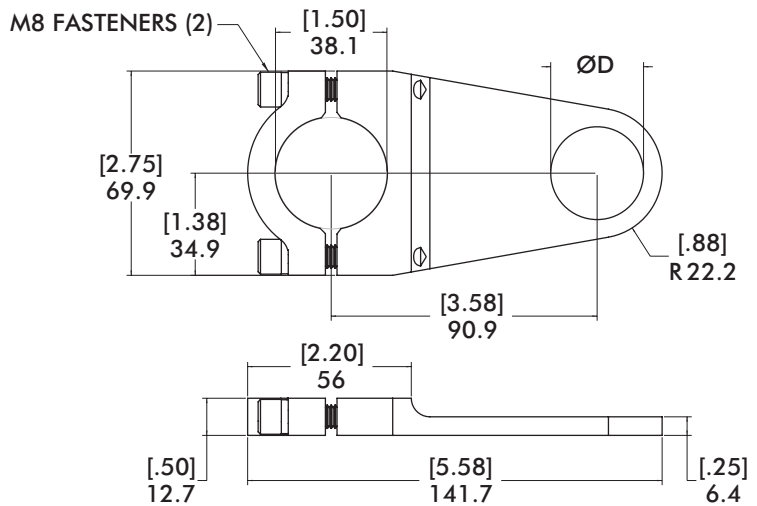
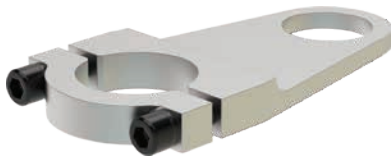
Material: Aluminum

Features:

- Mounts 30mm barrel style and square style proximity switches to the extended travel spring-loaded cup mounts.

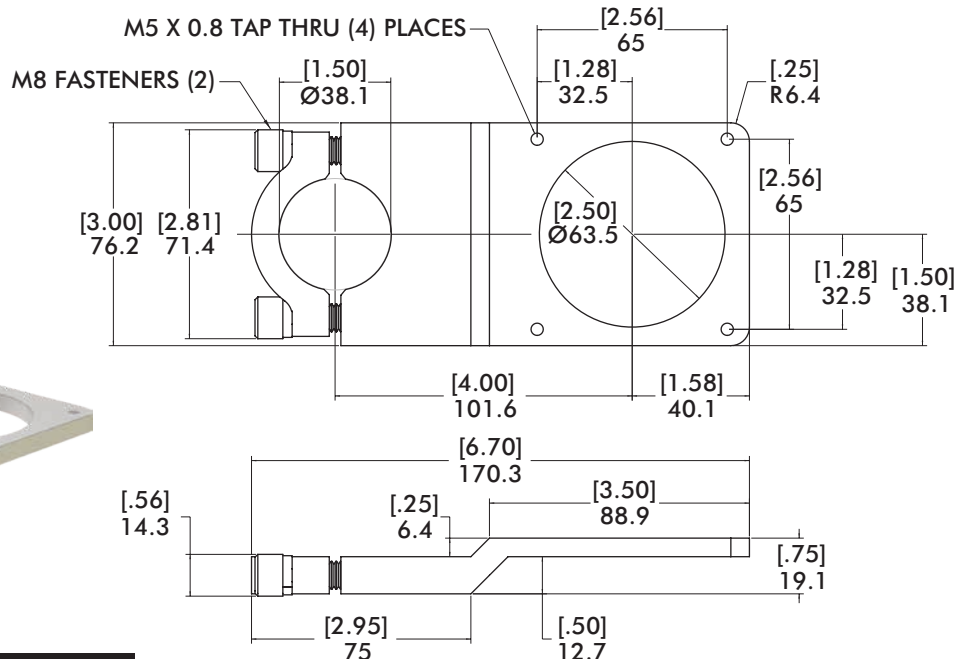


SAP 30mm Barrel Style



Model	ØD	Weight
CPI-SAP-30-PM-150	[1.25] 31.8	.13 kg [.29 lb]
CPI-SAP-18-PM-150	[.75] 19	.17 kg [.38 lb]

SAP 50mm Square Style

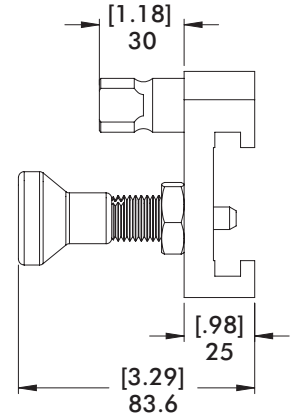
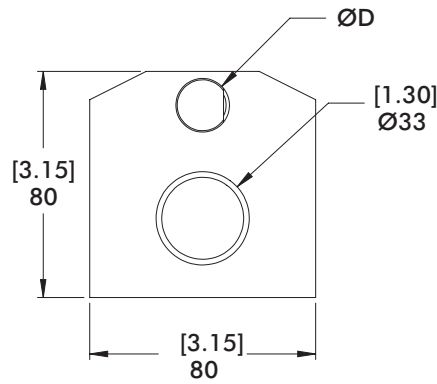
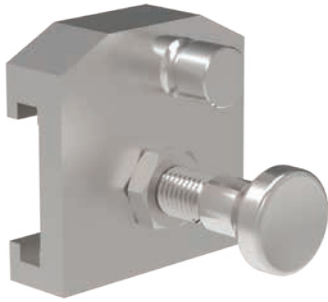


Model	Weight
CPI-SAP-NI50-PM-150	.23 kg [.56 lb]

DOUBLE BLANK DETECTOR QUICK-CHANGE MOUNT

Vacuum Products | Dimensions | Technical Specifications

DBD Quick-Change Mount



Model	ØD	Weight
DBD-19-QC-A	19mm	522g [1.15 lb]
DBD-20-QC-A	20mm	527g [1.16 lb]

DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Features and Options | Ordering Information

DBD Series

Features:

- Orbital design allows compliance to blanks within +/- 15° without having to make any automation, tooling or robot adjustments.
- Elimination of compression springs results in long-lasting, reliable performance
- **HD** Version provides added stability for heavy-duty applications

Specifications:

Operating Pressure: 4 bar [60psi]
Electric: Sensor supplied by customer

Note: To be used in vertical orientations only.

CPI-DBD-(X)-SCMB-(T)
 Ø1.25" Thru Hole
 Bulkhead Mount



CPI-DBD-(X)-SCM10/25-(T)
 Ø1.00"/25mm
 Extension Mount



CPI-DBD-(X)-SCMB-(T)-HD
 Ø1.00"/25mm Tube Mount
 Heavy-duty (Double Pogo)



Base Model
DBD
 Double Blank
 Detector

Sensor Size
42 Ø42mm
54 Ø54mm
 (Sensors not
 Included)

Mounting Style
SCM10 Ø1.00" Extension Mount
SCM25 Ø25mm Extension Mount
SCMB Bulkhead Mount

Vertical Travel (T) (See pages 45-47)
200E 2.00 in. with NPT Vacuum Port (Except -HD)
400E 4.00 in. with NPT Vacuum Port
600E 6.00 in. with NPT Vacuum Port
800E 8.00 in. with NPT Vacuum Port (-HD only)
050M 50mm with G Vacuum Port (Except -HD)
100M 100mm with G Vacuum Port
150M 150mm with G Vacuum Port
200M 200mm with G Vacuum Port (-HD only)

Covered under one or more U.S./International Patents

CPI-DBD-(X)-(T)-SCMC-(D)
 Ø1.50"/40mm
 Tube Mount



X=Sensor Size
42 Ø42mm
54 Ø54mm
 (Sensors not Included)

T=Vertical Travel
200E 2.00 in. with NPT Vacuum Port
400E 4.00 in. with NPT Vacuum Port
600E 6.00 in. with NPT Vacuum Port
050M 50mm with G Vacuum Port
100M 100mm with G Vacuum Port
150M 150mm with G Vacuum Port

D=Tube Mount
40 40mm Tube Mount (Metric Only)
150 1.50" Tube Mount (Imperial Only)
 (See page 47)

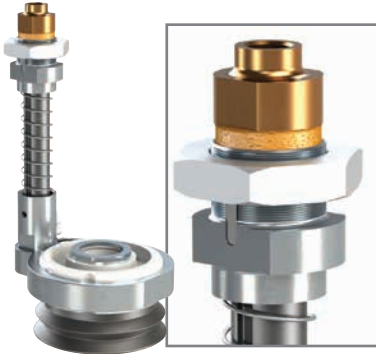
CPI-DBD-42-200E-SCMS
 Ø45mm
 BodyBuilder Mount
 (See page 48)



DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

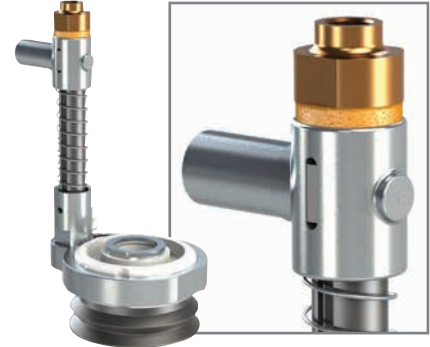
Vacuum Products | Dimensions | Technical Specifications

DBD Bulkhead/Extension Style Dimensions

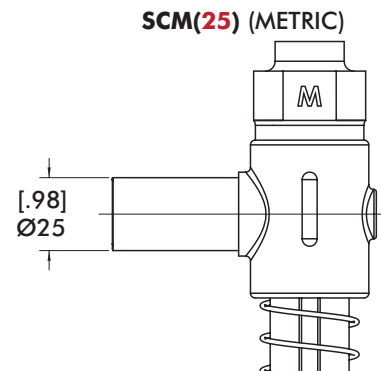
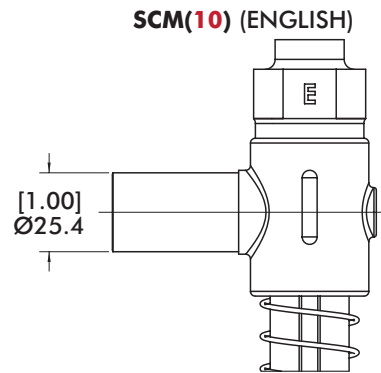
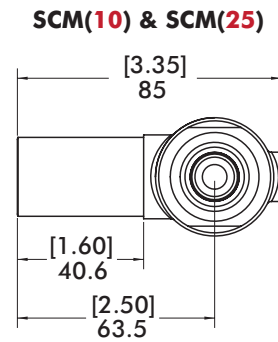
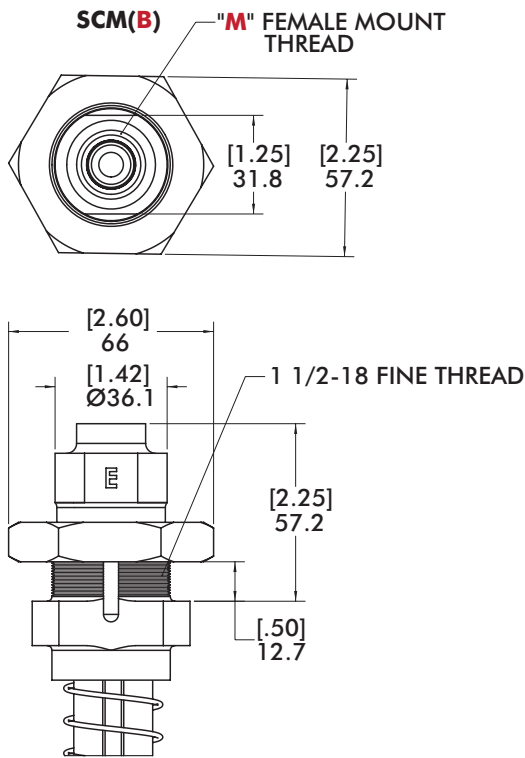


SCMB
Ø1.25" Thru Hole
Bulkhead Mount

Note: To be used in vertical orientations only.



SCM10/25
Ø1.00"/25mm
Extension Mount

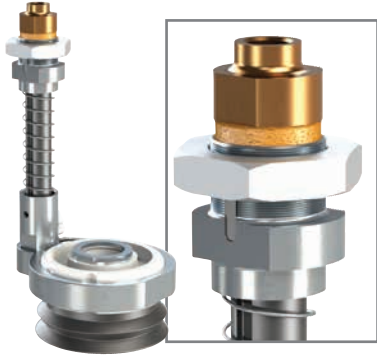


Version	(M)
Imperial	3/8" NPT
Metric	3/8" G

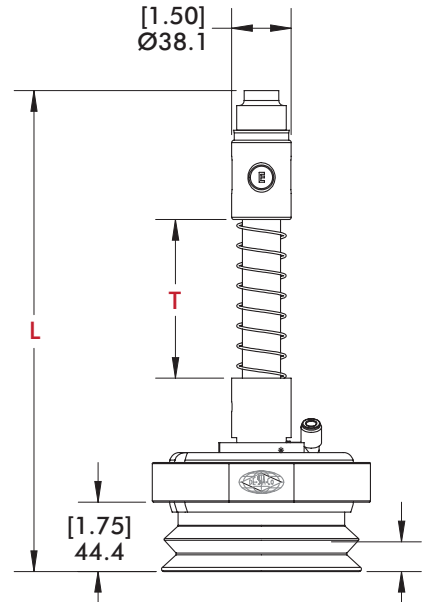
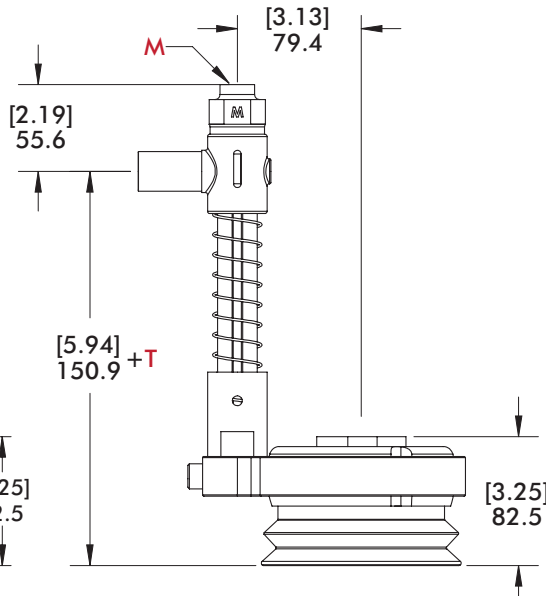
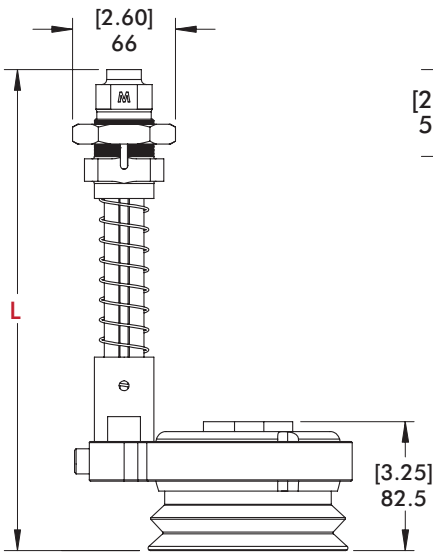
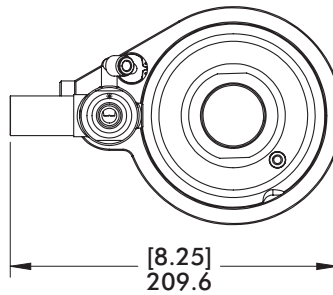
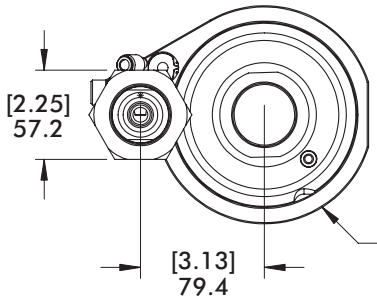
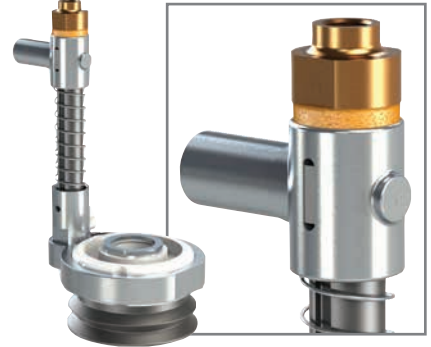
DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Bulkhead/Extension Style



Note: To be used in vertical orientations only.



DBD Travel and Length - CPI-DBD-(X)-SCM(X)-(T)

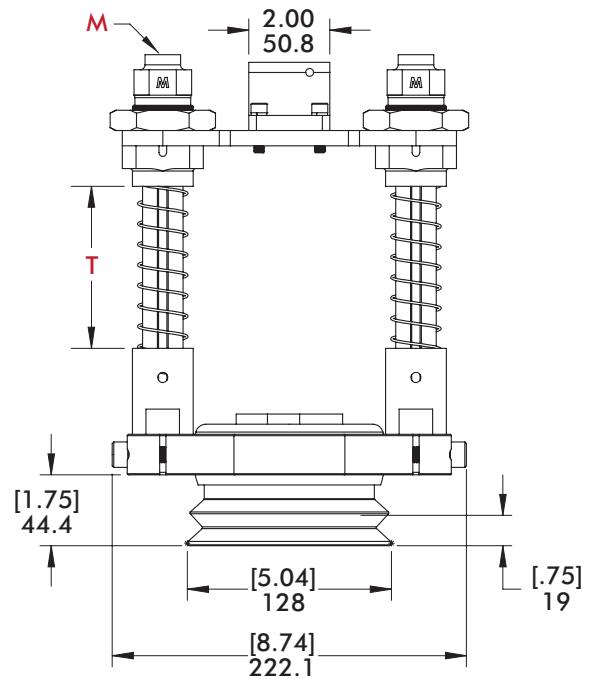
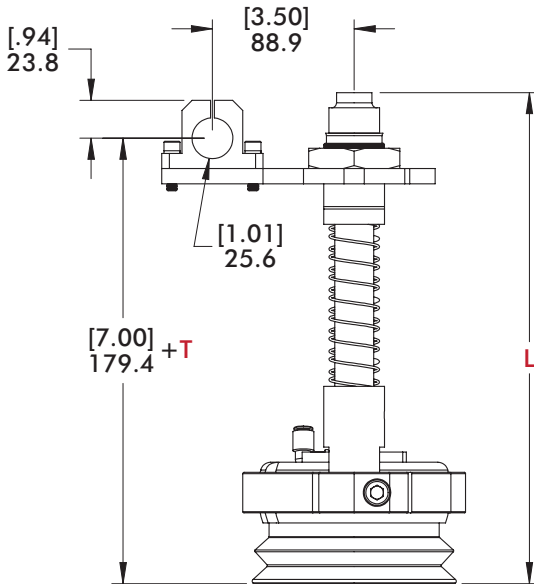
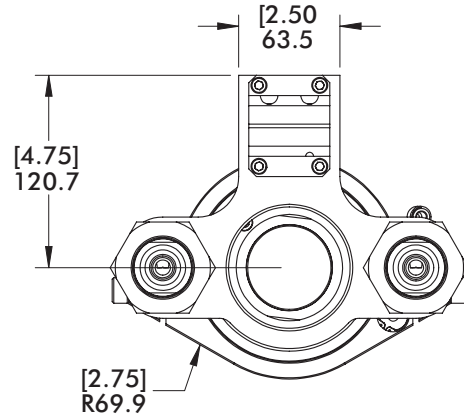
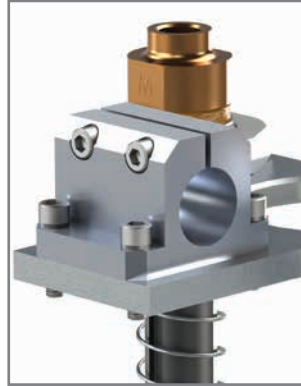
Version	Vertical Travel (T)	(L)	(M)	Weight
Imperial	200E (2.00")	257.1 [10.12]	3/8" NPT	.85kg [1.87 lb]
	400E (4.00")	307.9 [12.12]		.90kg [1.97 lb]
	600E (6.00")	358.7 [14.12]		.94kg [2.08 lb]
Metric	050M (50mm)	257.1 [10.12]	3/8" G	.85kg [1.87 lb]
	100M (100mm)	307.9 [12.12]		.90kg [1.97 lb]
	150M (150mm)	358.7 [14.12]		.94kg [2.08 lb]

DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS



Vacuum Products | Dimensions | Technical Specifications

DBD Heavy Duty (Double Pogo)

Note: To be used in vertical orientations only.



DBD Travel and Length - CPI-DBD-(X)-SCMB-(T)-HD

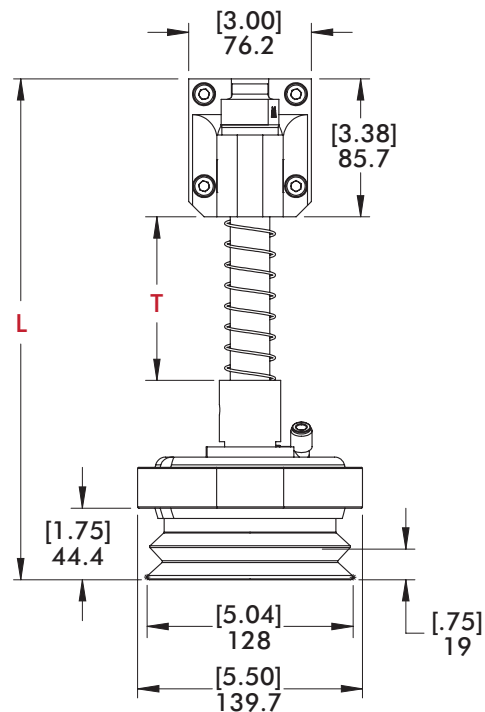
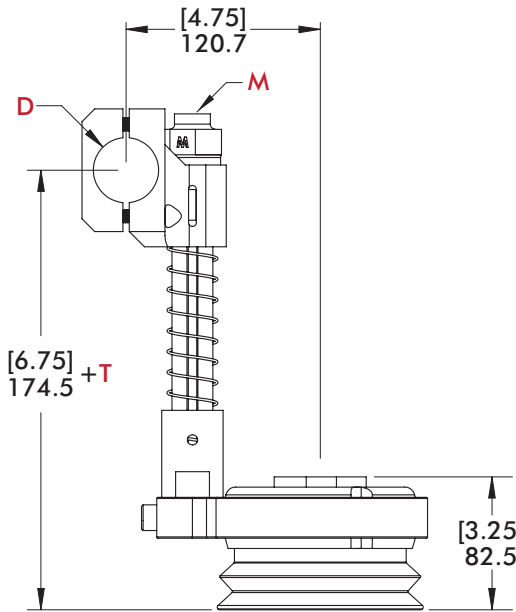
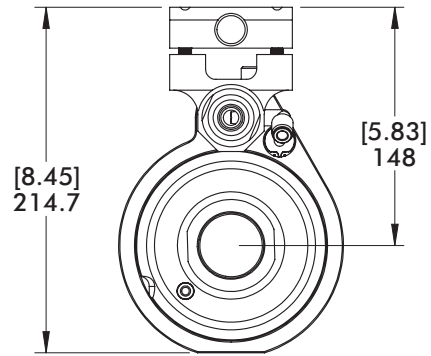
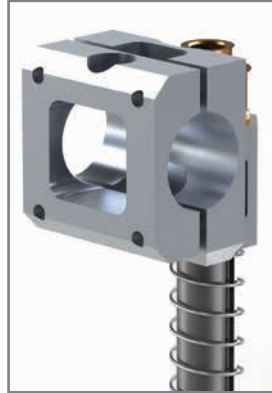
Version	Vertical Travel (T)	(L)	(M)	Weight
 Imperial	400E (4.00")	307.9 [12.12]	3/8" NPT	3.06kg [6.75 lb]
	600E (6.00")	357.9 [14.09]		3.16kg [6.97 lb]
	800E (8.00")	405.9 [15.98]		3.23kg [7.12 lb]
 Metric	100M (100mm)	307.9 [12.12]	3/8" G	3.06kg [6.75 lb]
	150M (150mm)	357.9 [14.09]		3.16kg [6.97 lb]
	200M (200mm)	405.9 [15.98]		3.23kg [7.12 lb]

BODYBUILDER™ DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Ø1.50"/40mm Tube Mount

Note: To be used in vertical orientations only.



X=Sensor Size
 42 Ø42mm
 54 Ø54mm
 (Sensors not Included)

DBD Travel and Length - CPI-DBD-(X)-(T)-SCMC-(D)

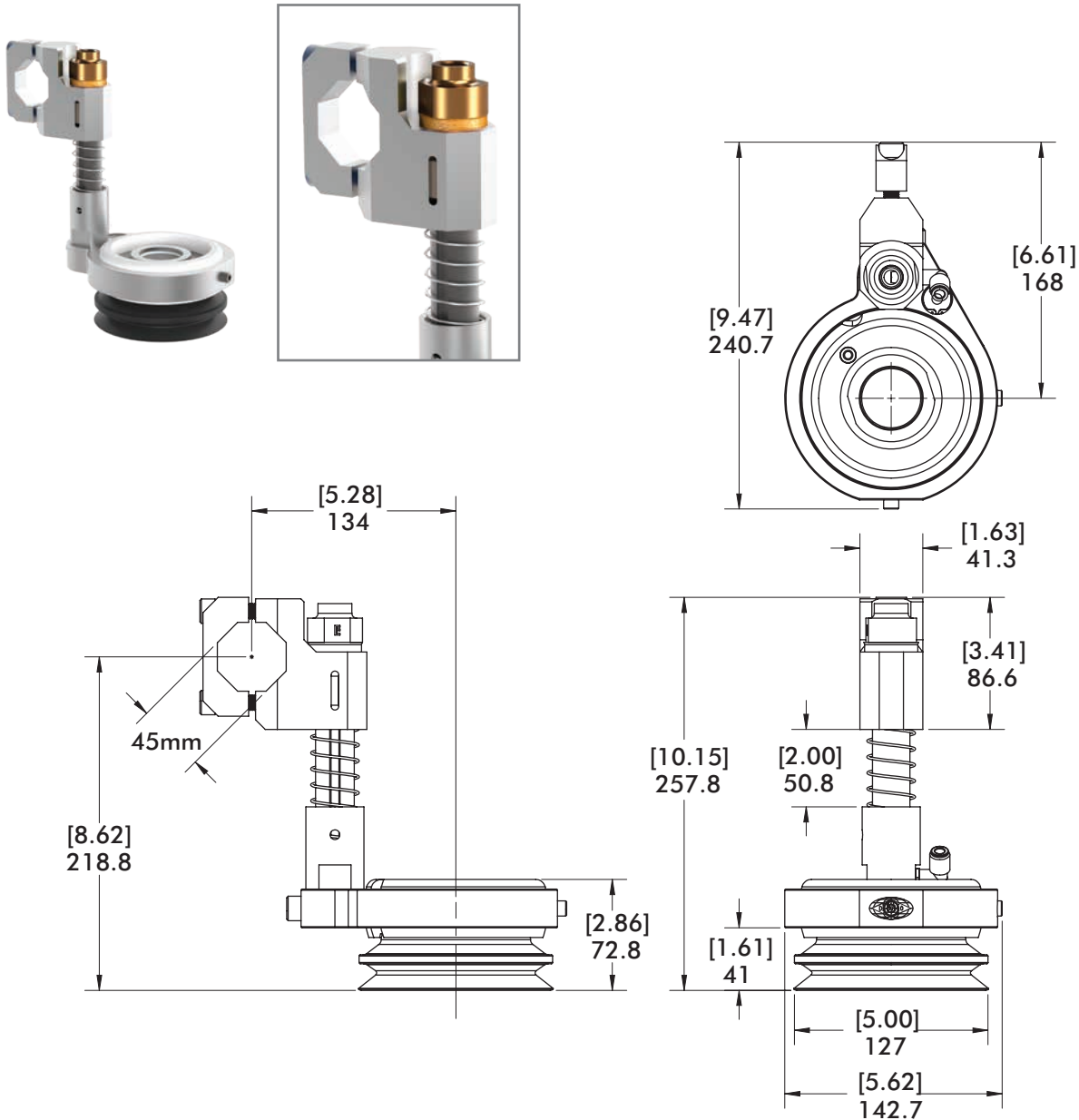
Version	Vertical Travel (T)	(L)	(M)	(D)	Weight
Imperial	200E (2.00")	261.1 [10.28]		150 (Ø1.50")	.85kg [1.87 lb]
	400E (4.00")	311.1 [12.25]	3/8" NPT		.90kg [1.97 lb]
	600E (6.00")	369.9 [14.21]			.94kg [2.08 lb]
Metric	050M (50mm)	261.1 [10.28]		40M (Ø40mm)	.85kg [1.87 lb]
	100M (100mm)	311.1 [12.25]	3/8" G		.90kg [1.97 lb]
	150M (150mm)	369.9 [14.21]			.94kg [2.08 lb]

DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Ø45mm BodyBuilder Mount

Note: To be used in vertical orientations only.



CPI-DBD-42-200E-SCMS-45B

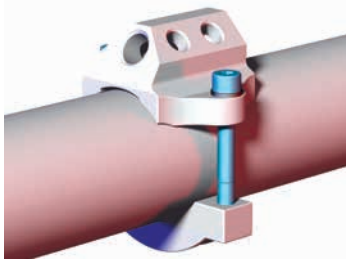
Version	Thread	Weight
Imperial	3/8" NPT	1.8kg [3.9 lb]



MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

MBC/MLK Boom Mounted Single 4-Port - 30° Angled Input Port

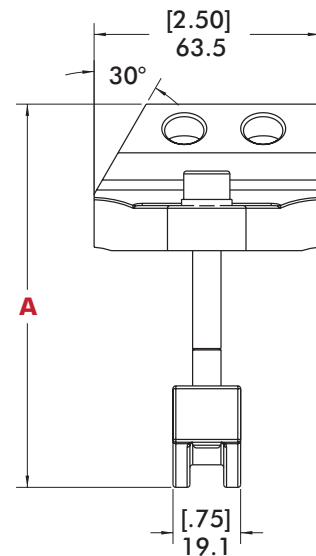
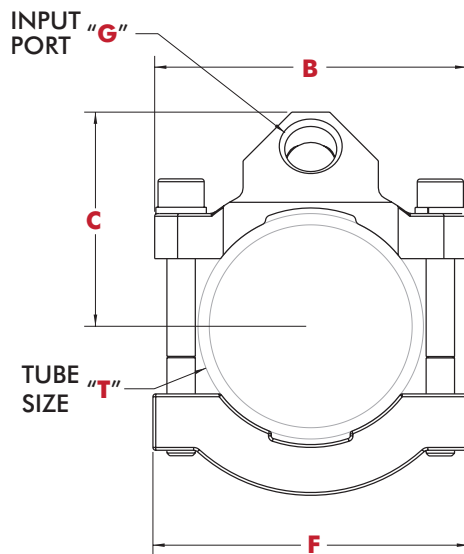
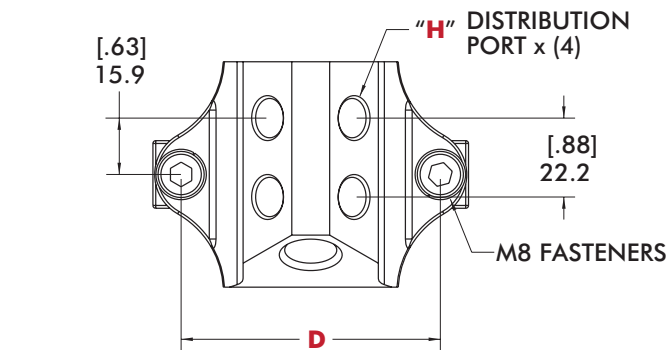
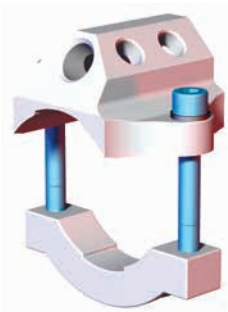


Features:

- 30° Angled input port.
- Provides a 4-port air distribution system mount on the boom.

Specifications:

Material: Aluminum



MBC/MLK Dimensions

Model	A	B	C	D	F	G	H	T	Weight
CPI-MLK-60-G44-30	108.0	87.9	60.3	73	88.9	3/8 G	1/4 G	Ø60MM	340g
[CPI-MBC-250-4-4-30]	[4.25]	[3.46]	[2.38]	[2.88]	[3.50]	[3/8 NPT]	[1/4 NPT]	[Ø2.50"]	[12 oz]

MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

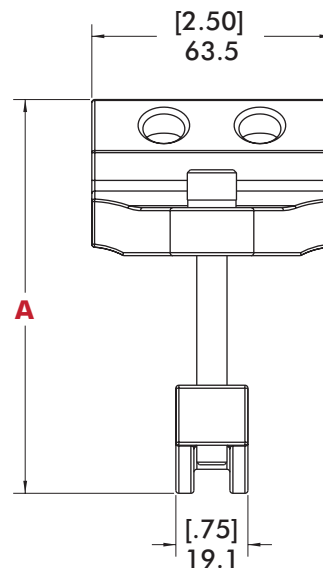
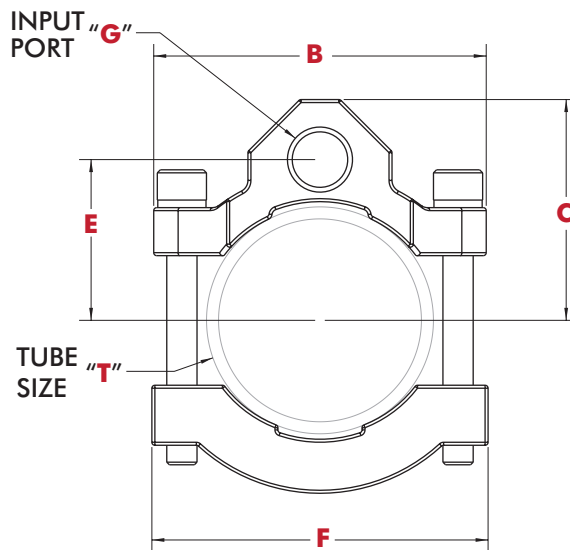
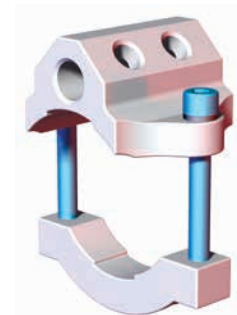
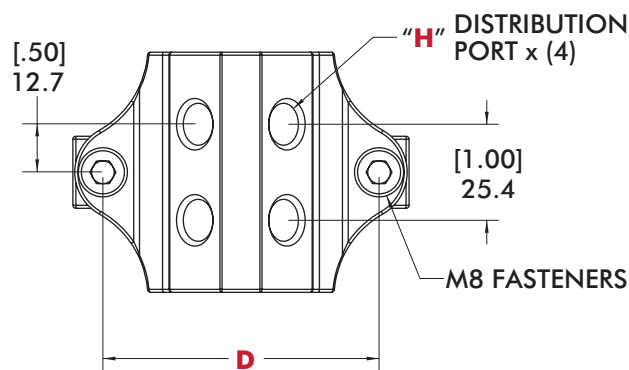
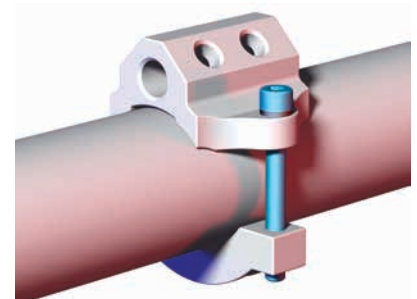
MBC/MLK Boom Mounted Single 4-Port

Specifications:

Material: Aluminum

Features:

- Provides a 4-port air distribution system mount on the boom.
- Available in two sizes to allow clamping to Ø40mm [Ø1.50"] and Ø60mm [Ø2.50"] materials.



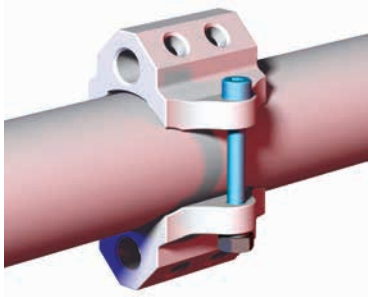
MBC/MLK Dimensions

Model	A	B	C	D	E	F	G	H	T	Weight
CPI-MLK-40-G44	88.9	64.3	52.5	48.5	36.7	64.3	12.9	114.5	Ø40MM	283g
[CPI-MBC-150-4-4]	[3.50]	[2.53]	[2.07]	[1.91]	[1.44]	[2.53]	[.51]	[4.51]	[Ø1.50"]	[10 oz]
CPI-MLK-60-G44	104.1	87.9	58.4	73	42.5	88.9	39.7	118.4	Ø60MM	340g
[CPI-MBC-250-4-4]	[4.10]	[3.46]	[2.30]	[2.88]	[1.67]	[3.50]	[1.56]	[4.65]	[Ø2.50"]	[12 oz]

MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

MBC/MLK Boom Mounted Double 8-Port

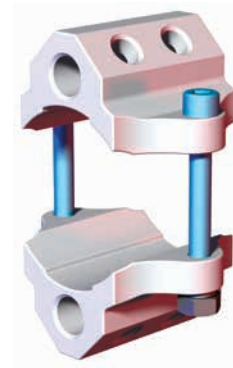
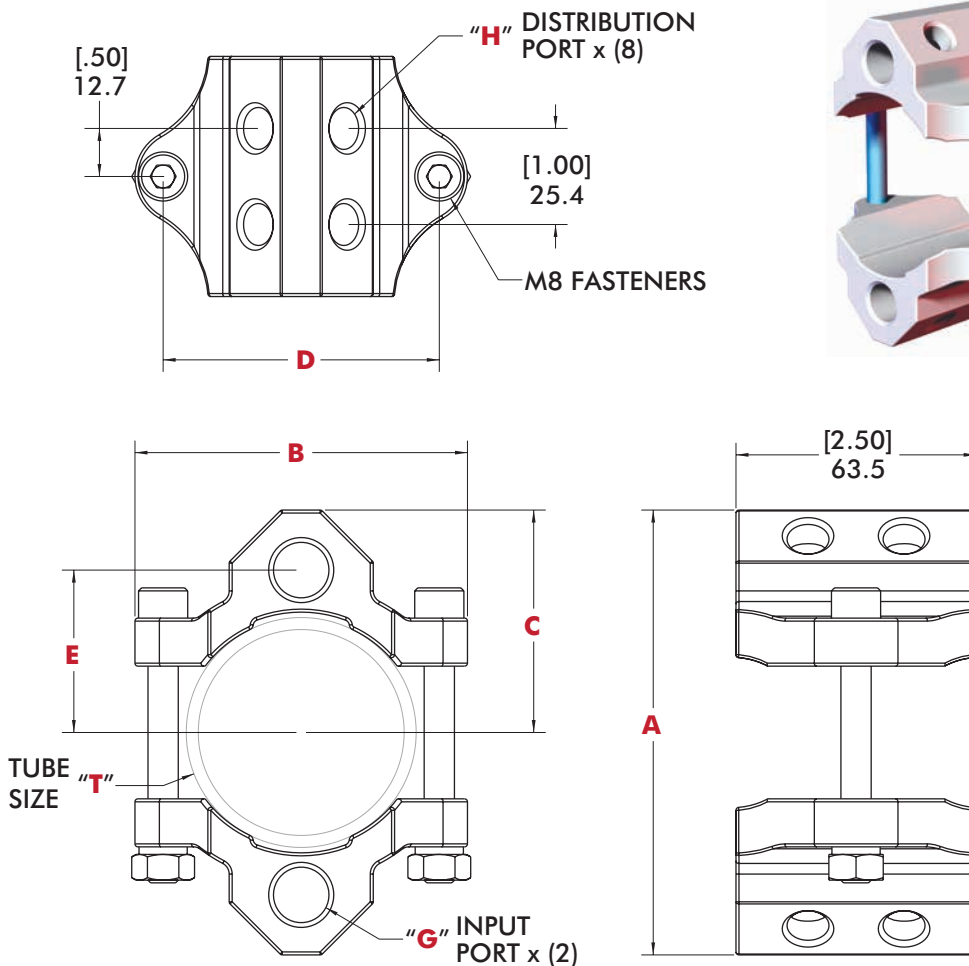


Features:

- Provides an 8-port (4 ports on top and bottom) air distribution system mount on the boom.
- Available in two sizes to allow clamping to Ø40mm [Ø1.50"] and Ø60mm [Ø2.50"] materials.

Specifications:

Material: Aluminum



MBC/MLK Dimensions

Model	A	B	C	D	E	G	H	T	Weight
CPI-MLK-40-G88 [CPI-MBC-150-8-8]	105.1 [4.14]	64.3 [2.53]	52.5 [2.07]	48.5 [1.91]	36.8 [1.45]	3/8 G [3/8 NPT]	1/4 G [1/4 NPT]	Ø40MM [Ø1.50"]	425g [16 oz]
CPI-MLK-60-G88 [CPI-MBC-250-8-8]	117.6 [4.63]	87.9 [3.46]	58.8 [2.32]	73.0 [2.88]	42.9 [1.69]	3/8 G [3/8 NPT]	1/4 G [1/4 NPT]	Ø60MM [Ø2.50"]	510g [18 oz]

MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

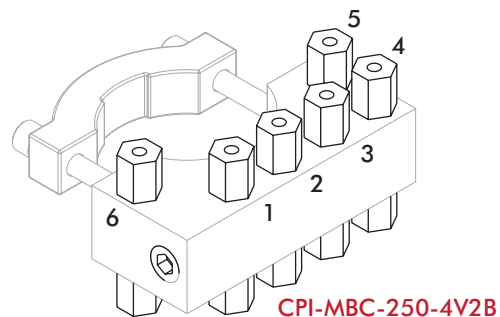
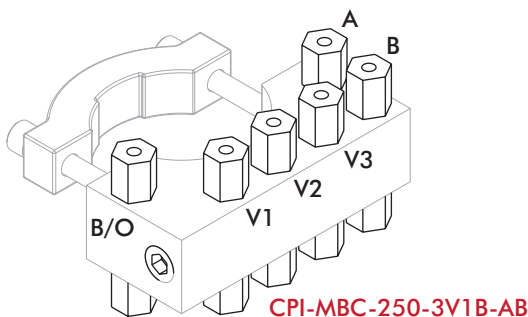
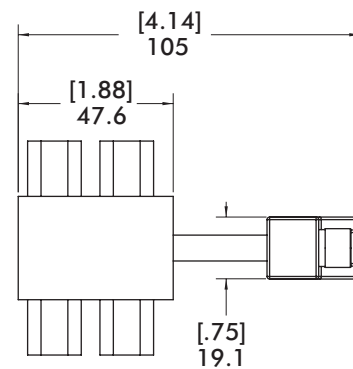
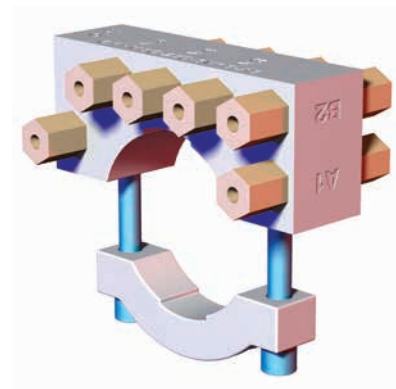
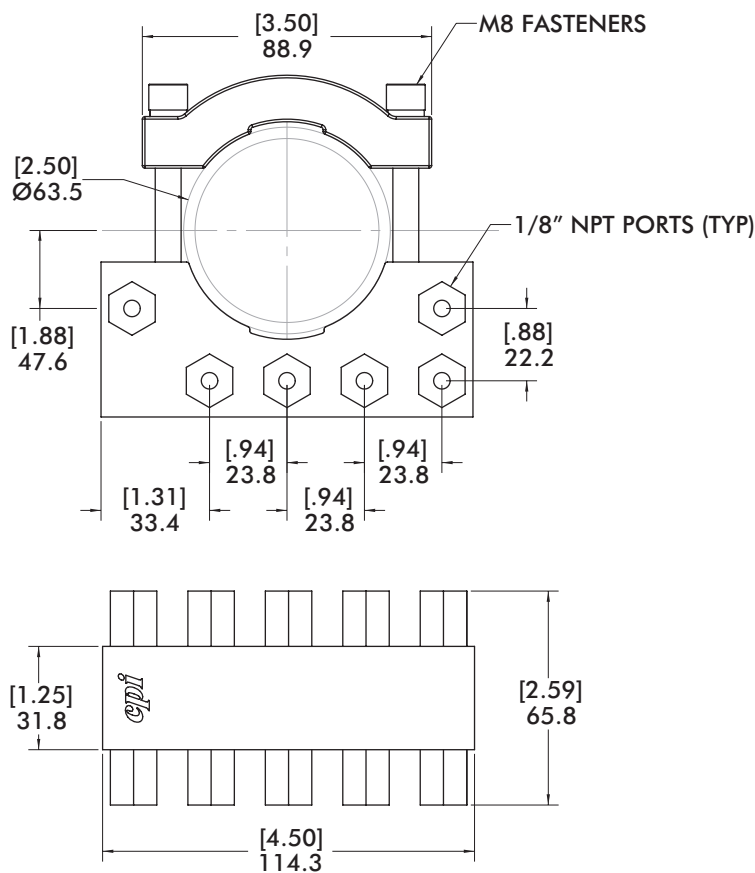
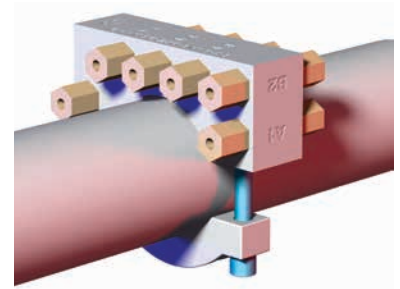
MBC Boom Mounted Single 6-Port

Specifications:

Material: Aluminum

Features:

- Provides a 6-port air distribution system mounted on the boom.
- Easy access.



MANIFOLDS

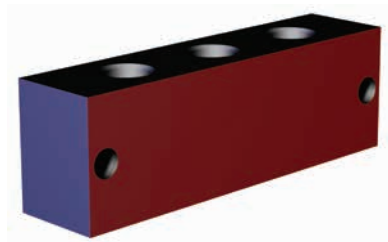
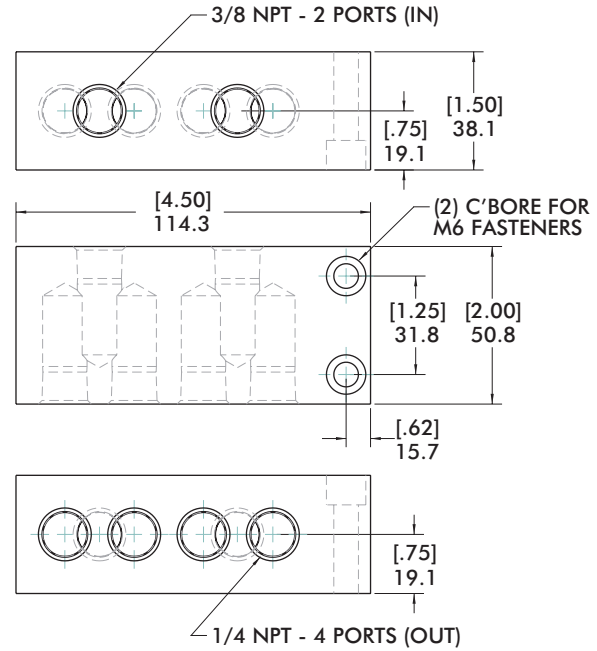
Vacuum Products | Dimensions | Technical Specifications

GDA/MBB Block Style for Remote Mounting



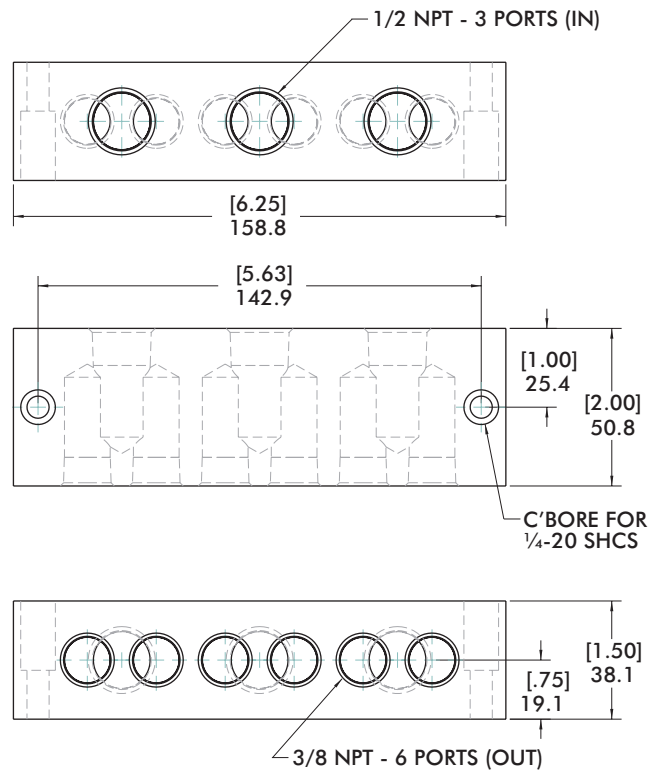
Material: Aluminum

Model	Weight
CPI-GDA-M24-37327	.23 kg [.56 lb]



Material: Aluminum

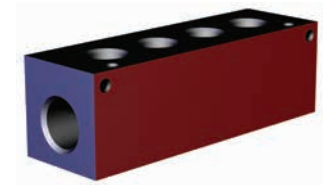
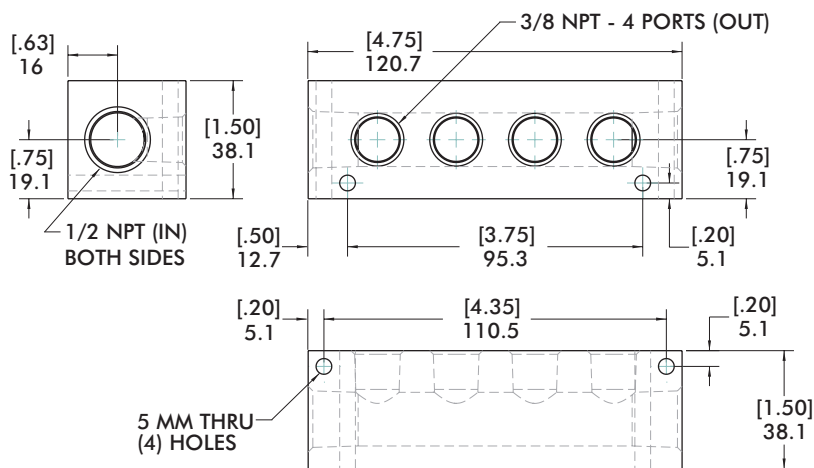
Model	Weight
CPI-MMB-4V2B-LG	.23 kg [.56 lb]



MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

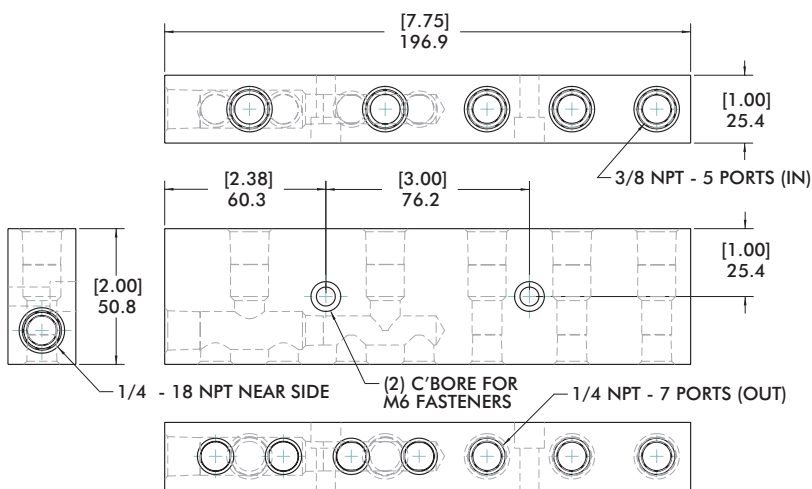
MMB Block Style or Remote Mounting



Material: Aluminum

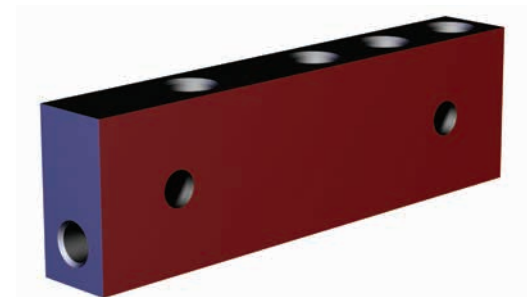
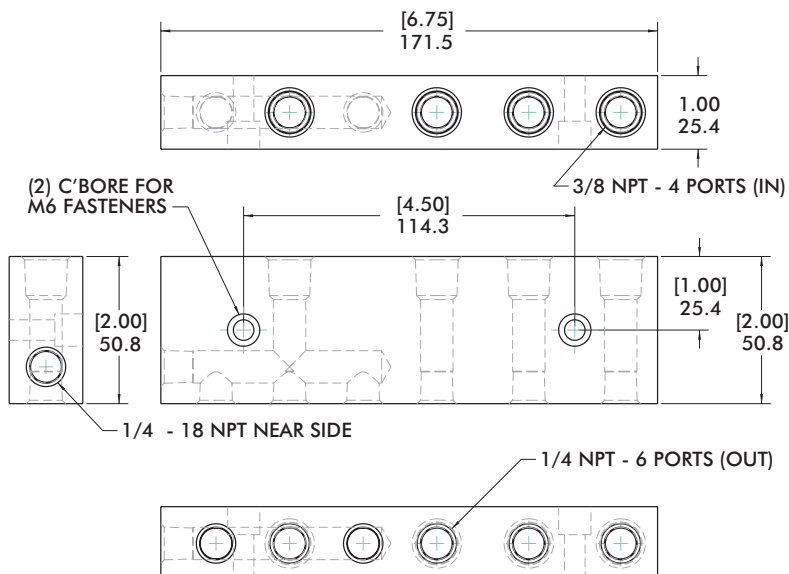
Model	Weight
CPI-MMB-4P	.23 kg [.56 lb]

MMB Block Style or Remote Mounting



Material: Aluminum

Model	Weight
CPI-MMB-4VSP-AB	.23 kg [.56 lb]



Material: Aluminum

Model	Weight
CPI-MMB-3V1B-AB	.23 kg [.56 lb]

BODYBUILDER™ TOOLING EXAMPLES



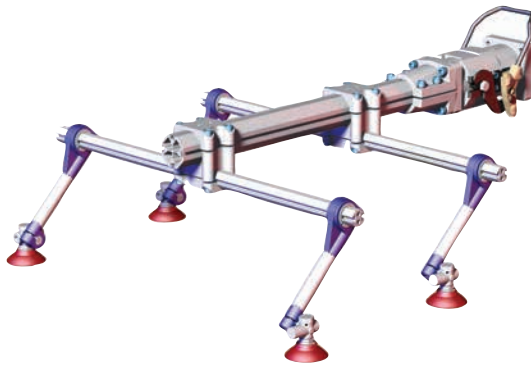
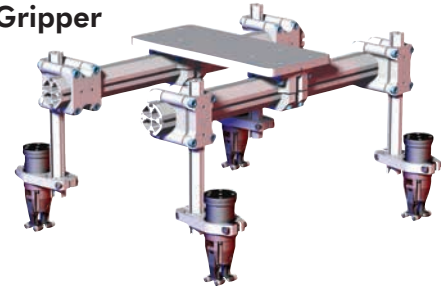
Table of Contents

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	BodyBuilder™ Structure End Mount Assemblies.....	24
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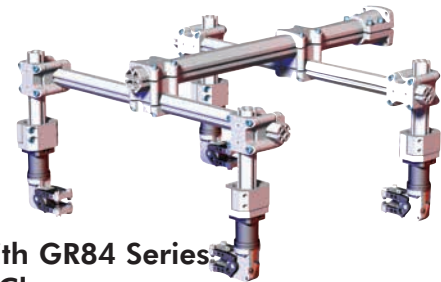


**Mid Mount with GR84
Series Mini-Clamps**

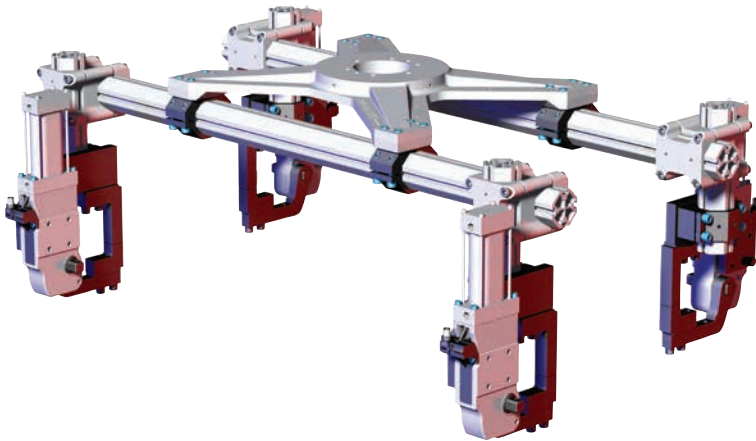
**Mid Mount with GR1
Series Gripper**



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

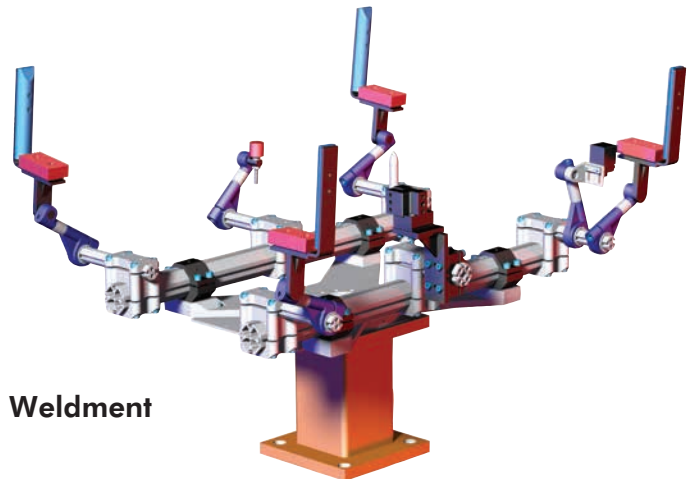


**End Mount with GR84 Series
Mini Clamp**



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

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



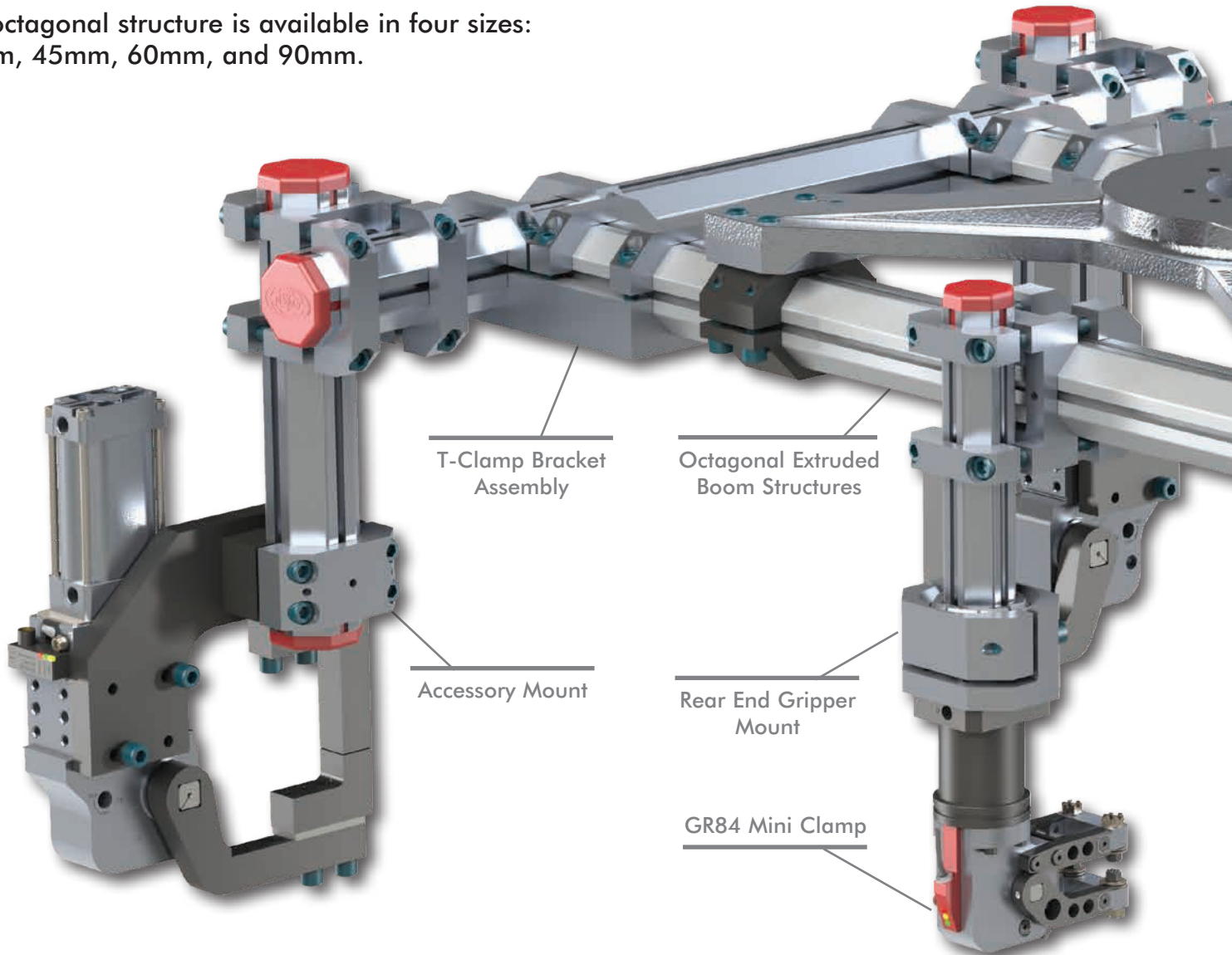
BODYBUILDER™ END EFFECTOR SYSTEM



Product Overview

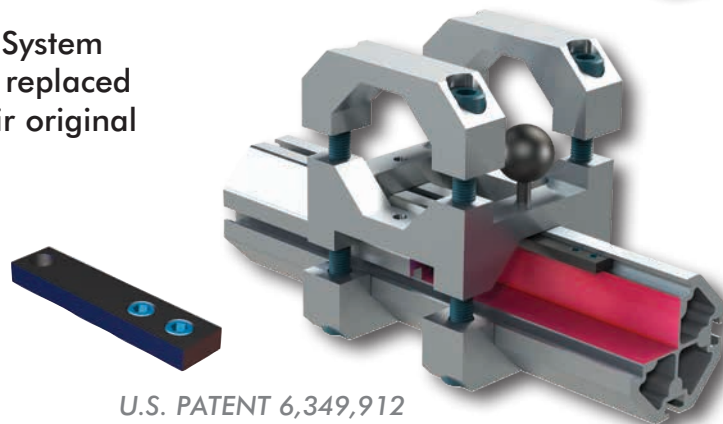
BodyBuilder™ is designed to maximize productivity, both before and after installation. The flexibility of the system allows modifications to the end effector in minutes, greatly reducing start up time to launch.

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



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

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



Most commonly used in:

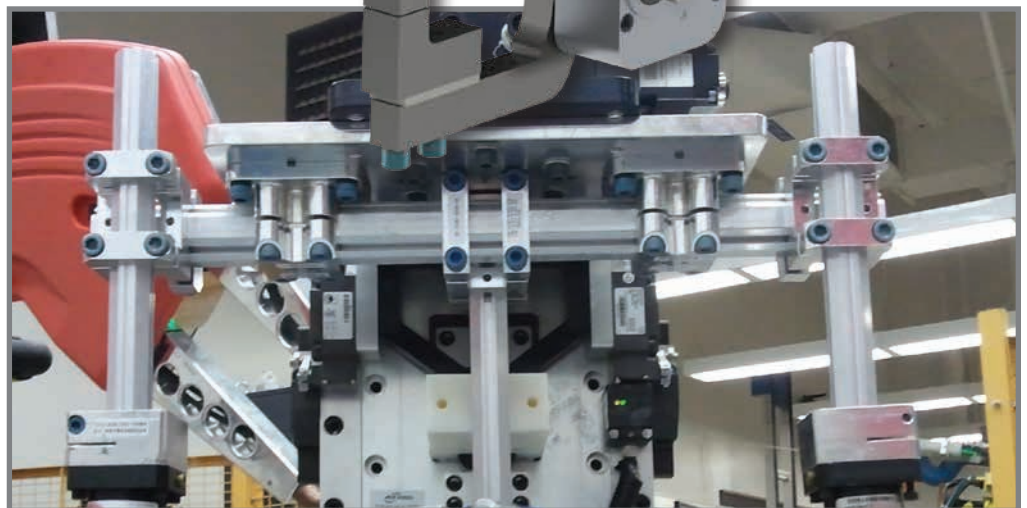
Applications	Markets
Robot Welding	Industrial
Pick and Place	Automotive
Material Handling	Transportation
Lower Nest	Appliance

Heavy Duty
Mid Mount Assembly

M-Series Cross
Bracket Assembly

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

82M Series Power
Clamp



BODYBUILDER™ BOOM STRUCTURE

BodyBuilder™ Octagonal Tooling | Dimensions

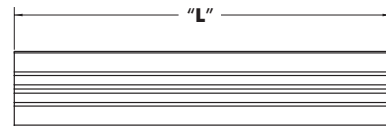
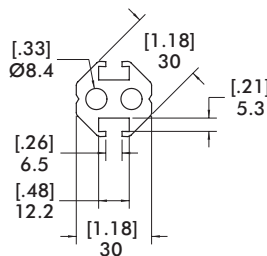


30, 45, 60, and 90mm Boom Popular Lengths

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

30mm Boom Profile Dimensions and Specifications

BodyBuilder™ 30mm Boom

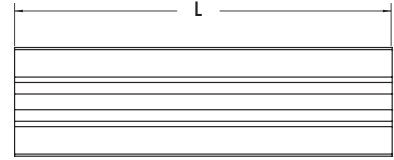
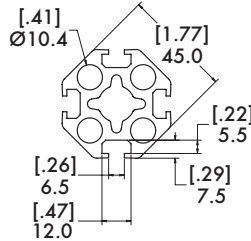


Model Number	Weight
B-30-(L)-0	1.4 kg/m [0.9 lb/ft]

(L) = Specify Length in 50mm Increments starting from 150mm to 3000mm Ex: B-30-450-0 = 450mm Length

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

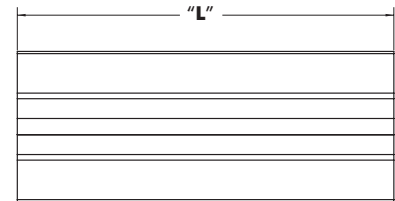
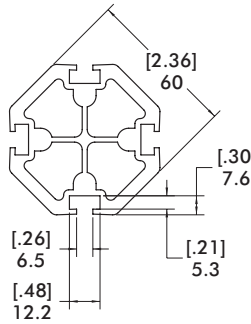
BodyBuilder™ 45mm Boom



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

(L) = Specify Length in 50mm Increments starting from 150mm to 3000mm Ex: B-45-450-0 = 450mm Length

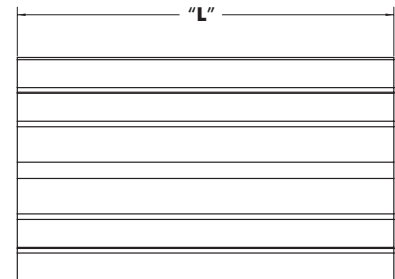
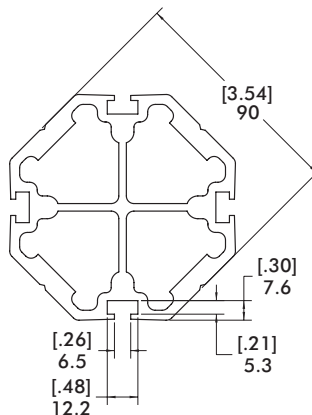
BodyBuilder™ 60mm Boom



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

(L) = Specify Length in 50mm Increments starting from 150mm to 3000mm Ex: B-60-450-0 = 450mm Length

BodyBuilder™ 90mm Boom



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

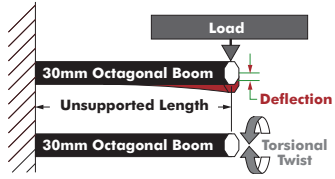
(L) = Specify Length in 50mm Increments starting from 300mm to 3000mm Ex: B-90-450-0 = 450mm Length

BODYBUILDER™ BOOM STRUCTURE

BodyBuilder™ Octagonal Tooling | Technical Specifications

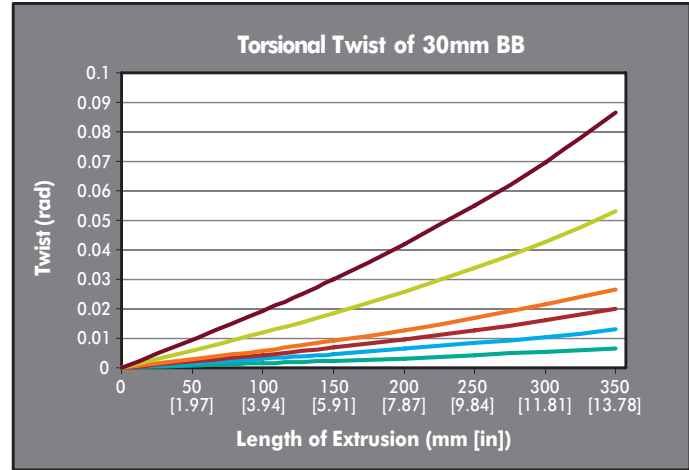
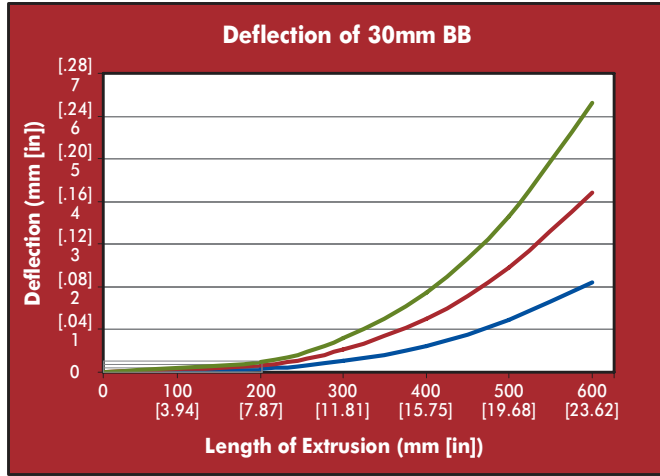


30mm Boom Deflection and Torsion Charts

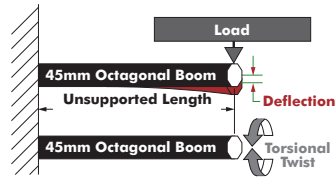


5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
15 Kgf	33.0 lbf

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

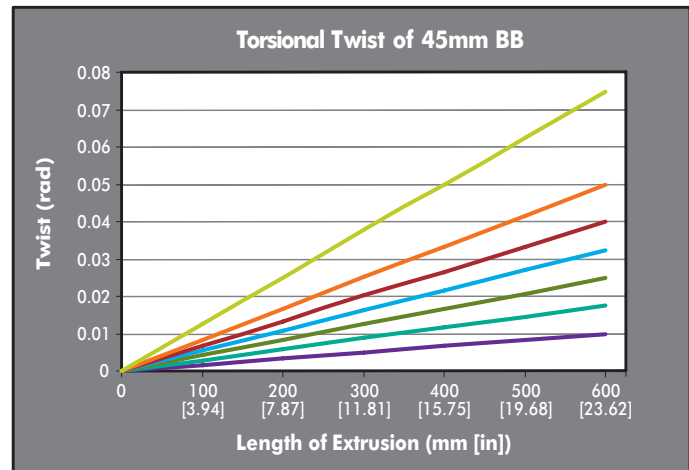
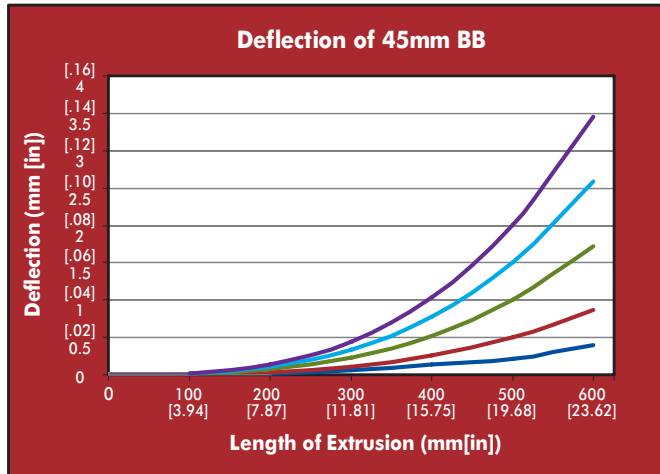


45mm Boom Deflection and Torsion Charts



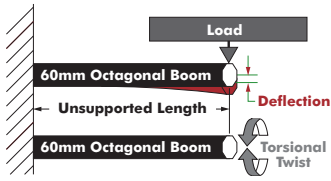
5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf

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



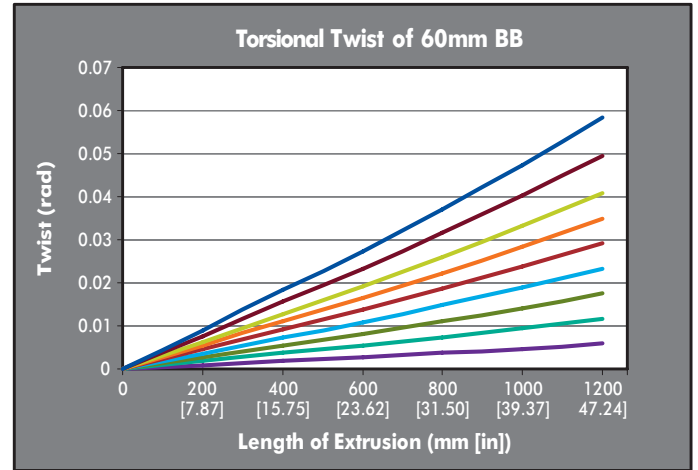
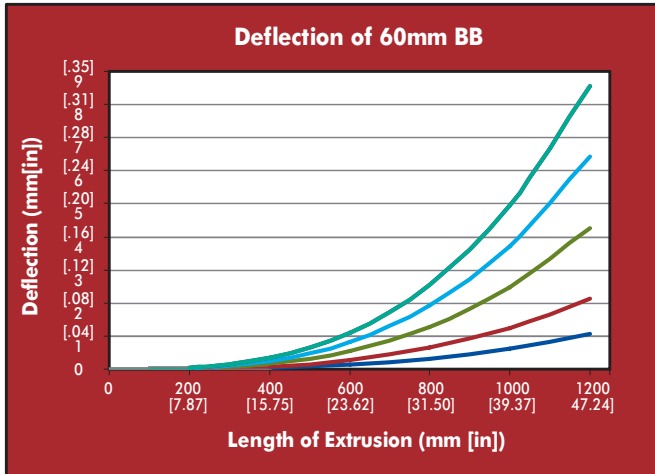
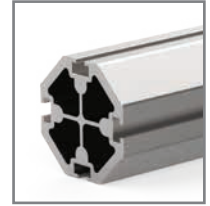
Note: Performance may vary if used with non-DESTACO components

60mm Boom Deflection and Torsion Charts

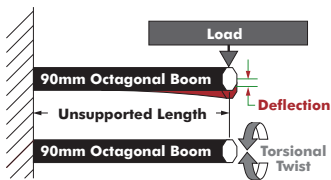


5 Kgf	11.0 lbf
10 Kgf	22.0 lbf
20 Kgf	44.1 lbf
30 Kgf	66.1 lbf
40 Kgf	88.2 lbf
50 Kgf	110.2 lbf

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

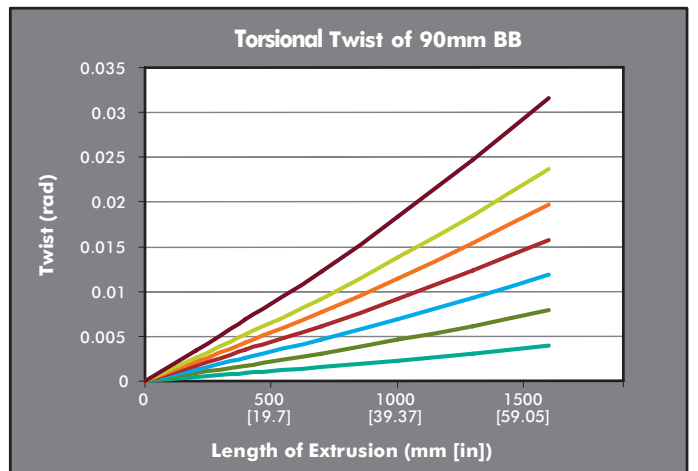
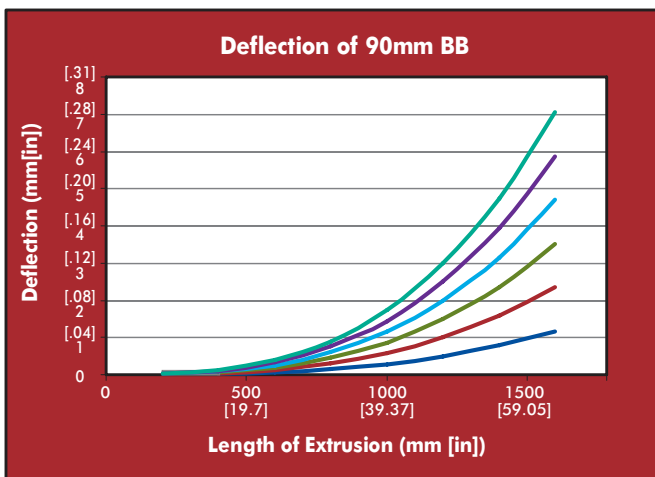
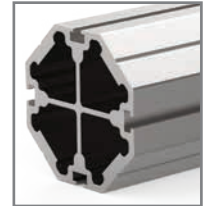


90mm Boom Deflection and Torsion Charts



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

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



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

BODYBUILDER™ BOOM STRUCTURE ACCESSORIES

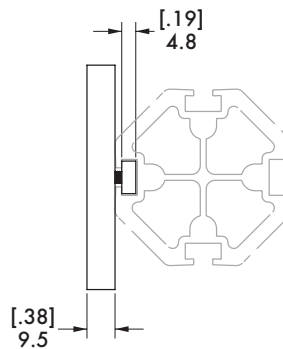
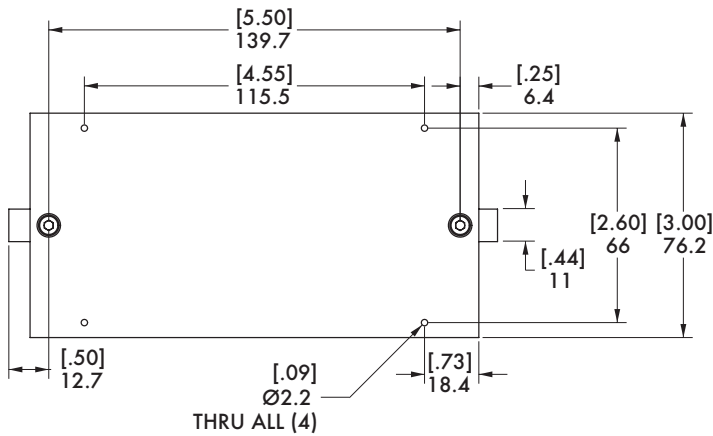
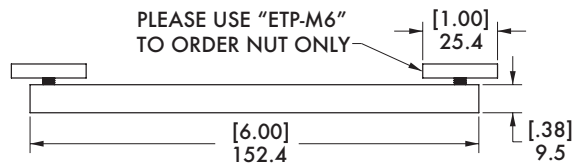
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



ETP-35 Extrusion Accessory Mount

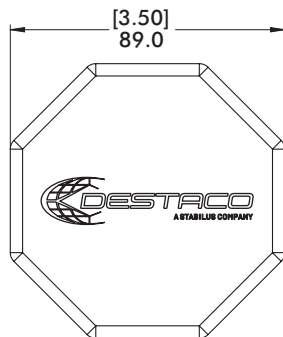
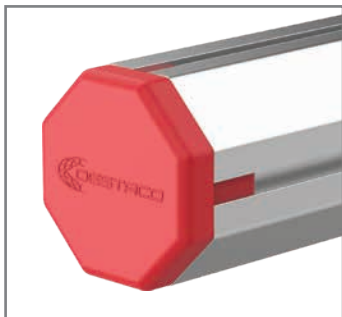


Specifications:
Material: Aluminum

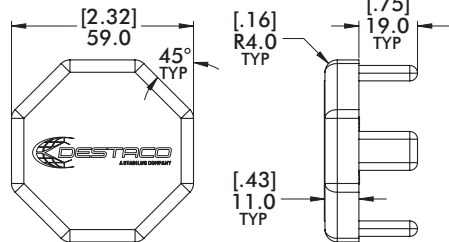


Model Number	Weight
CPI-ETP-35	.31 kg [.68 lb]

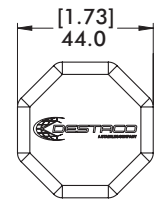
EC-60 60mm Bodybuilder Octagonal Boom End Cap



90mm End Cap



60mm End Cap



45mm End Cap



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



BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

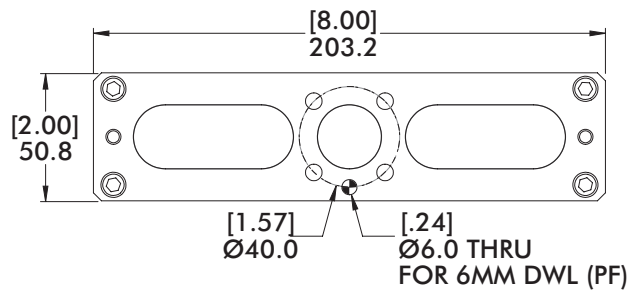
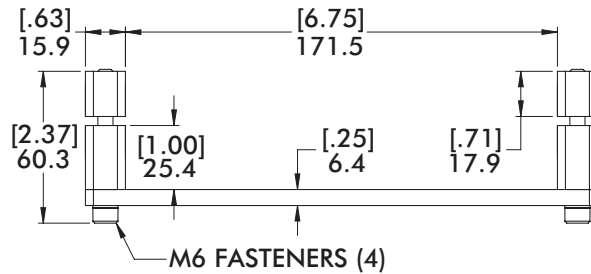
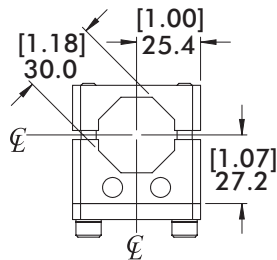
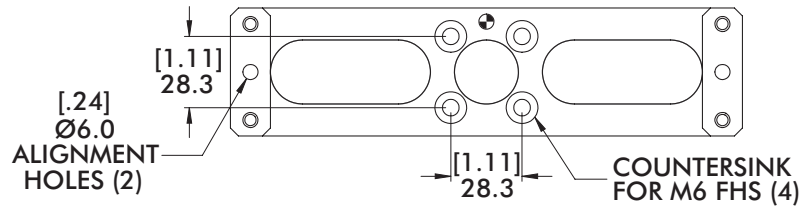
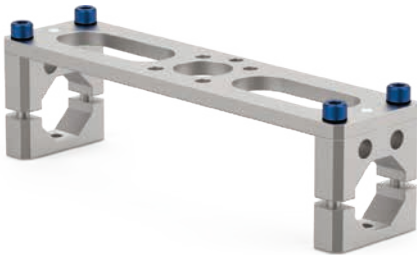


Specifications:

Max. Static Product Load:

102 Nm [75 ft-lb]

Material: Aluminum



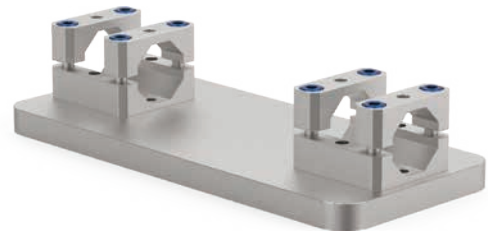
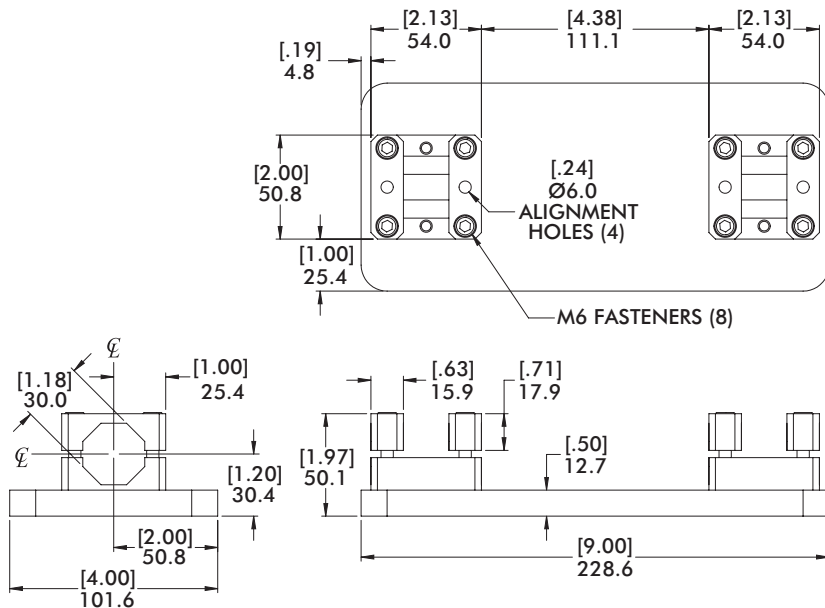
Model Number	Weight
CPI-RMM-30B-40BC-08-90	.28 kg [.62 lb]

BODYBUILDER™ MID-MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

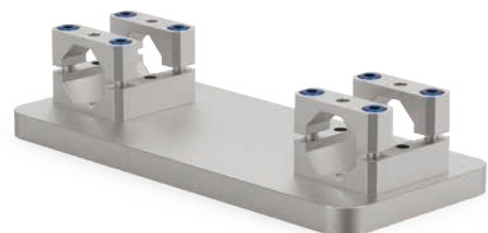
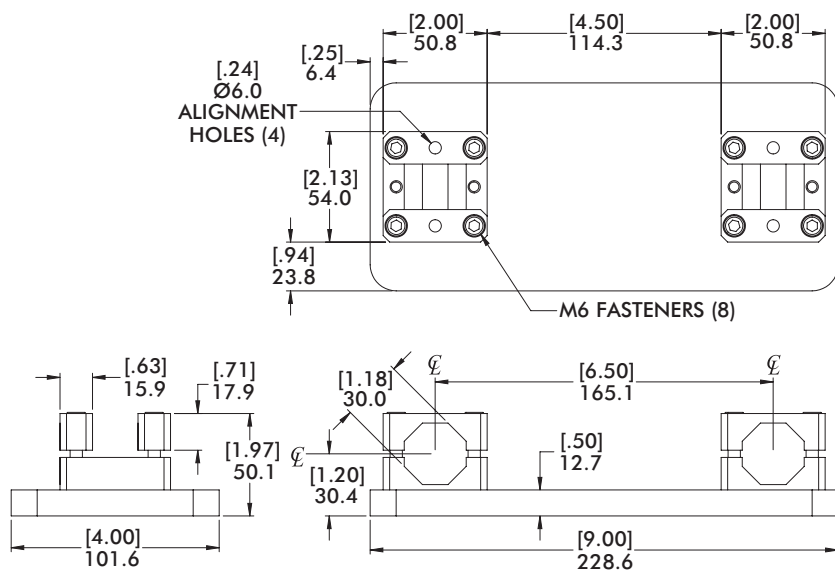


Specifications:

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

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

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

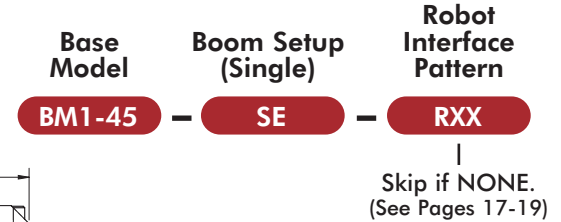
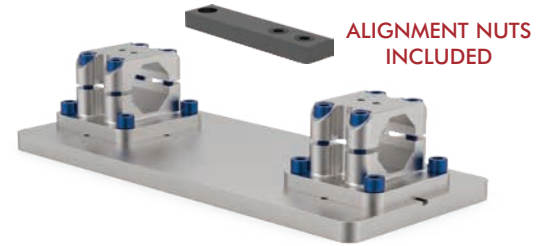
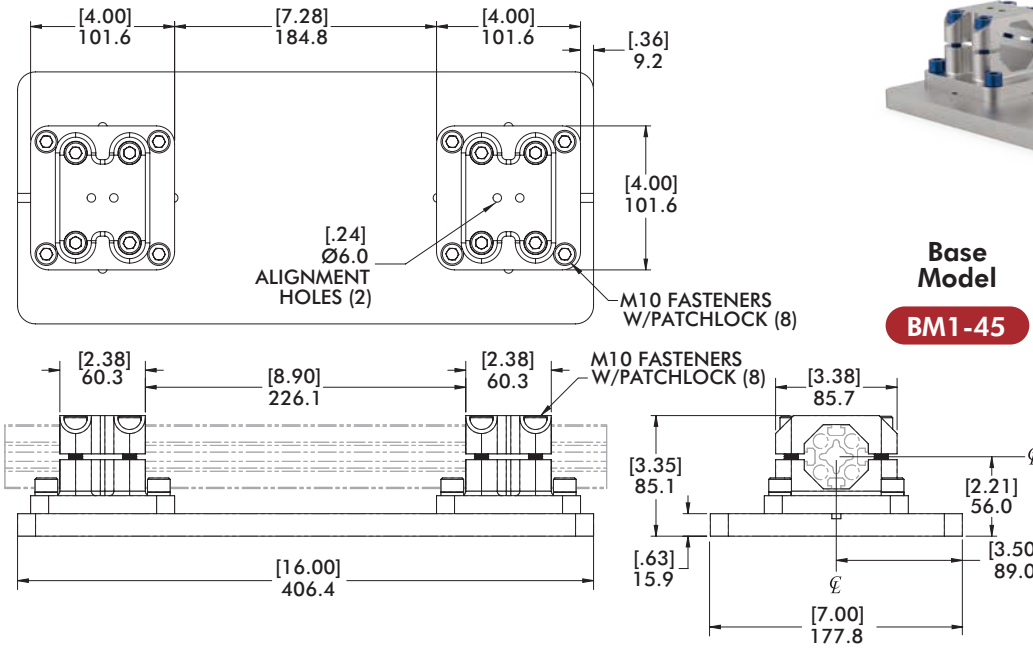


Specifications:

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

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

BM1-45-SE Single Extrusion 45mm Mid Mount

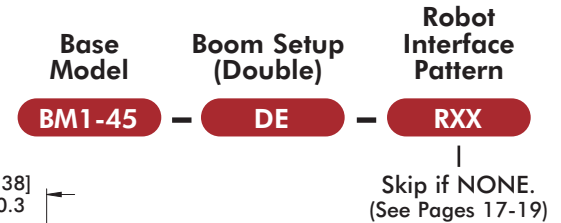
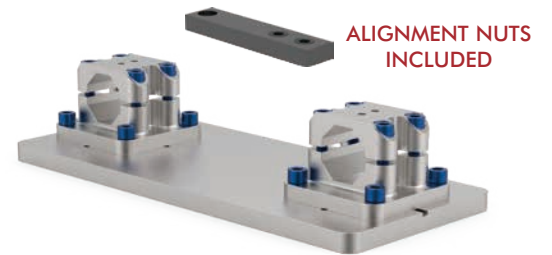
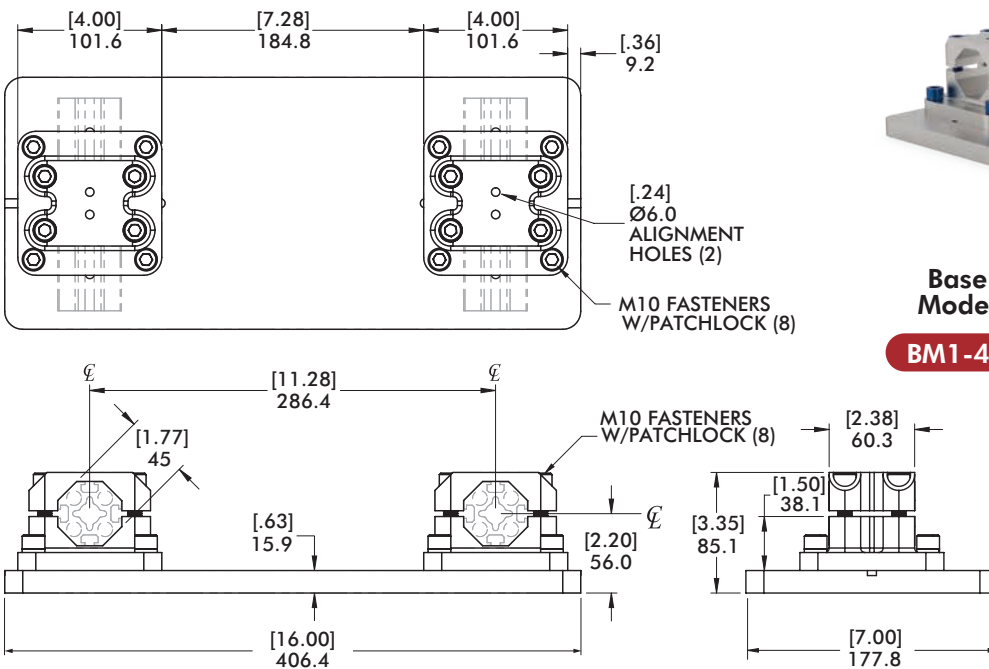


Specifications:
Max. Static Product Load:
 350 Nm [258 ft-lb]
Material: Aluminum

Weight
 5.05 kg [11.1 lb]

Can be supplied with robot interface mounting patterns, see pages 17-19.
 Note: All Ø200mm mounting patterns include an Adapter Plate. See page 14.

BM1-45-DE Double Extrusion 45mm Mid Mount



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

Weight
 5.05 kg [11.1 lb]

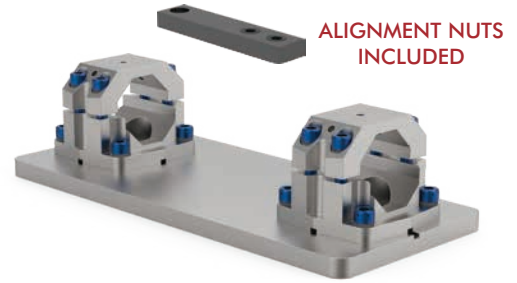
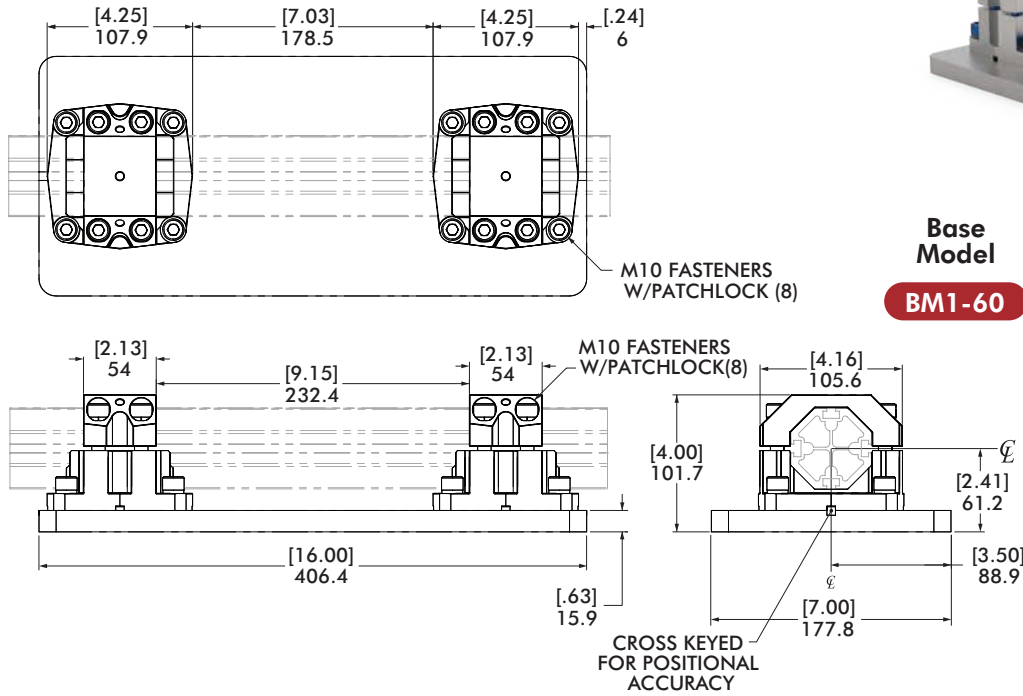
Can be supplied with robot interface mounting patterns, see pages 17-19.
 Note: All Ø200mm mounting patterns include an Adapter Plate. See page 14.

BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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



Base Model

Boom Setup (Single)

Robot Interface Pattern

BM1-60

SE

RXX

Skip if NONE.
(See Pages 17-19)

Specifications:

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

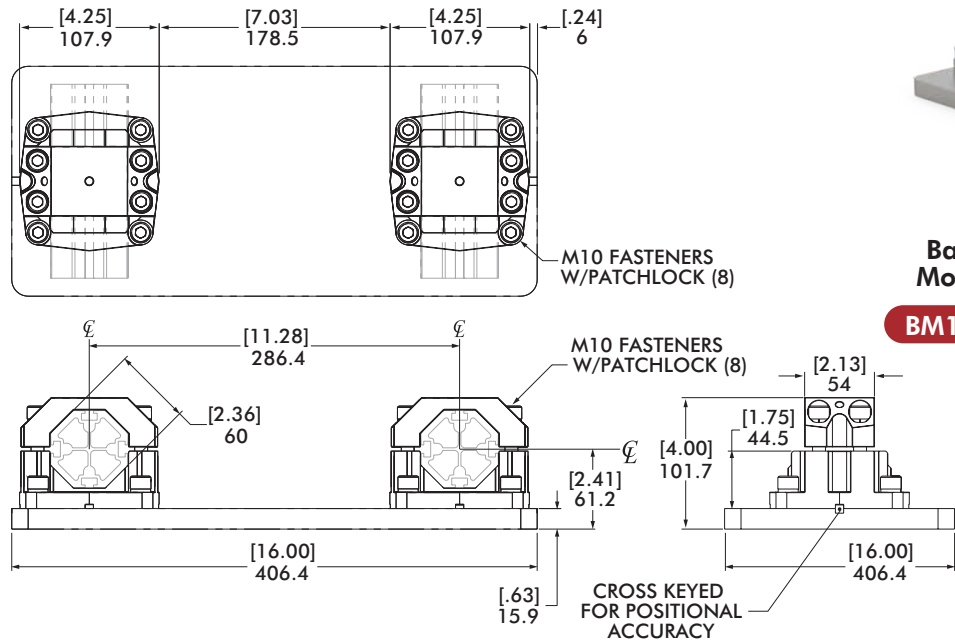
Material: Aluminum

Weight

5.2 kg [11.5 lb]

Can be supplied with robot interface mounting patterns, see pages 17-19.
Note: All Ø200mm mounting patterns include an Adapter Plate. See page 14.

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



Base Model

Boom Setup (Double)

Robot Interface Pattern

BM1-60

DE

RXX

Skip if NONE.
(See Pages 17-19)

Specifications:

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

Material: Aluminum

Weight

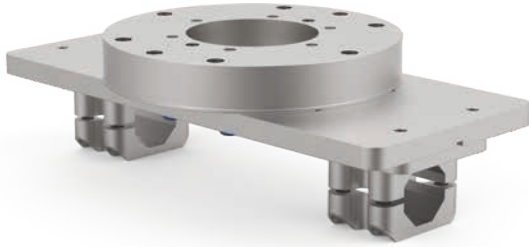
5.2 kg [11.5 lb]

Can be supplied with robot interface mounting patterns, see pages 17-19.
Note: All Ø200mm mounting patterns include an Adapter Plate. See page 14.

BODYBUILDER™ MID MOUNT ASSEMBLIES

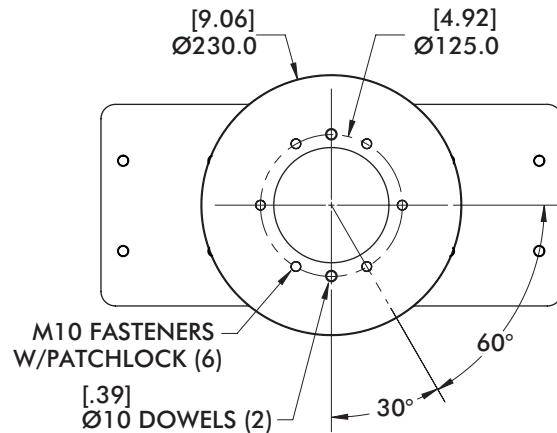
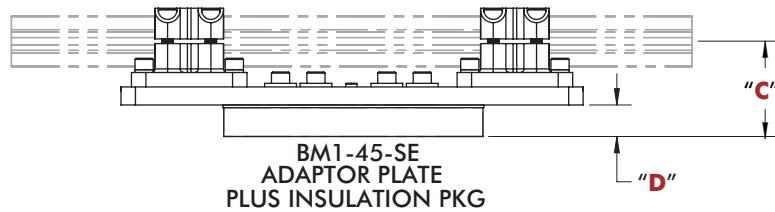
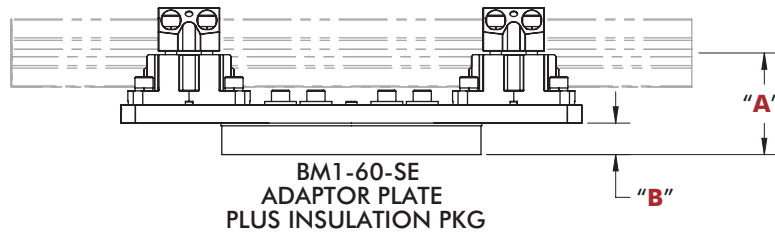
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

Adapter Plate for **BM1-45/BM1-60** Mid Mount Assemblies



Specifications:
Material: Aluminum

- Features:**
- Can be machined or left blank.
 - Can be supplied with robot interface hole patterns. (See pages 17-19).



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

BODYBUILDER™ MID MOUNT ASSEMBLIES



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Features:

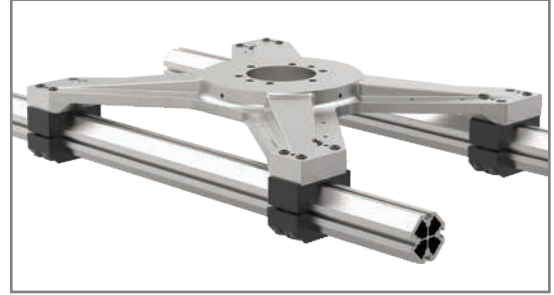
- Can be used as a direct robot interface.
- Provide robust clamping of each extrusion for maximum stability.
- Standard robot interface patterns provided. Plate can also be left blank.

Specifications:

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

Material:

Mid Mount:
Cast Aluminum
Clamps: Steel

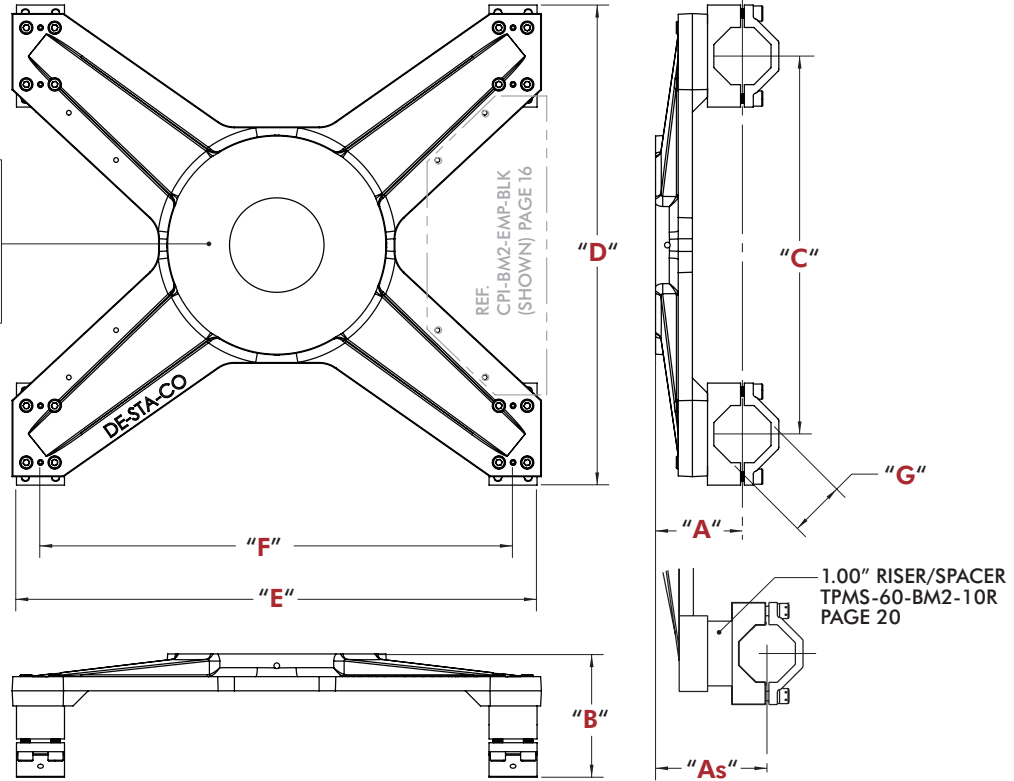


ROBOT INTERFACE PLATE SHOWN BLANK. FOR STANDARD ROBOT INTERFACE BOLT PATTERNS & DIMENSIONS SEE PAGES 17-19

NOTE: SCREWS AND FASTENERS FOR MOUNTING ARE NOT INCLUDED

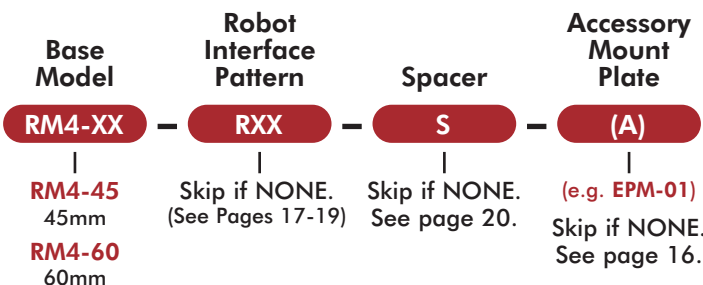
ADD 1.5MM TO "A"/"AS" DIM FOR INSULATION PACKAGE IF REQUIRED.

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



HEAVY-DUTY MID MOUNT ASSEMBLY DIMENSIONS

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



BODYBUILDER™ MID MOUNT ACCESSORY PLATE

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

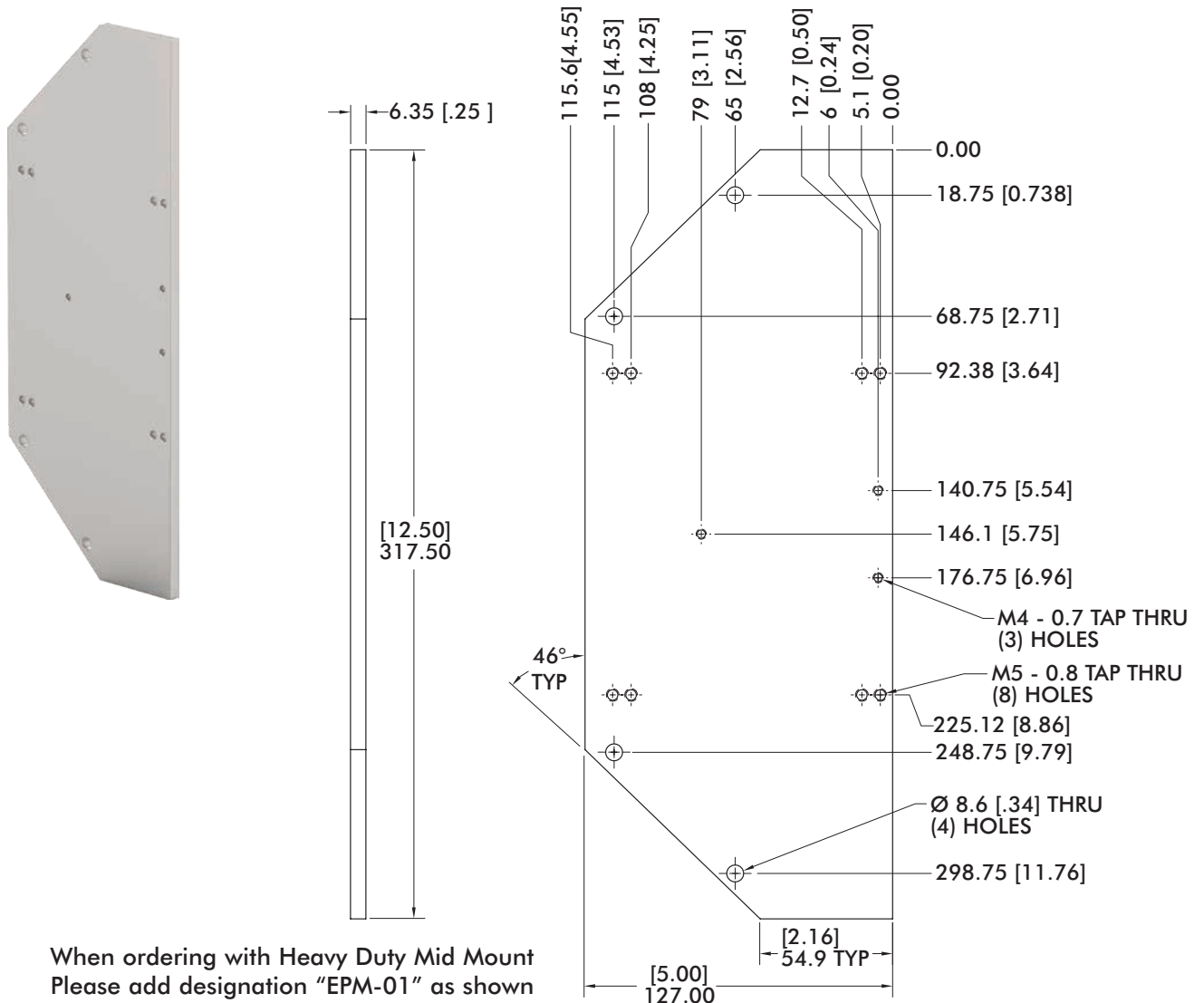
BM2-EPM Accessory Mount Plate



Specifications:
Material: Aluminum

Features:

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



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

To order separately use Model Number

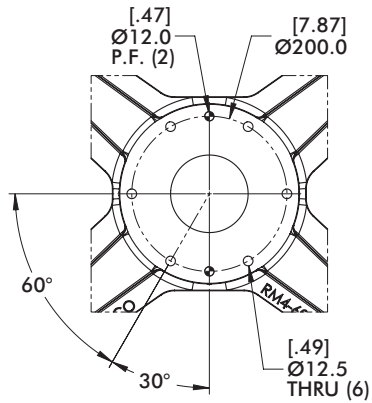
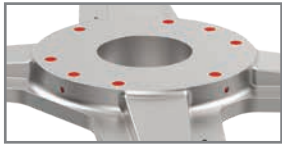
(A)	Pattern	For Model RM4-45/60	Weight
EPM-01	Standard	CPI-BM2-EPM-01	.63 kg [1.39 lb]
EPM-BLK	Blank	CPI-BM2-EPM-BLK	

BODYBUILDER™ MID MOUNT BOLT PATTERNS

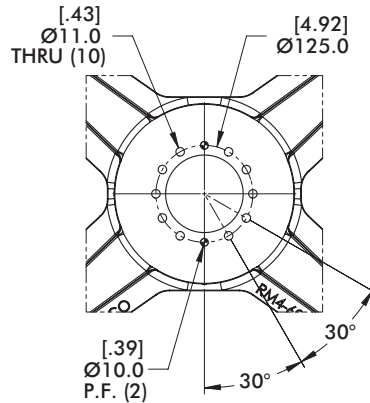
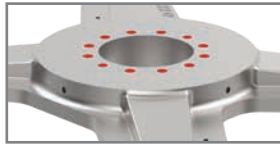
BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns



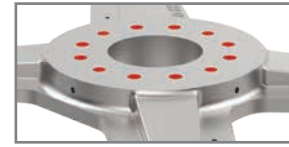
R01 (Ø200mm Bolt Circle)



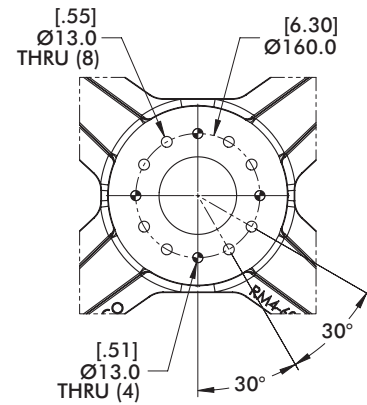
R02 (Ø125mm Bolt Circle)



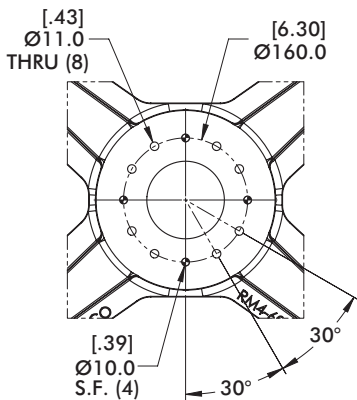
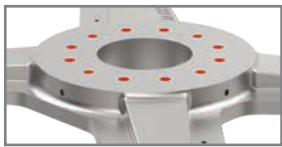
R03 (Ø160mm Bolt Circle)



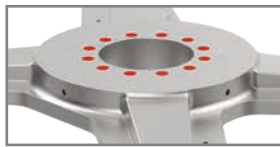
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



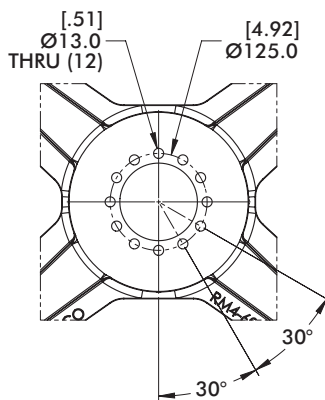
R04 (Ø160mm Bolt Circle)



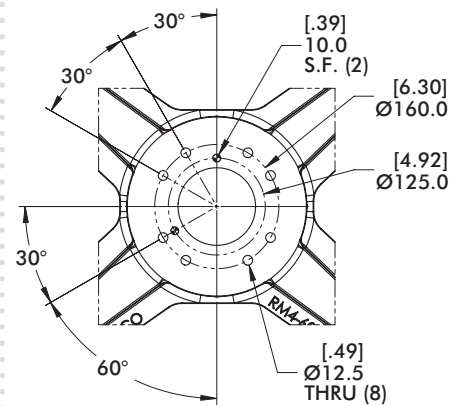
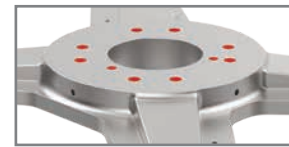
R05 (Ø125mm Bolt Circle)



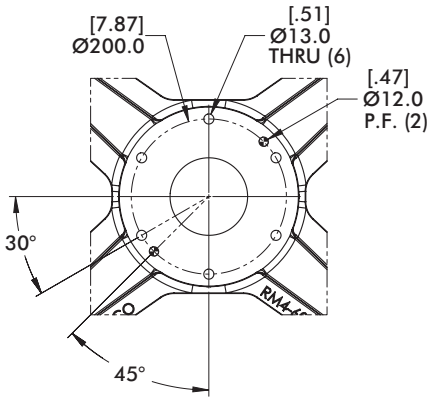
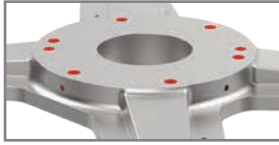
Includes Insulation
Add 1.5mm to Height Dim "A"/"AS"



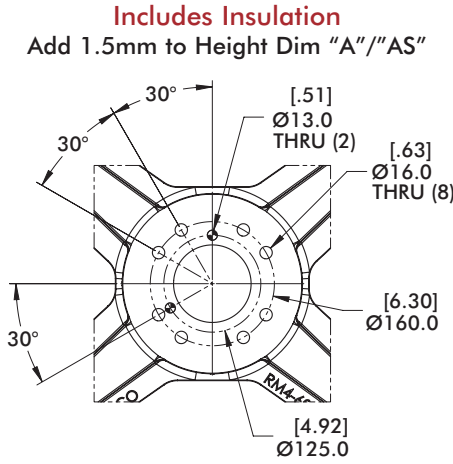
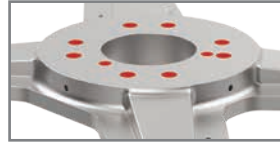
R06 (Ø125/160mm Bolt Circle)



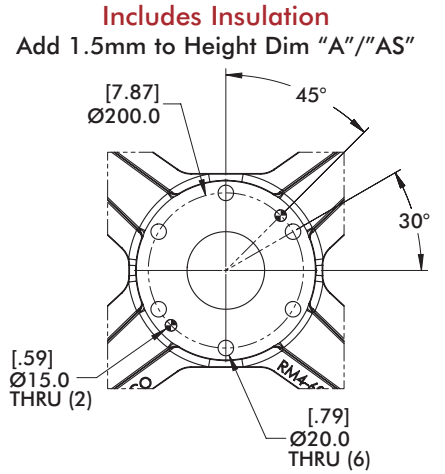
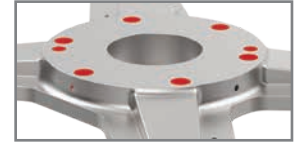
R07 (Ø200mm Bolt Circle)



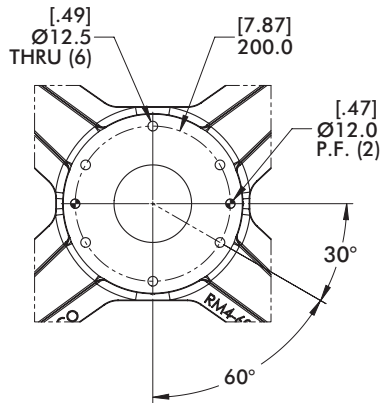
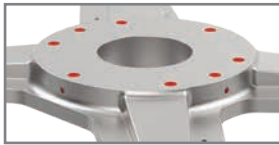
R08 (Ø125/160mm Bolt Circle)



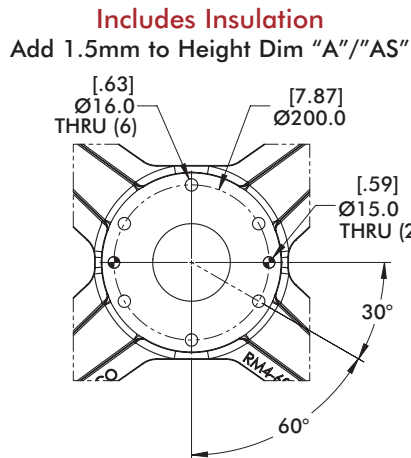
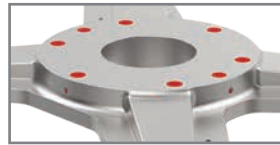
R09 (Ø200mm Bolt Circle)



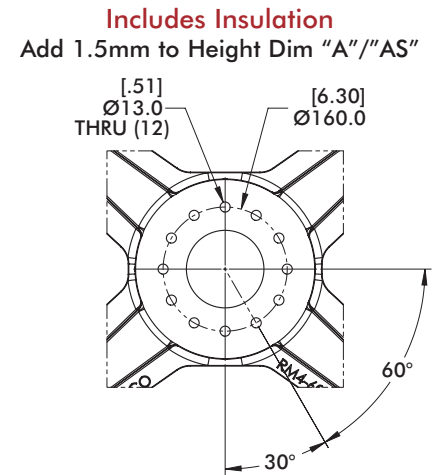
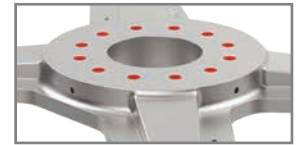
R10 (Ø200mm Bolt Circle)



R11 (Ø200mm Bolt Circle)



R12 (Ø160mm Bolt Circle)

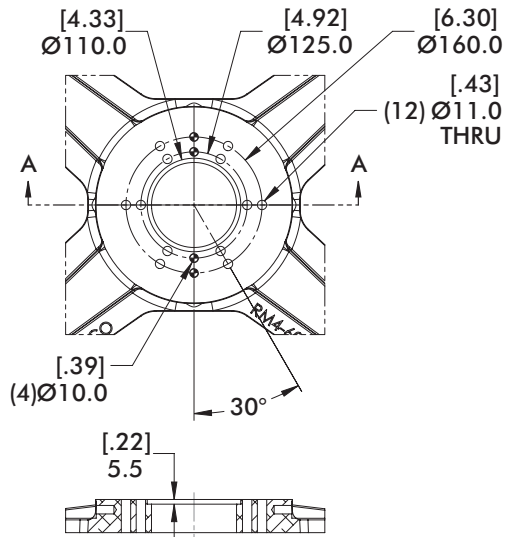
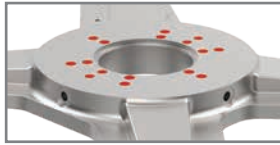


BODYBUILDER™ MID MOUNT BOLT PATTERNS

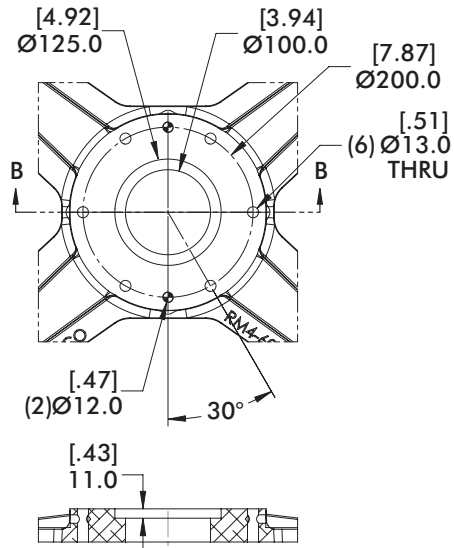
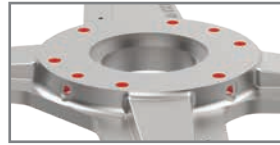


BodyBuilder™ Octagonal Tooling | Robot Interface Bolt Patterns

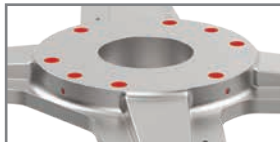
**R13 (Ø125/160mm Bolt Circle)
(Ø110mm Pilot, 5.5mm Deep)**



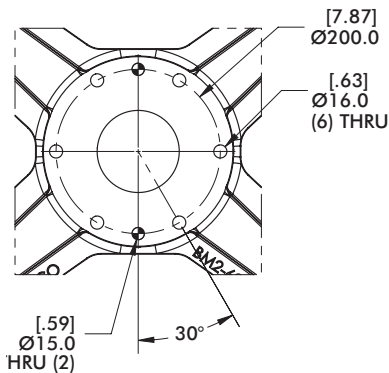
**R14 (Ø200mm Bolt Circle)
(Ø125mm Pilot, 11mm Deep)**



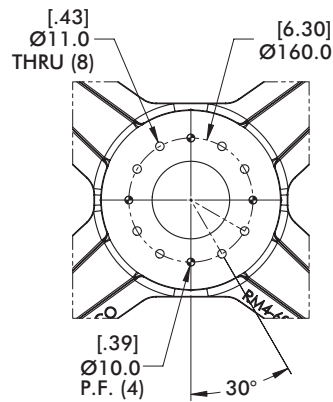
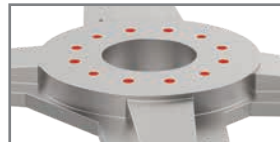
R16 (Ø200mm Bolt Circle)



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



R17 (Ø160mm Bolt Circle)

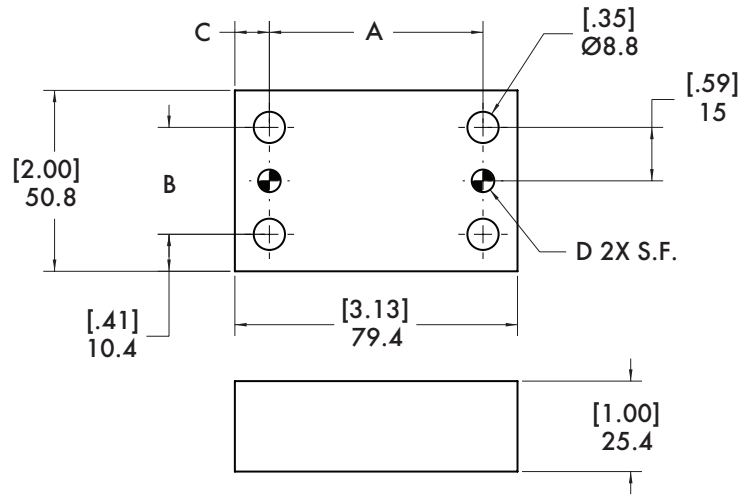
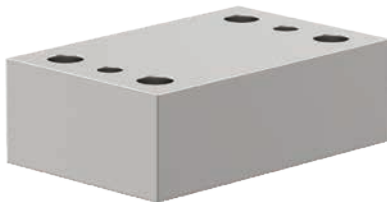




BODYBUILDER™ MID MOUNT RISERS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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



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

RM4-XX-RXX-S

To order Riser separately use Model Number.

Specifications:
Material: Aluminum

Riser for	Model	A	B	C	D	Weight
RM4-45	TPMS-45-RM4-10R	[3.00] 76.2	45 [1.77]	15.6 [.614]	8mm	.23 kg [.51 lb]
RM4-60	TPMS-60-BM2-10R	[3.13] 79.4	60 [2.36]	9.7 [.38]	6mm	.26 kg [.56 lb]

BODYBUILDER™ MID MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

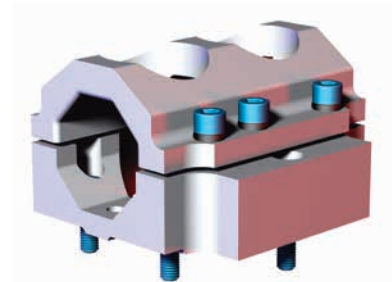
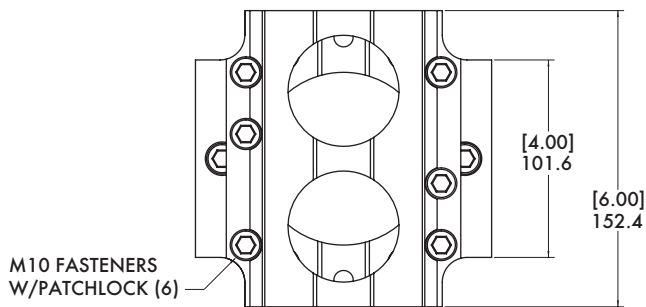
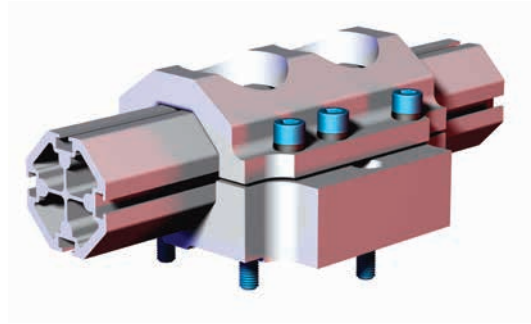
Specifications:

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

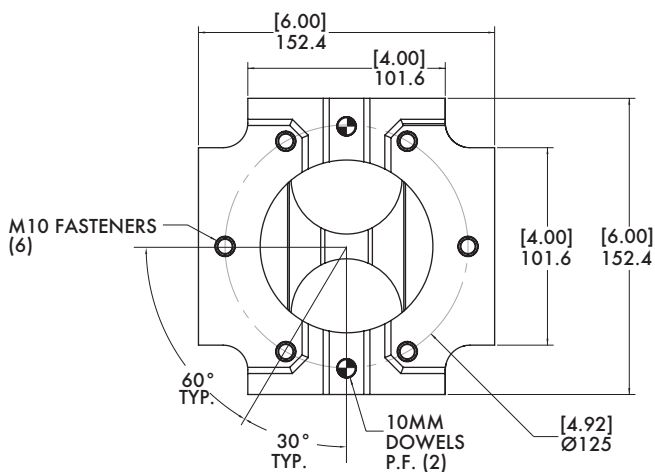
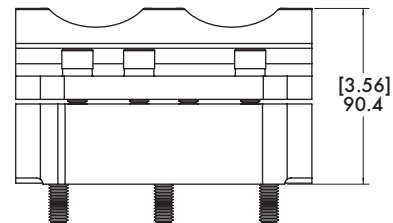
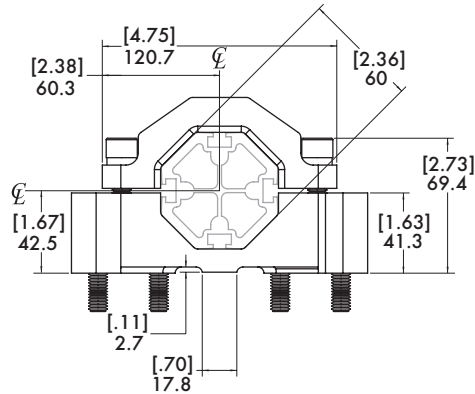
Material: Aluminum

Features:

- Can be used as direct robot interface.

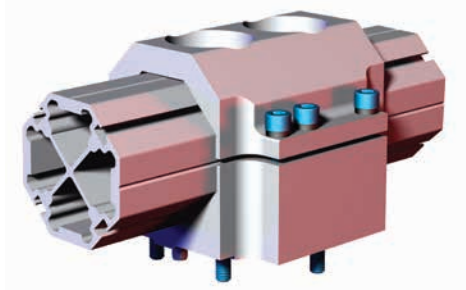


Fasteners included, Dowels not included



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

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



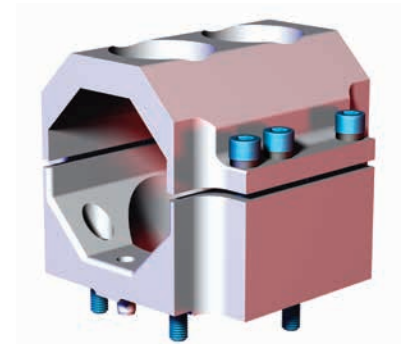
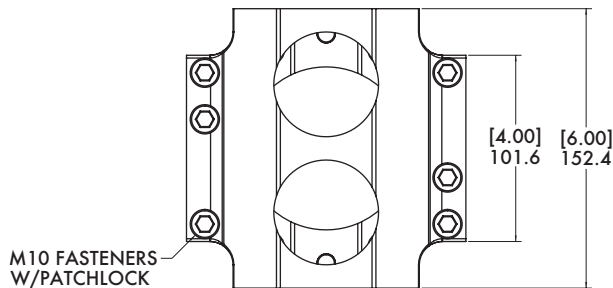
Features:

- Can be used as direct robot interface.

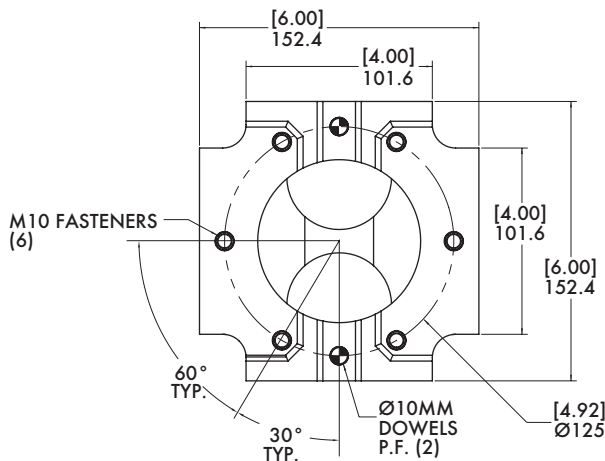
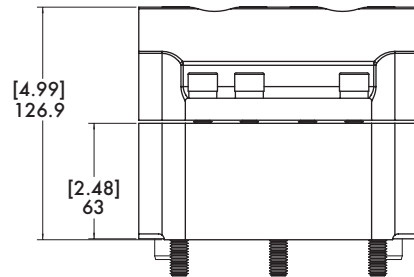
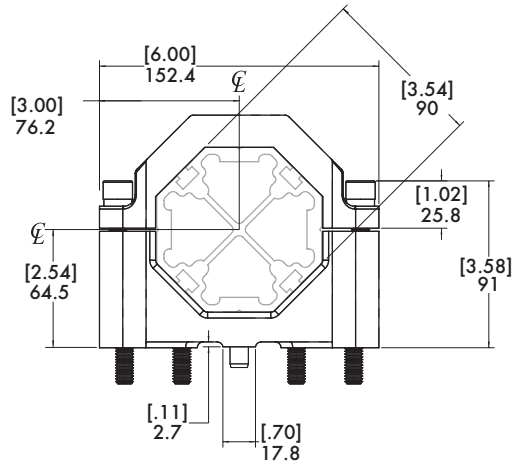
Specifications:

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

Material: Aluminum



Fasteners and Dowels Included



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

BODYBUILDER™ END MOUNT ASSEMBLIES

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



CL-90B-160F 90mm End Mount

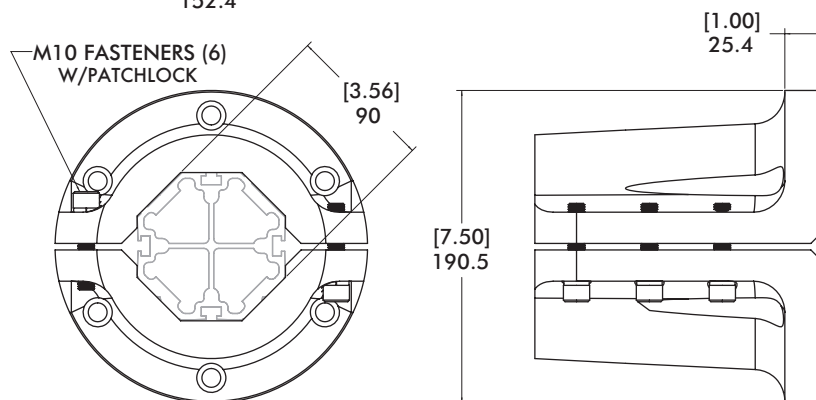
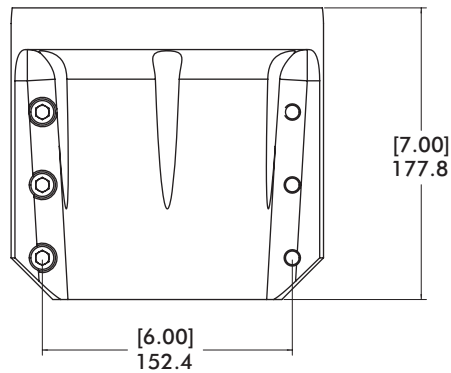
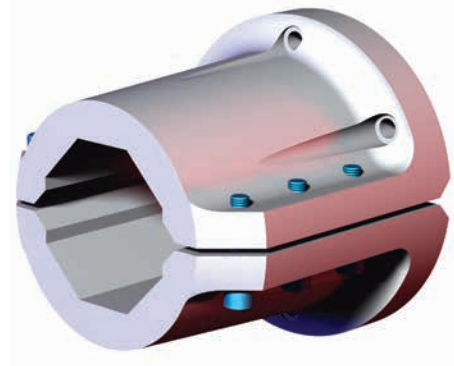
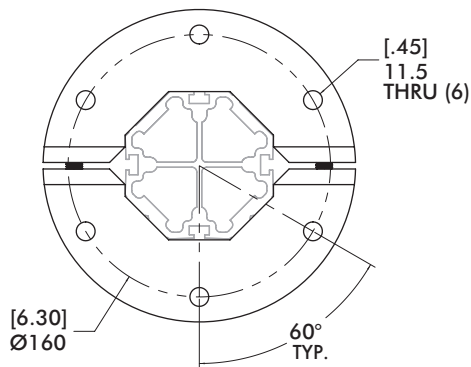
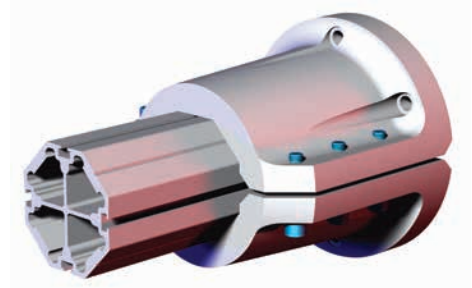
Specifications:

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

Material: Aluminum

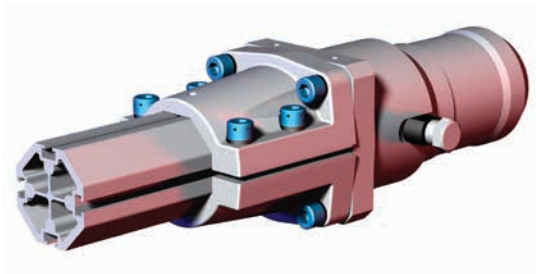
Features:

- Can be used as direct robot interface.



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

RDCF-60B 60mm BodyBuilder™ Bayonet



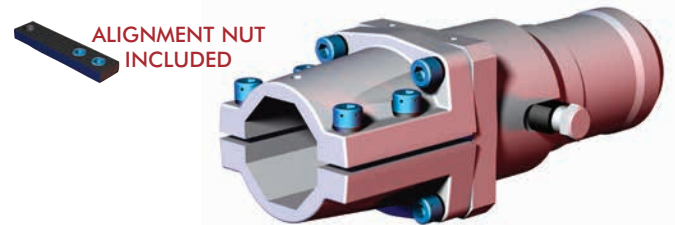
Features:

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

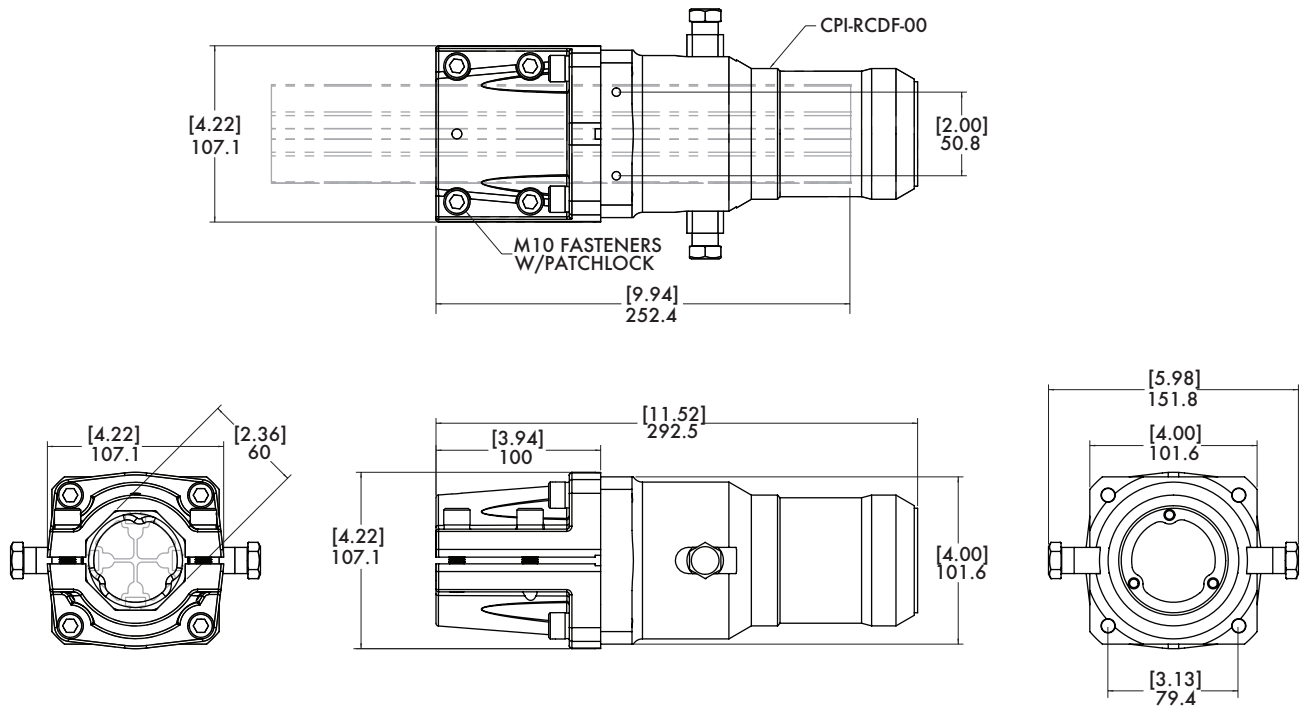
Specifications:

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

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



Optional 4-port air and electric connections available.



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

BODYBUILDER™ BAYONETS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

Specifications:

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

Material:

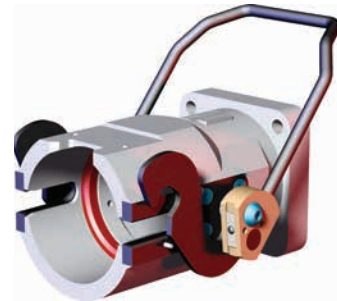
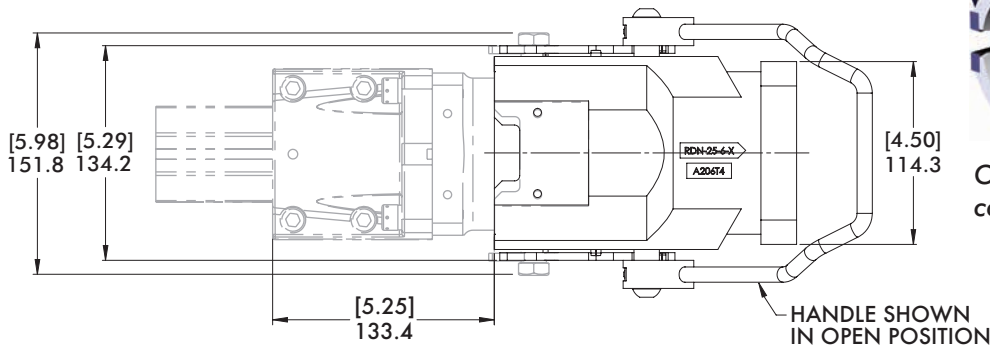
Body: Aluminum
Knuckles: Brass
Handle and Hooks: Steel
Inserts: Urethane

Features:

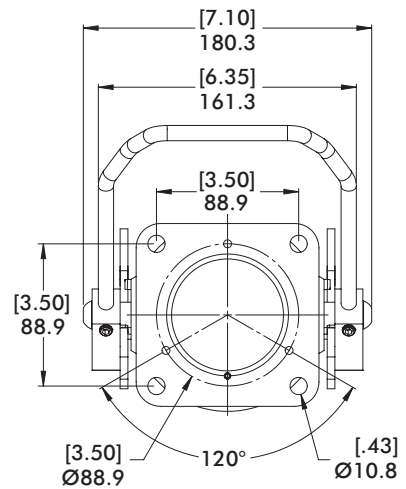
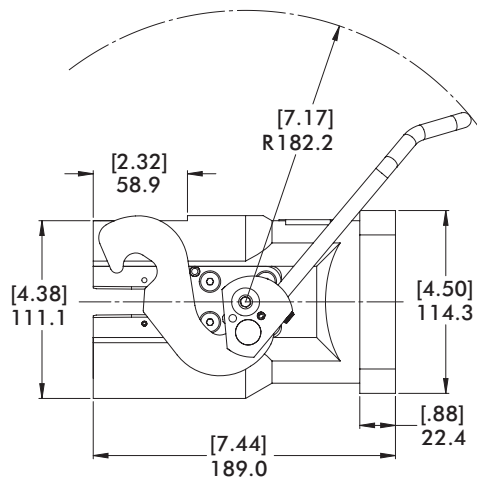
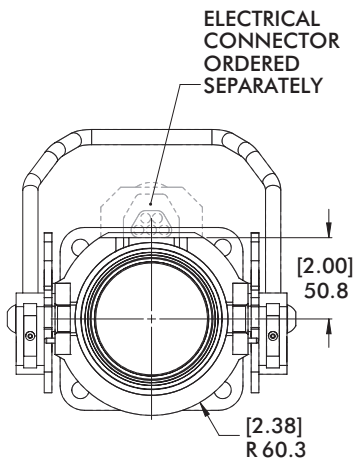
- Actuation of handle allows quick and accurate installation by pulling the bayonet into a fixed position within the housing.
- The internal rings eliminate vibration and seat the bayonet into a clamped position.
- Hardened steel retainer slots reduce wear and extend product life.



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



Optional 4-port air and electric connections available.



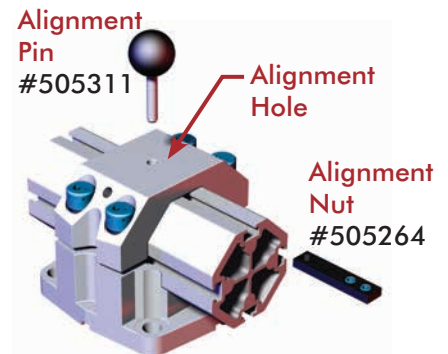
Model Number	Weight
CPI-RDN-25-6	4.00 kg [8.90 lb]



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

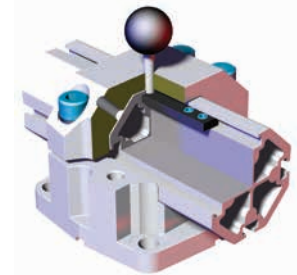
Once the BodyBuilder™ structure bracket mount is secured into place during set-up, insert the alignment nut into the octagonal boom channel groove.

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

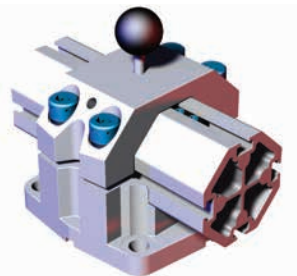


Slide the alignment nut along the boom groove and underneath the bracket mount until the hole in the block and the appropriate calibration hole in the bracket mount is aligned visual.

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



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



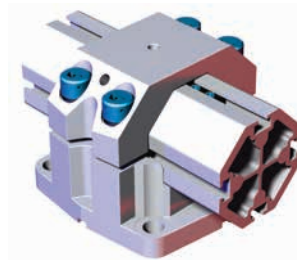
The alignment nut remains in place even when the bracket mount is removed.



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

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

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



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

U.S. PATENT 6,349,912

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS



BodyBuilder™ Octagonal Tooling | Explaining the Patented Alignment System

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

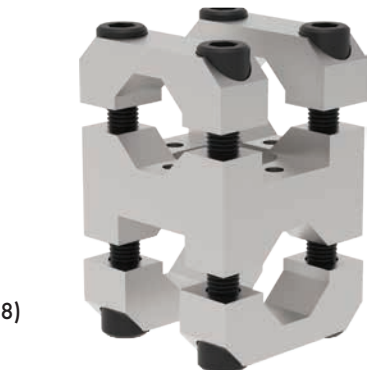
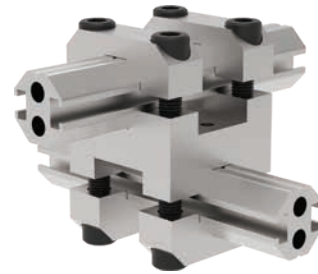
Features:

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

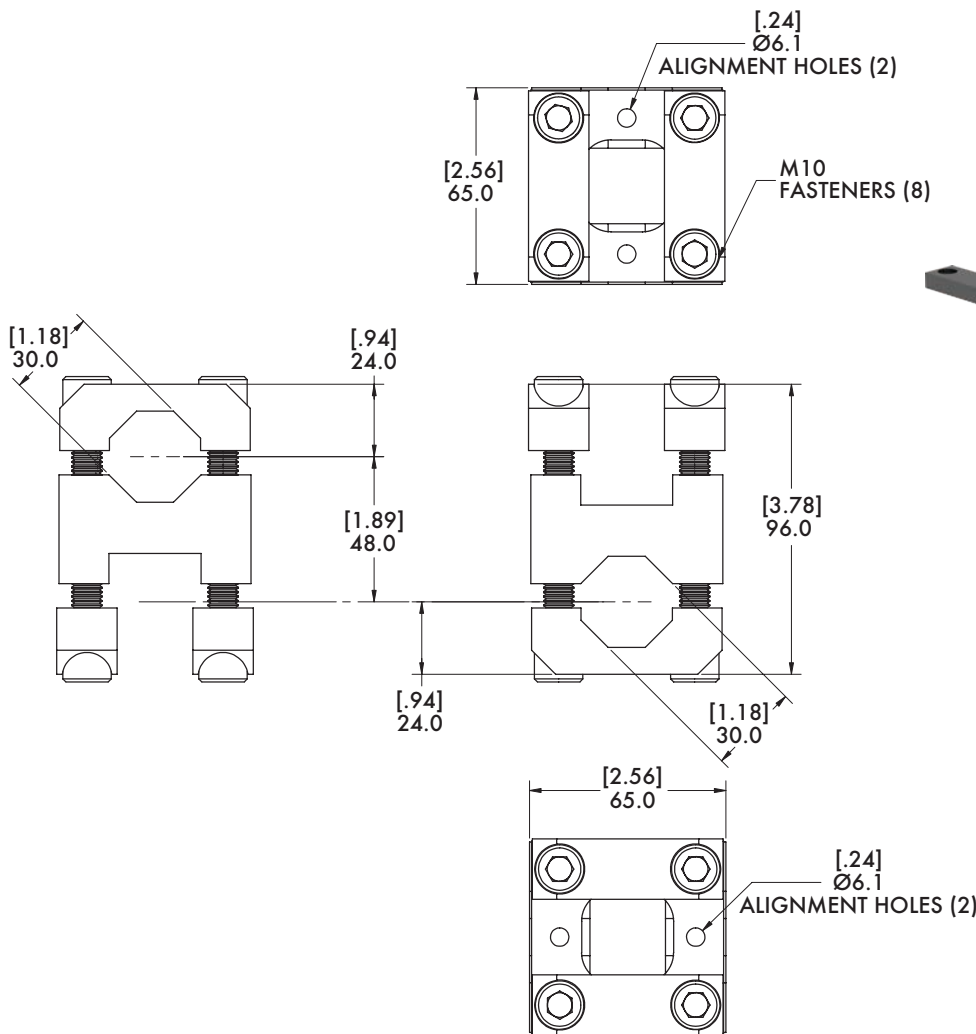
Specifications:

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

Material: Aluminum



ALIGNMENT NUTS INCLUDED



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

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



Specifications:

Max. Static Clamp Load:

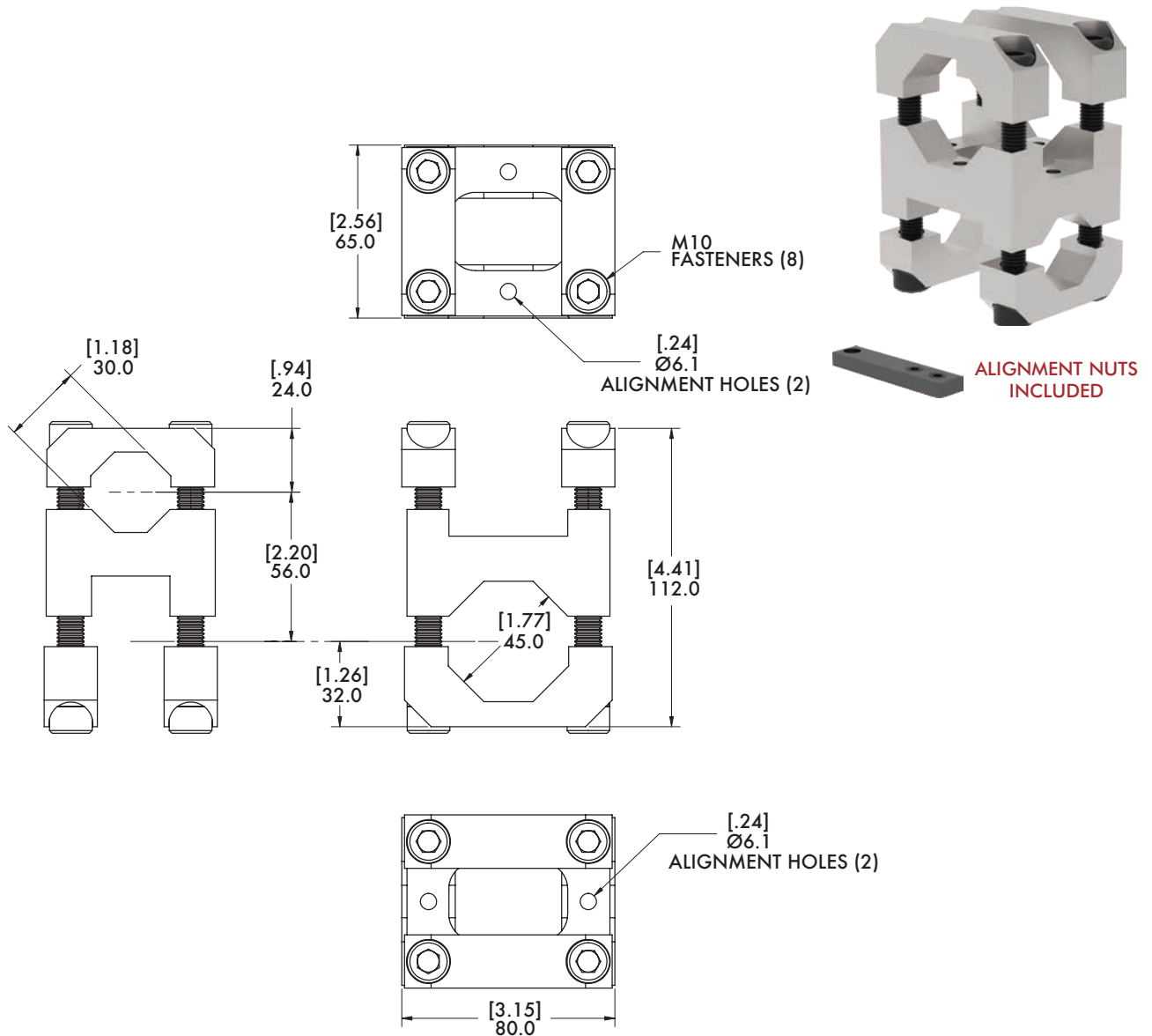
45mm: 475 Nm [350 ft-lb]

30mm: 271 Nm [200 ft-lb]

Material: Aluminum

Features:

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



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

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

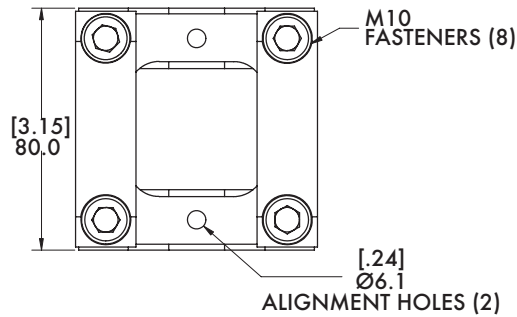
45B-45B 45mm to 45mm Transition Bracket Assembly

Features:

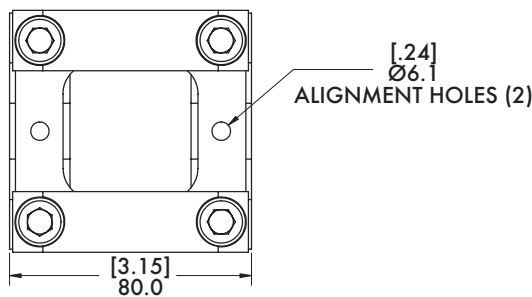
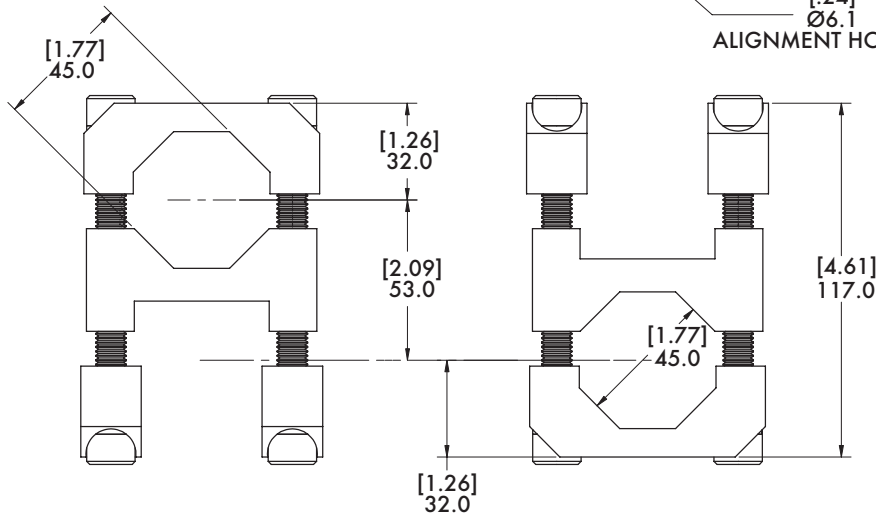
- Connects (2) 45mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design

Specifications:

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



ALIGNMENT NUTS INCLUDED



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



BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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



Specifications:

Max. Static Clamp Load:

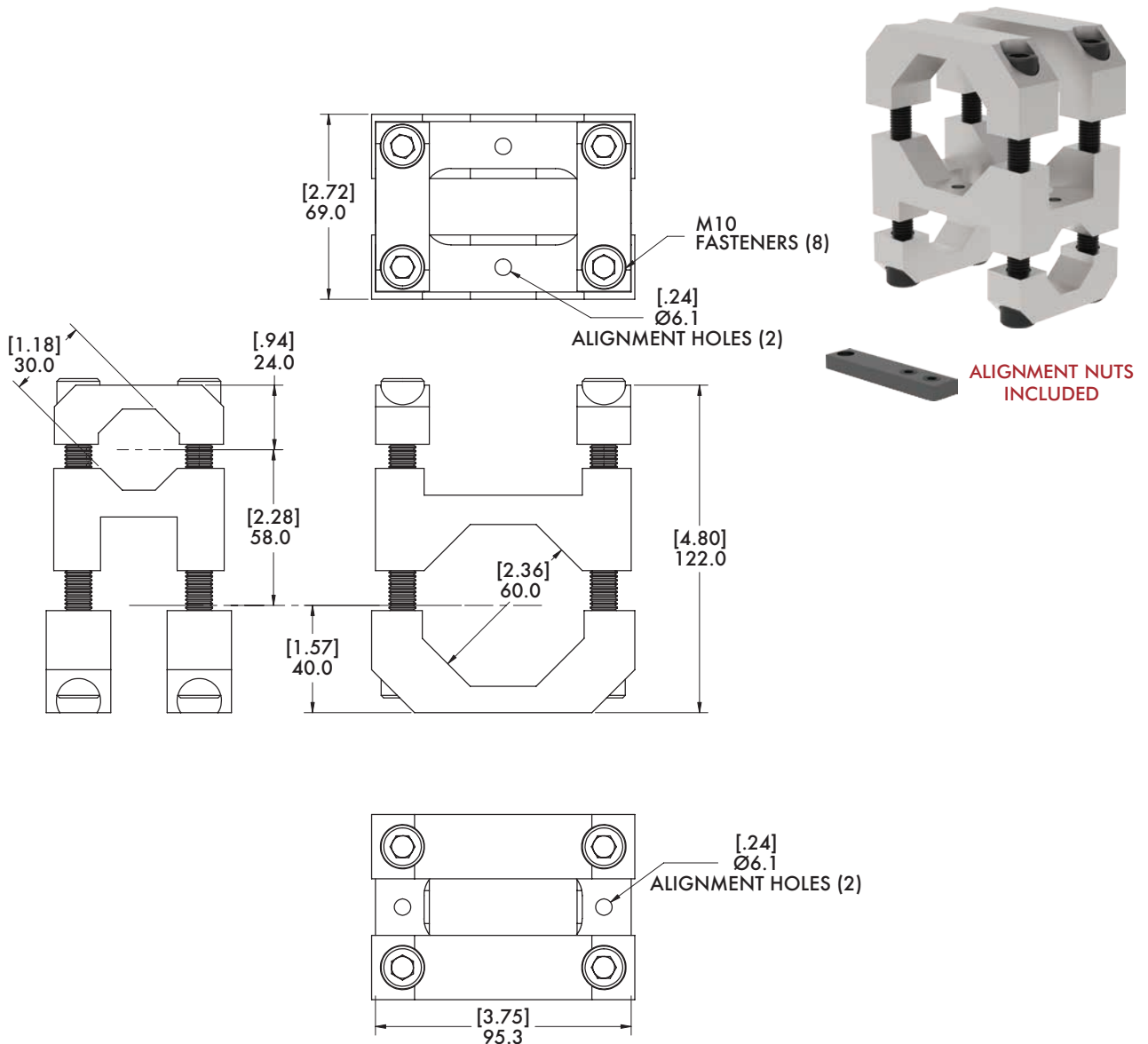
60mm: 746 Nm [550 ft-lb]

30mm: 271 Nm [200 ft-lb]

Material: Aluminum

Features:

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



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

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

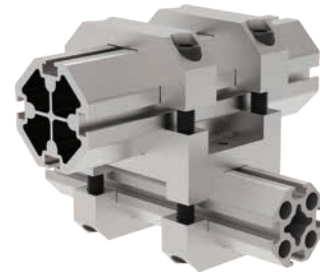
45B-60B 45mm to 60mm Transition Bracket Assembly

Features:

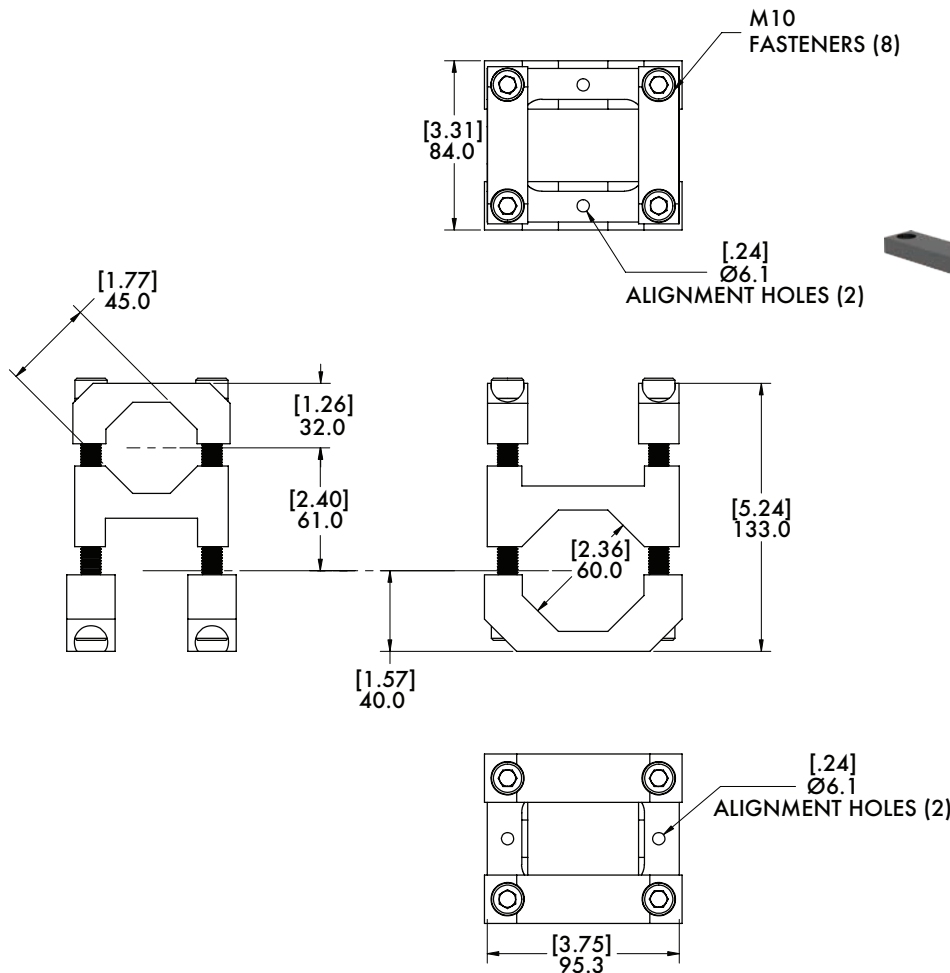
- Connects 45mm and 60mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

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



ALIGNMENT NUTS INCLUDED



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

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



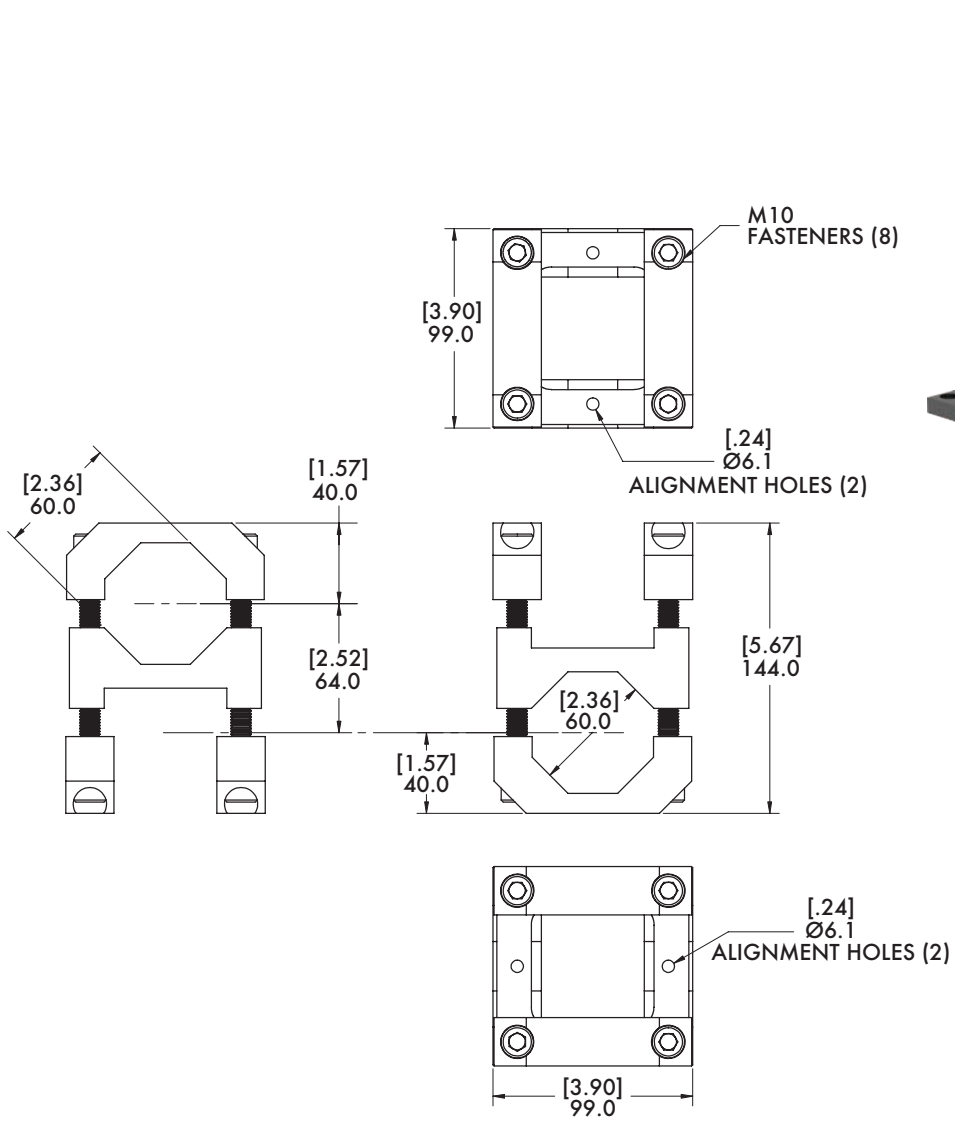
Specifications:

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

Material: Aluminum

Features:

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



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

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

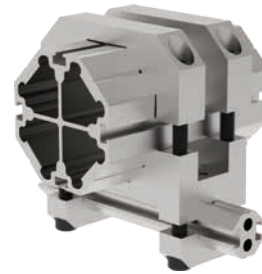
30B-90B 30mm to 90mm Transition Bracket Assembly

Features:

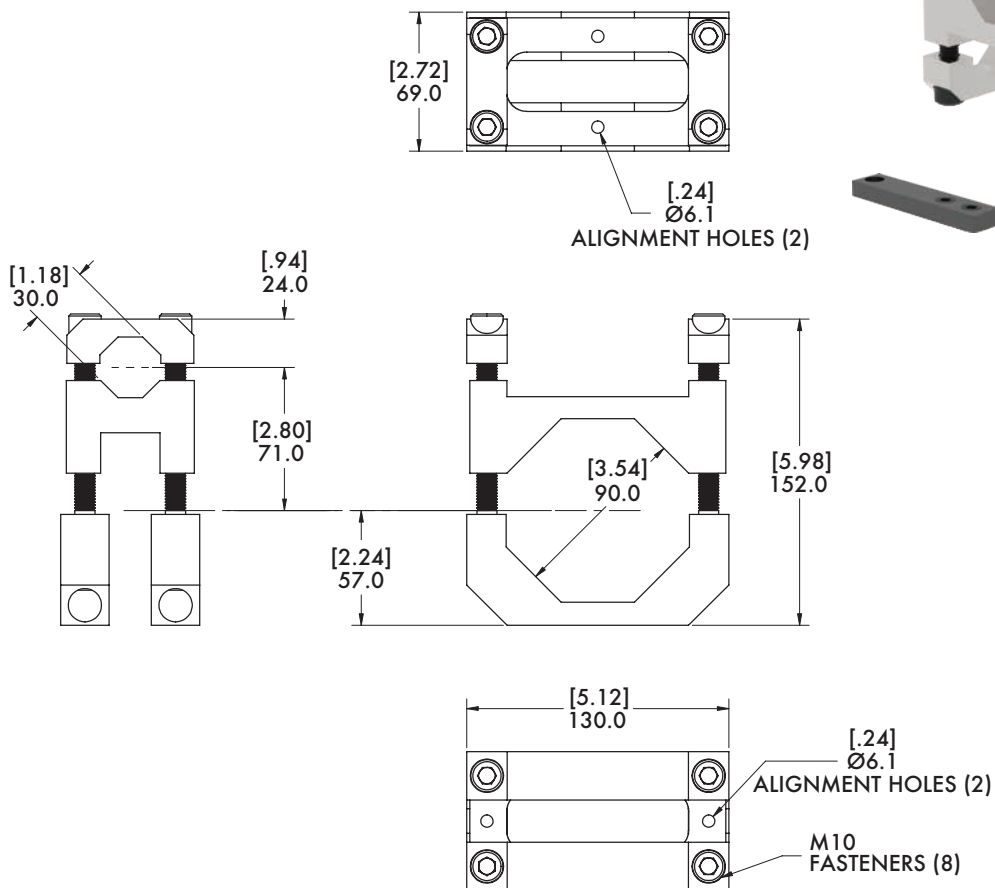
- Connects 30 and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

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

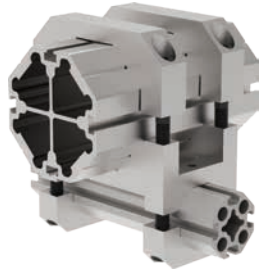


ALIGNMENT NUTS INCLUDED



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

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



Specifications:

Max. Static Clamp Load:

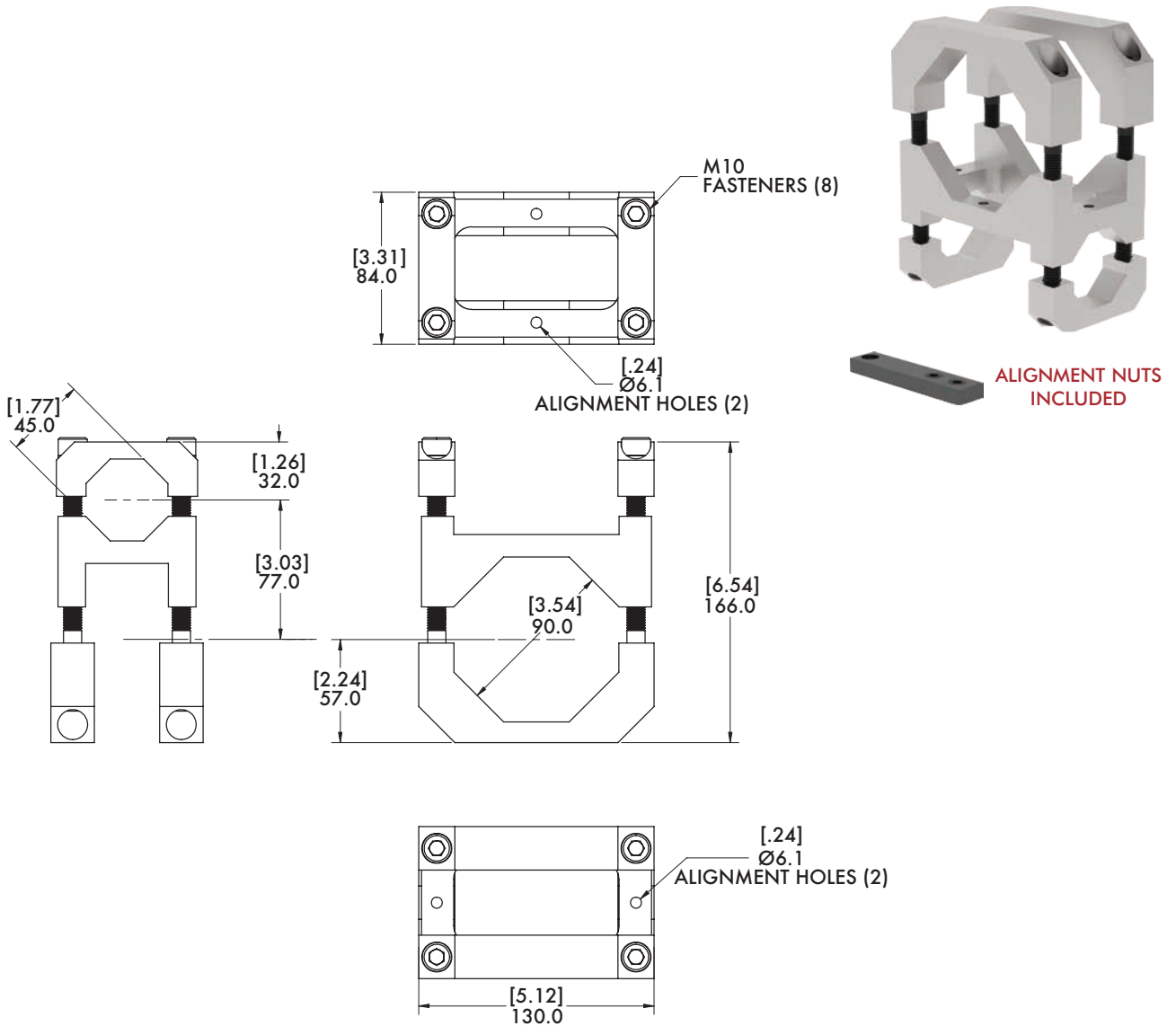
45mm: 475 Nm [350 ft-lb]

90mm: 746 Nm [550 ft-lb]

Material: Aluminum

Features:

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



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

BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Features:

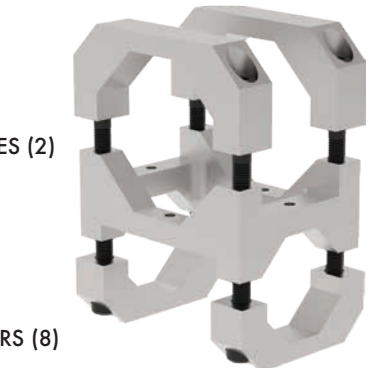
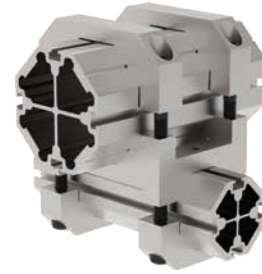
- Connects 60mm and 90mm extrusions perpendicular to each other.
- Lightweight, high-strength aluminum design.

Specifications:

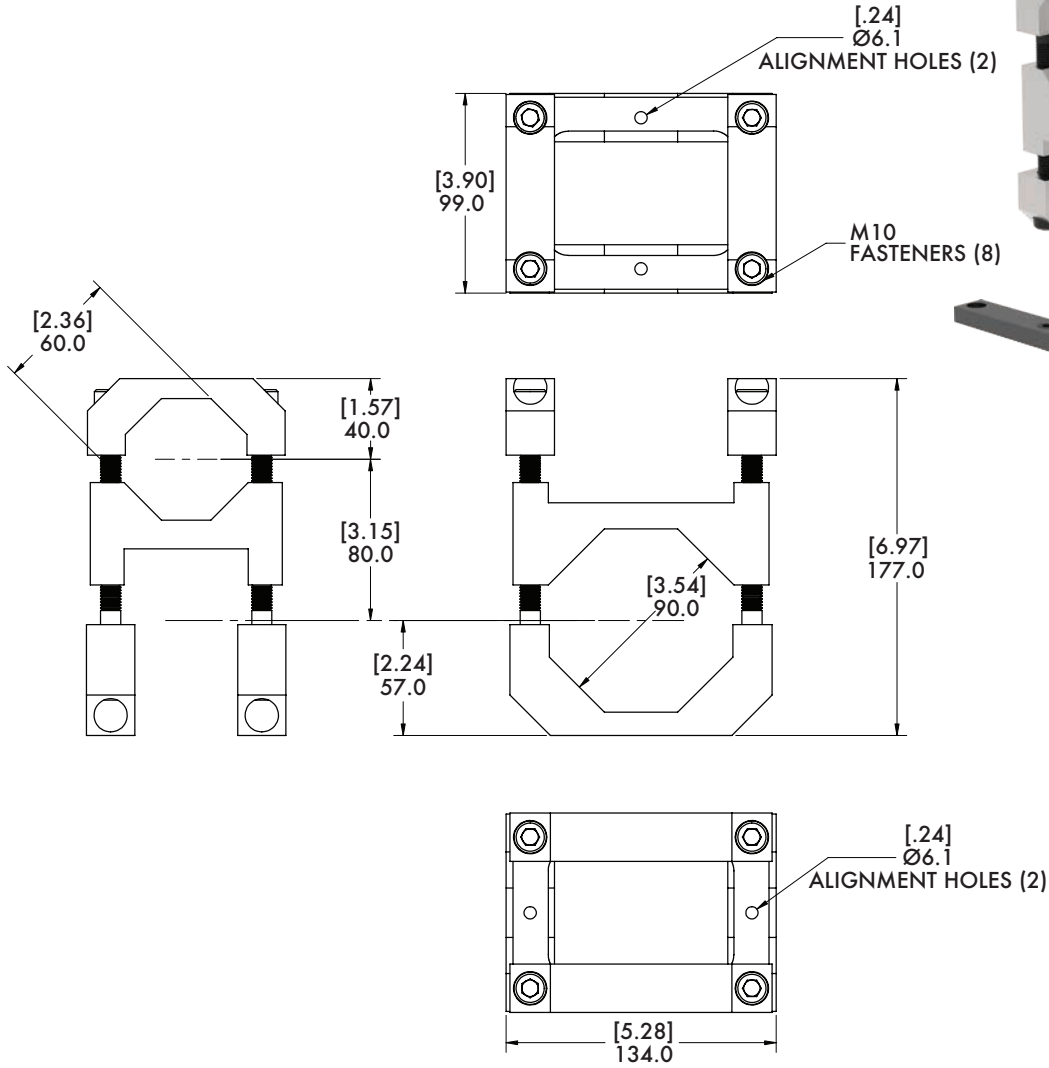
Maximum Clamp Load:

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

Material: Aluminum



ALIGNMENT NUTS INCLUDED



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



BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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



Specifications:

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

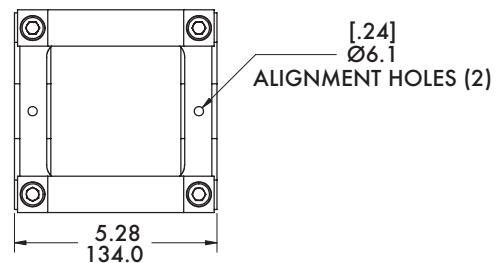
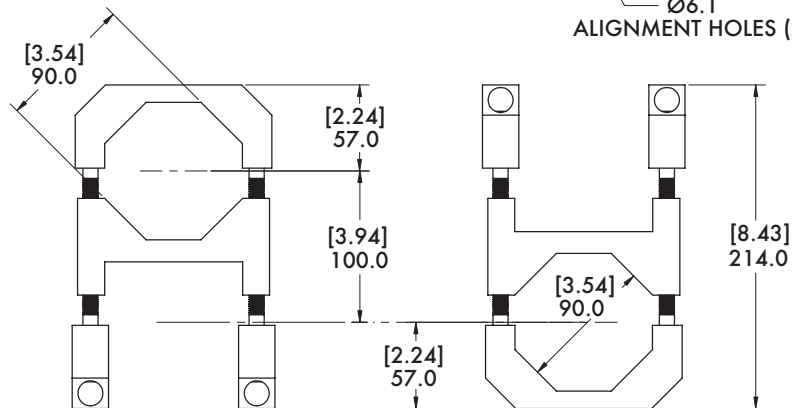
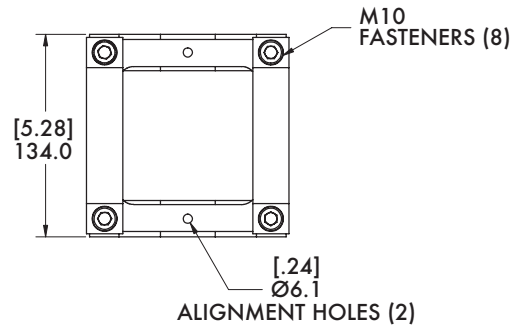
Material: Aluminum

Features:

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



ALIGNMENT NUTS INCLUDED



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

BODYBUILDER™ SQUARE CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



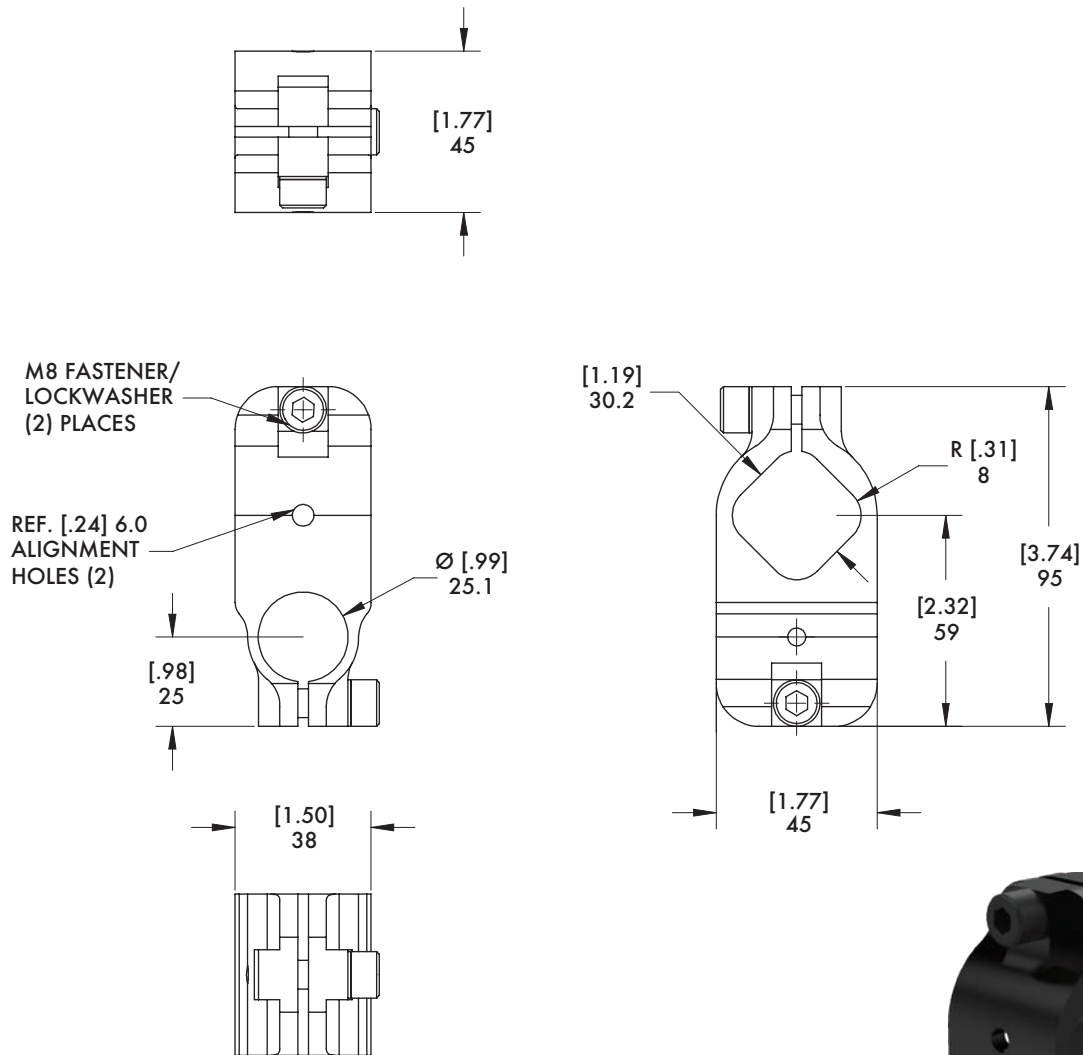
30B-25M 30mm Octagon to 25mm Round

Specifications:

Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



Model Number
M-30B-25M-M

Weight
203g [0.45lbs]

BODYBUILDER™ SQUARE CLAMPS

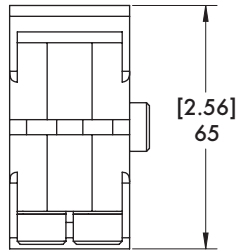
45B-25M (-10E) 45mm Octagon to 25mm or 1 in. Round

Specifications:

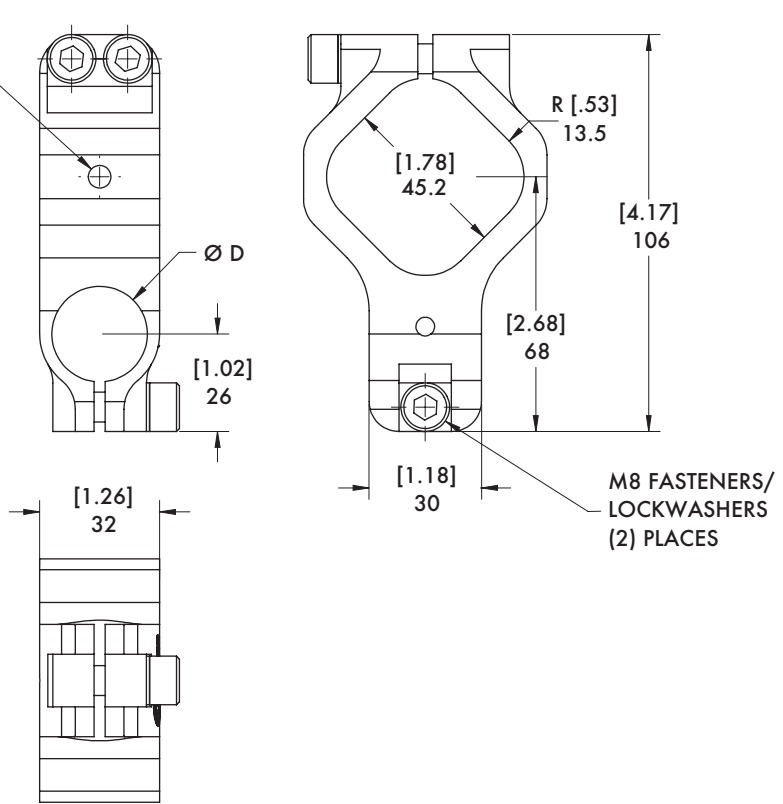
Max. Static Clamp Load:

407 Nm [300 ft-lb]

Material: High Strength Aluminum



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



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

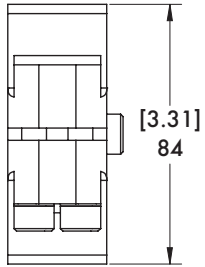
BODYBUILDER™ SQUARE CLAMPS

BodyBuilder™ Octagonal Tooling | Octagon to Round Transition Block Assembly

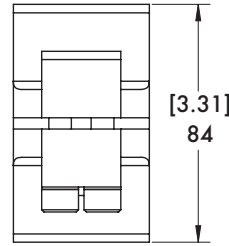


60B-25M 60mm Octagon to 25mm Round

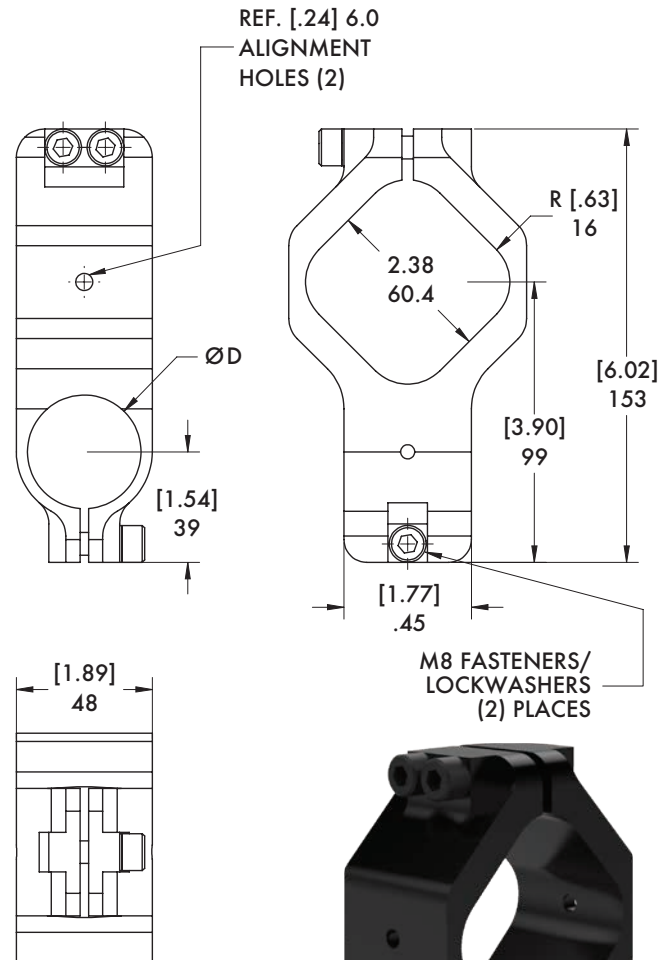
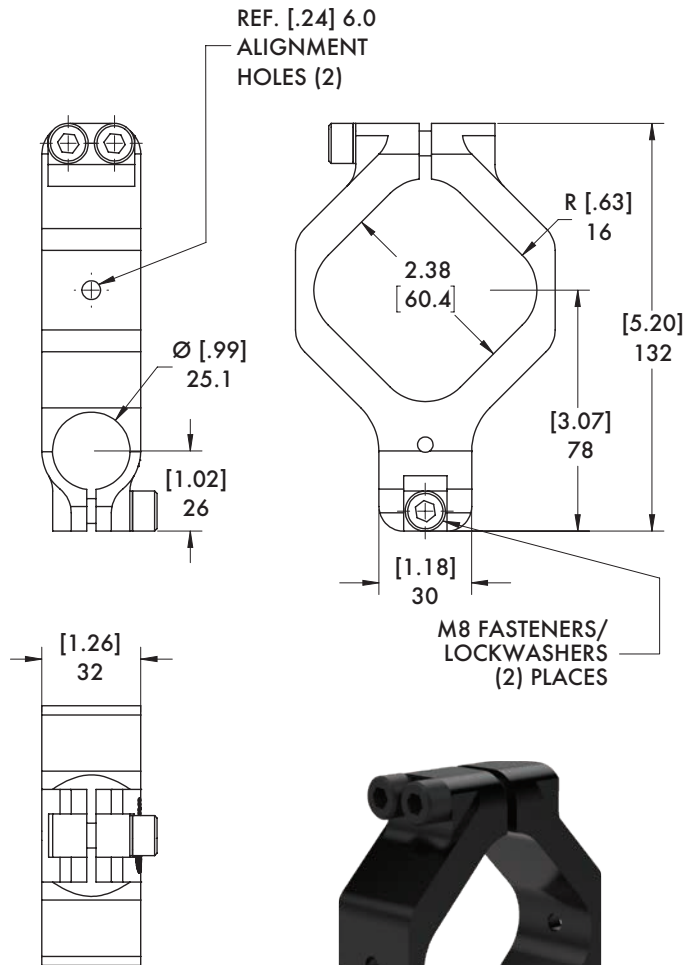
60B-40M (-15E) 60mm Octagon to 40mm or 1.5 in. Round



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



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



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

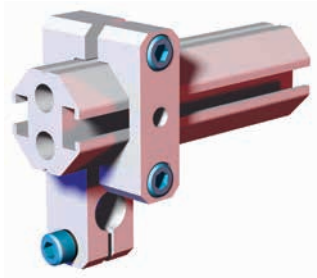
Model Number	Weight	ØD
M-60B-40M-M	520g [1.15lbs]	40mm
M-60B-15E-M	535g [1.18lbs]	1.5 in.



BODYBUILDER™ TRANSITION BRACKETS AND BLOCKS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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



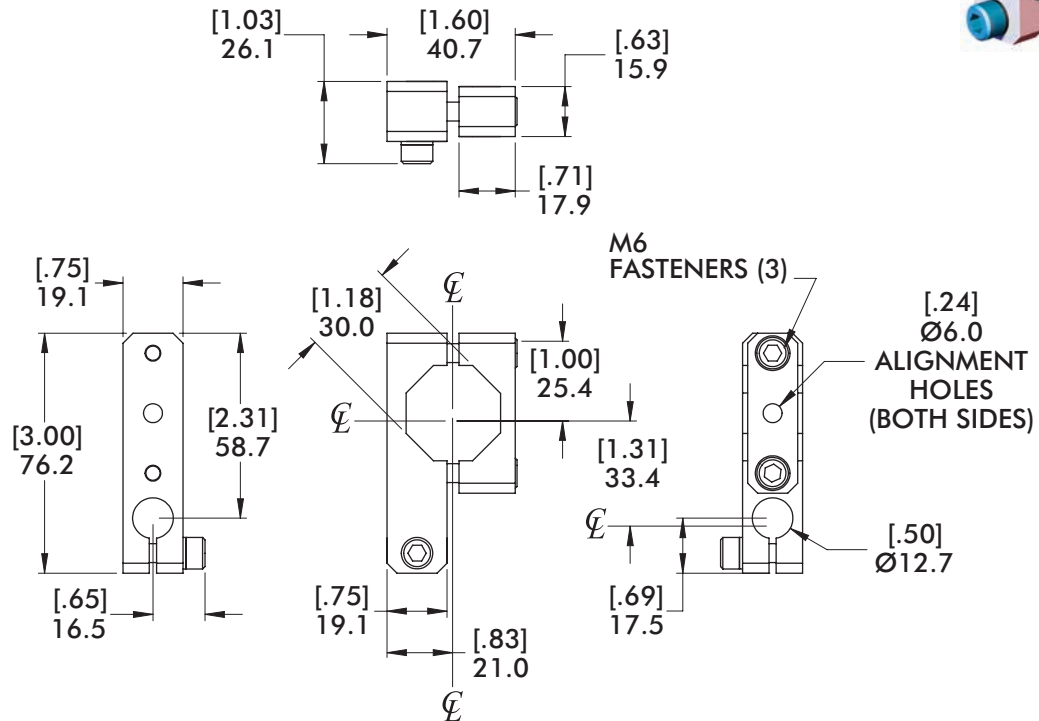
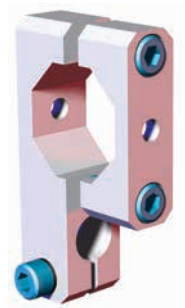
Features:

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

Specifications:

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

Material: Aluminum



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

BODYBUILDER™ T-CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

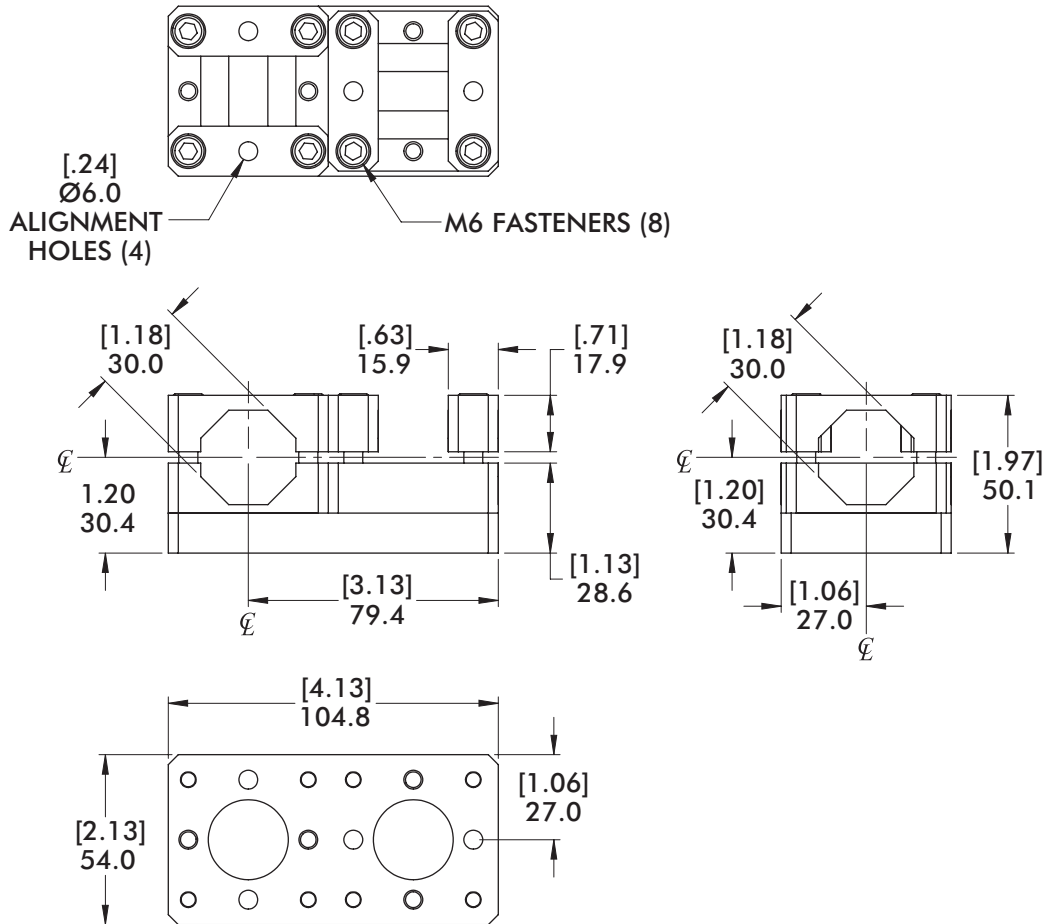
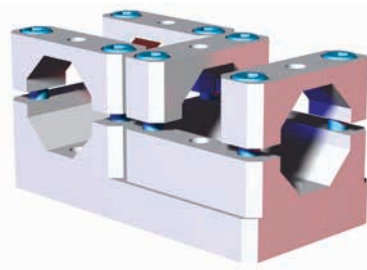
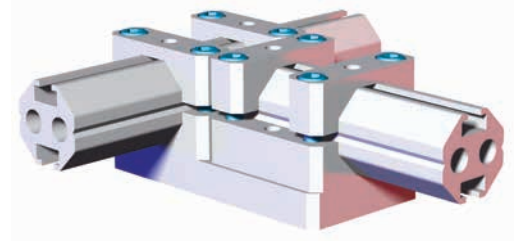
Specifications:

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

Material: Aluminum

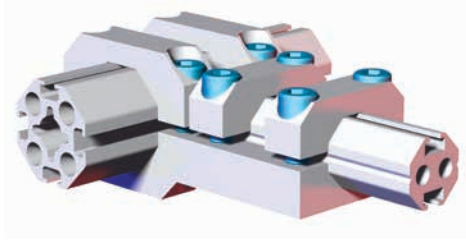
Features:

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



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

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

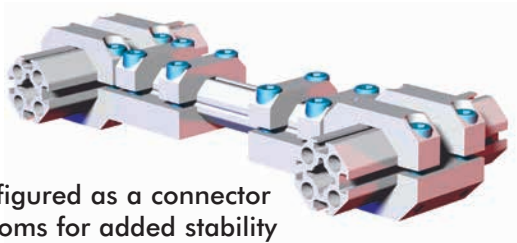


Features:

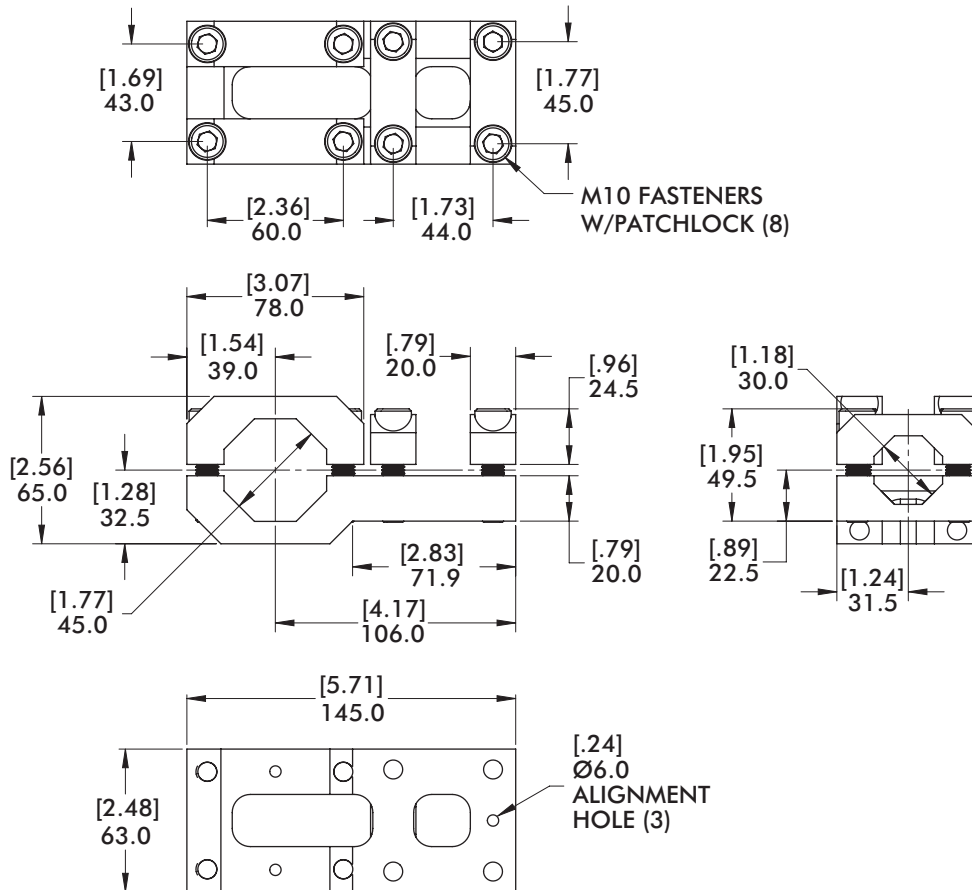
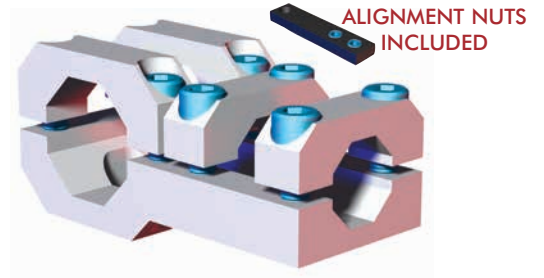
- Connects 30mm and 45mm octagon extrusion perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

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



Can be configured as a connector between booms for added stability



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

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Specifications:

Max. Static Clamp Load:

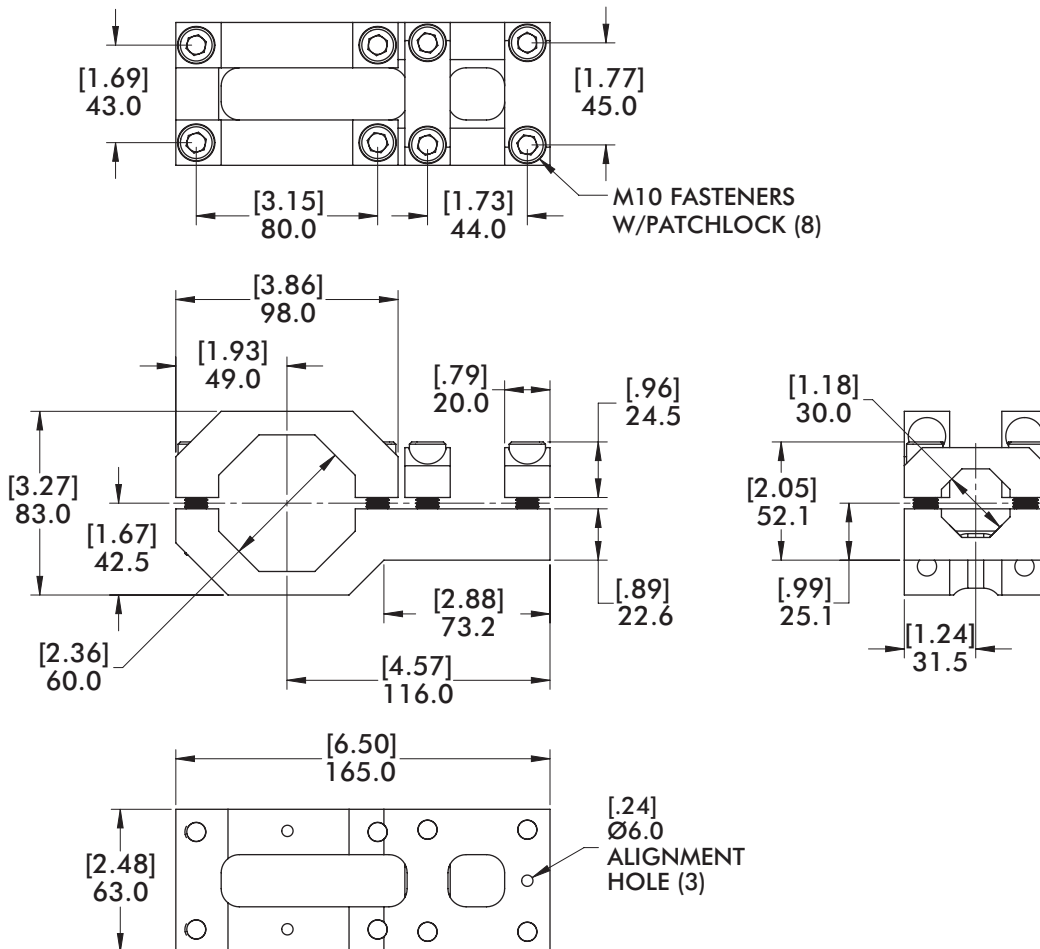
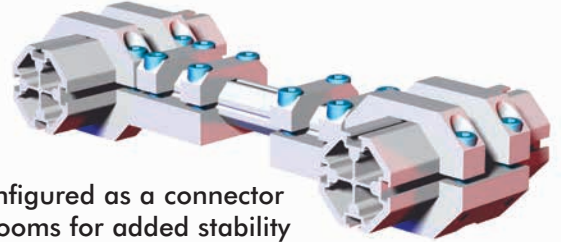
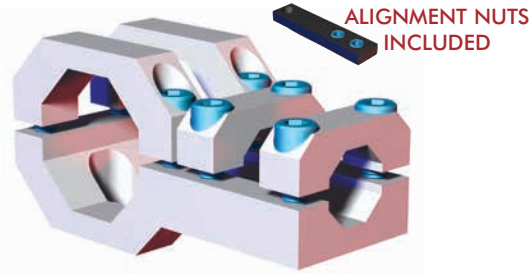
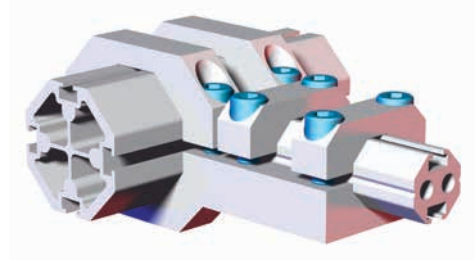
60mm: 746 Nm [550 ft-lb]

30mm: 271 Nm [200 ft-lb]

Material: Aluminum

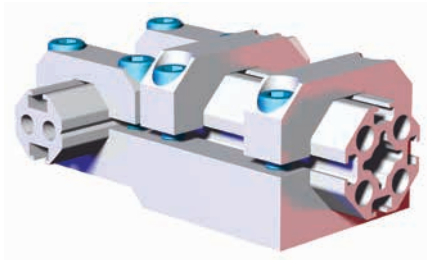
Features:

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



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

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

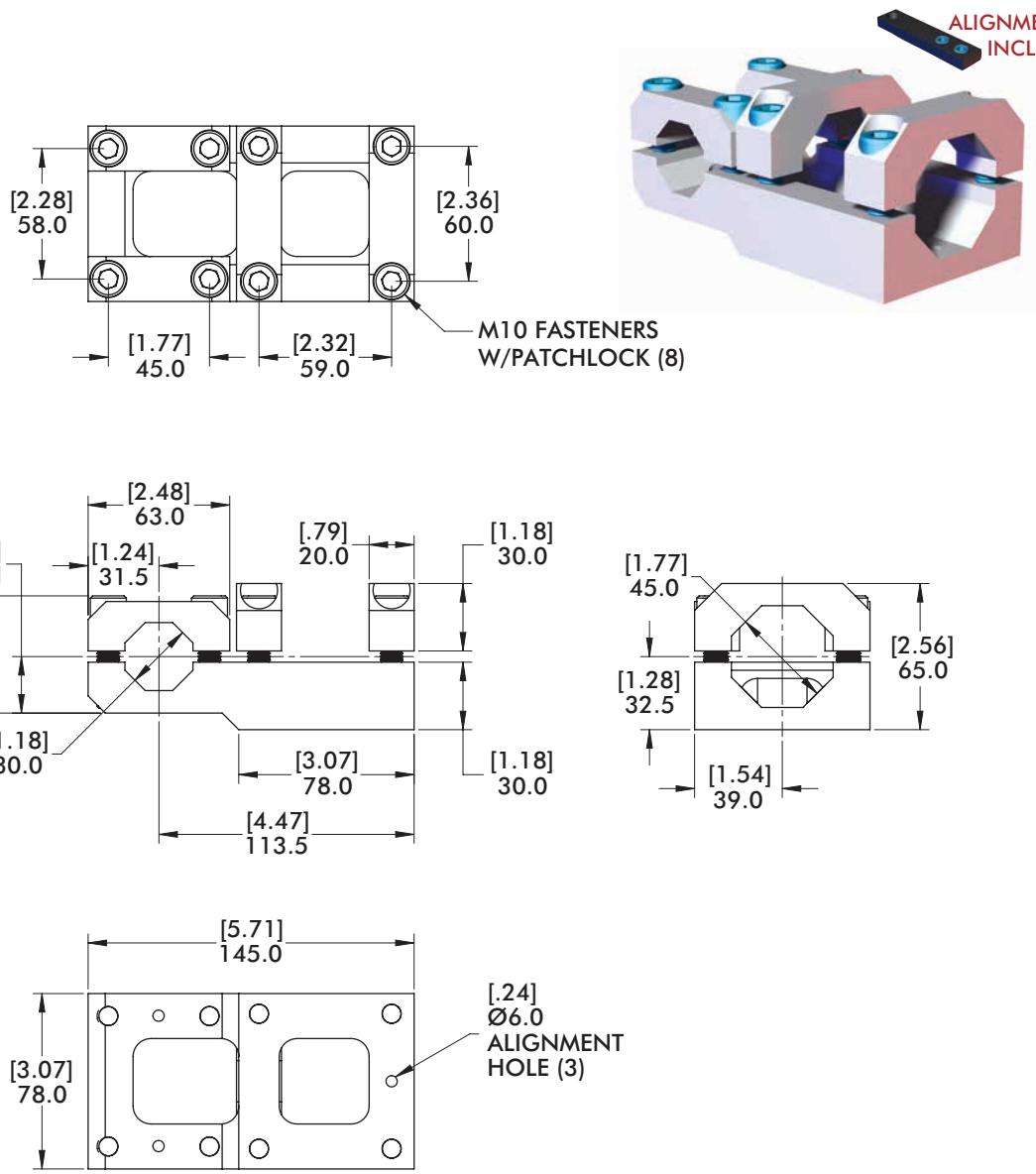


Features:

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

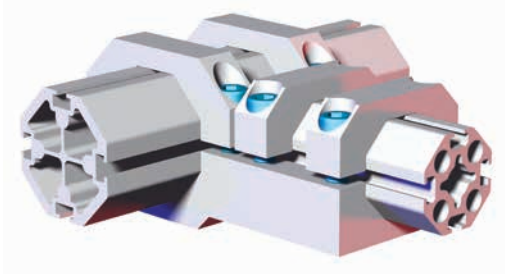
Specifications:

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



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

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

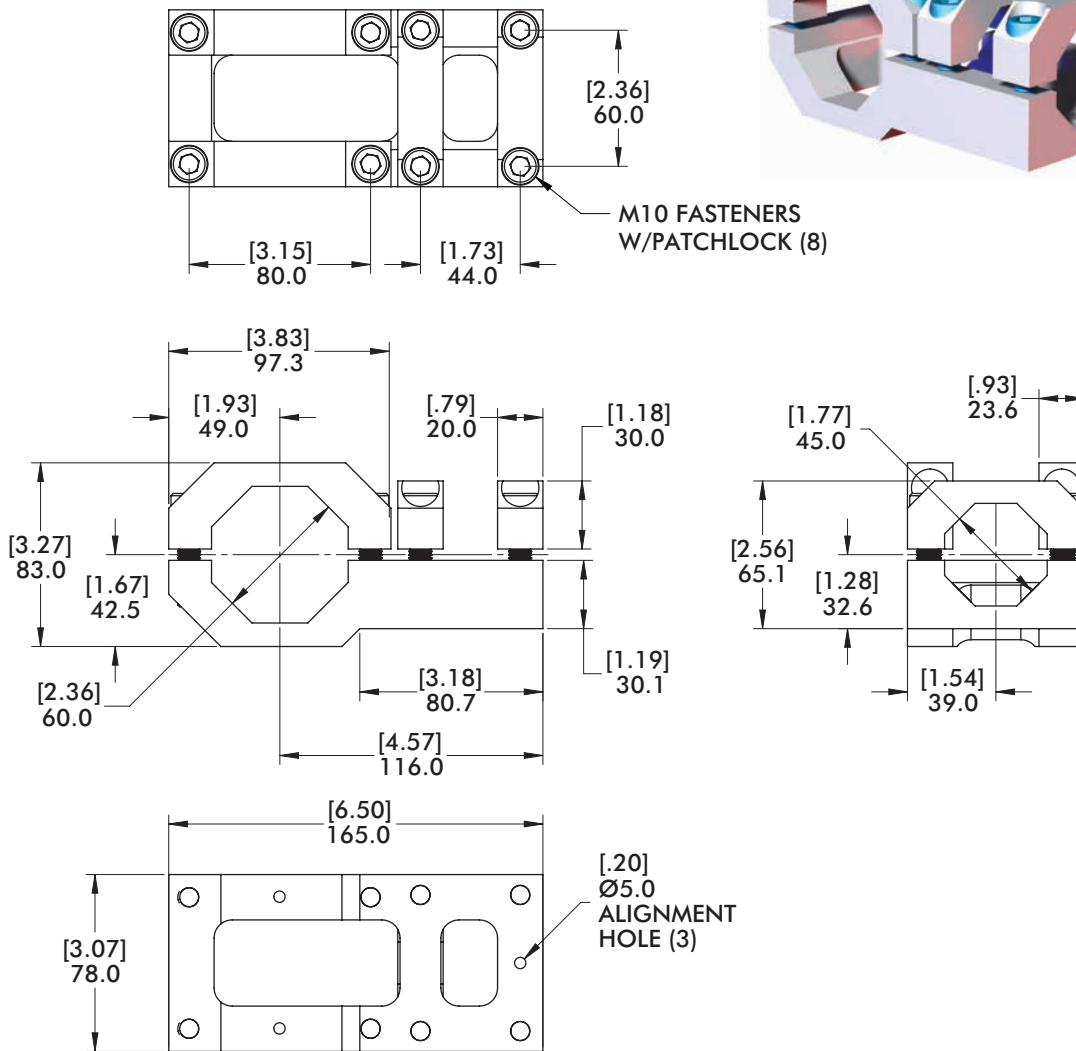
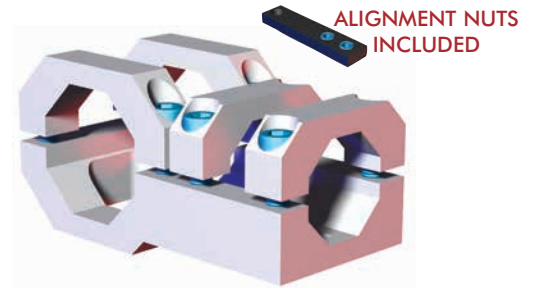


Features:

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

Specifications:

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



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

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Specifications:

Max. Static Clamp Load:

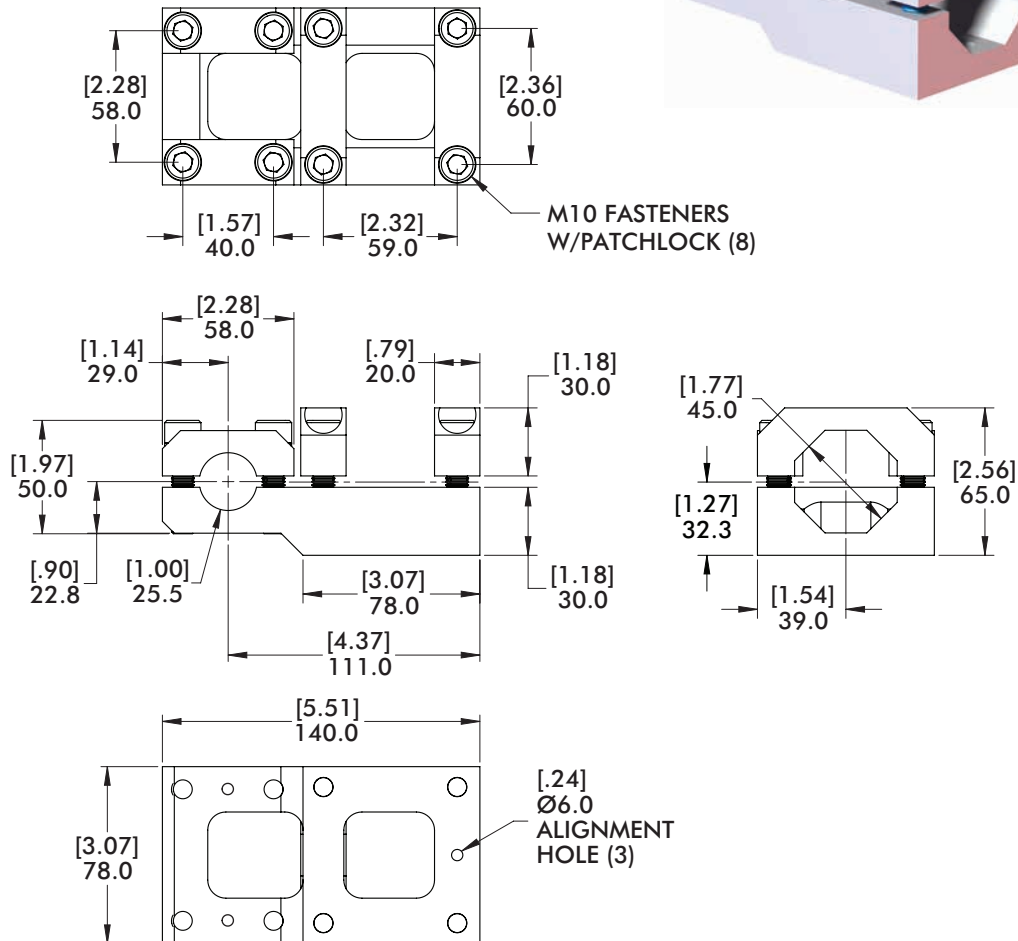
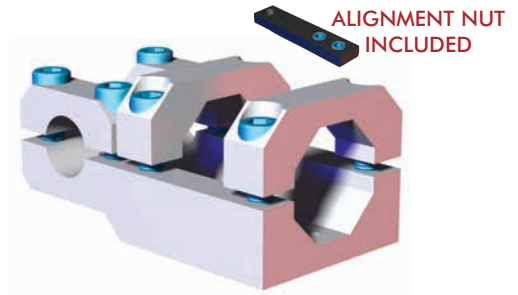
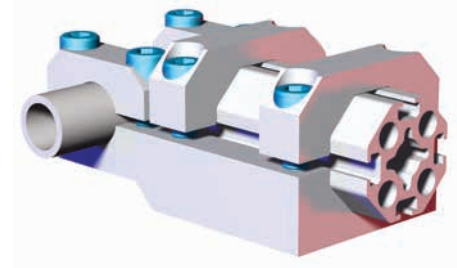
45mm: 475 Nm [350 ft-lb]

25mm: 271 Nm [200 ft-lb]

Material: Aluminum

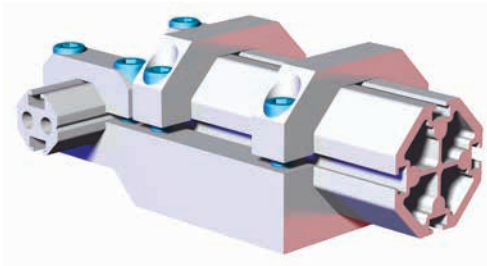
Features:

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



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

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



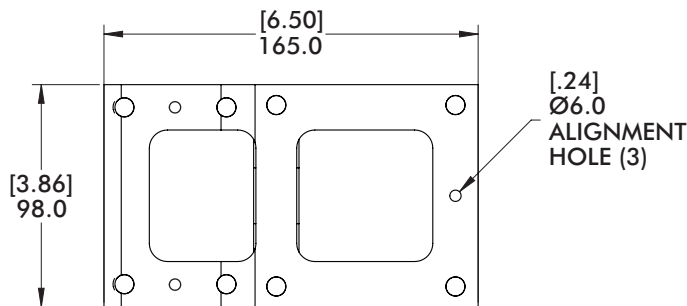
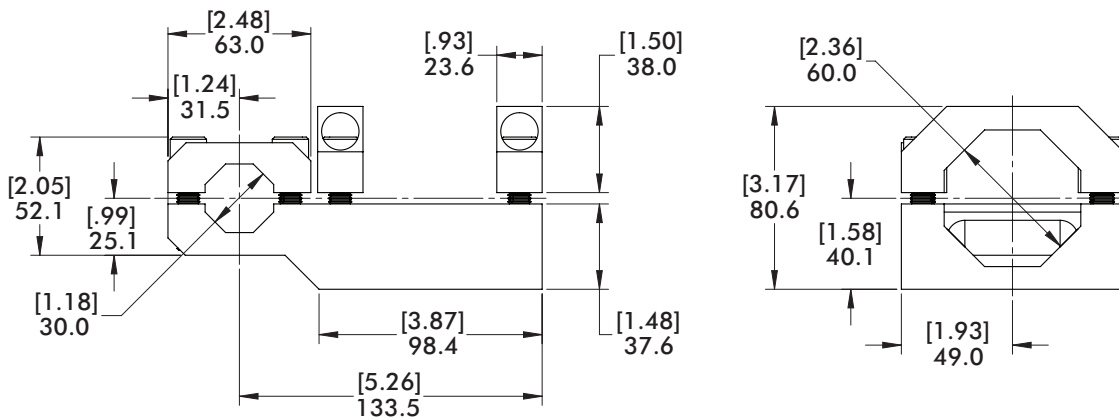
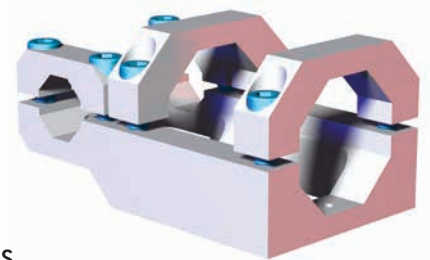
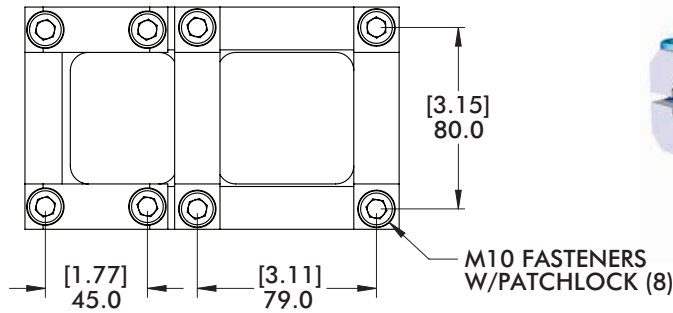
Features:

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

Specifications:

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

ALIGNMENT NUTS INCLUDED



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

BODYBUILDER™ T-CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

Specifications:

Max. Static Clamp Load:

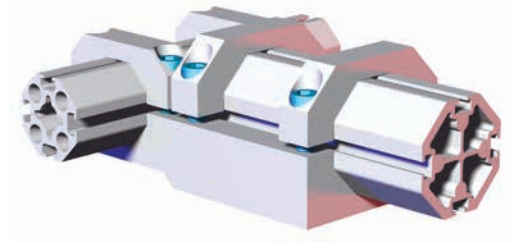
60mm: 746 Nm [550 ft-lb]

45mm: 475 Nm [350 ft-lb]

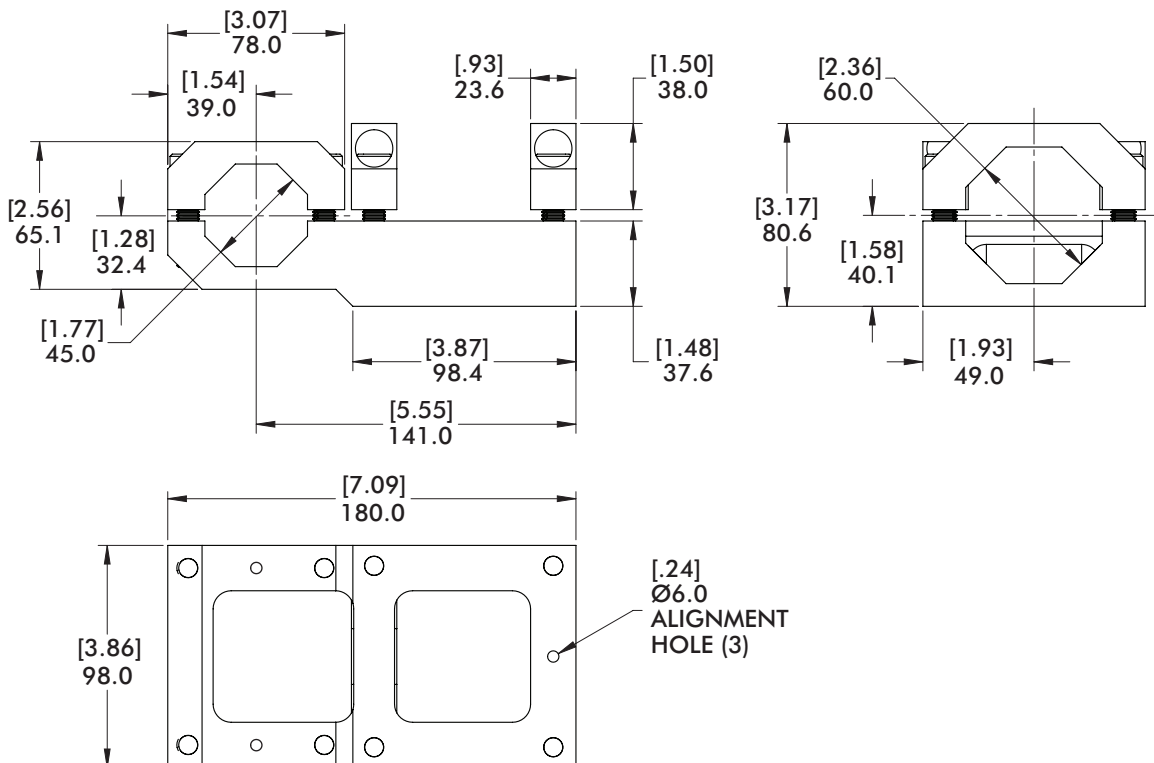
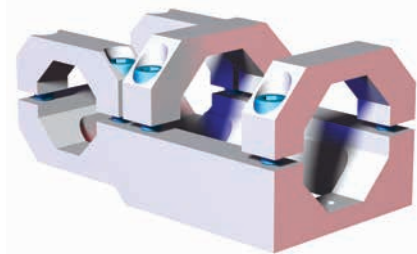
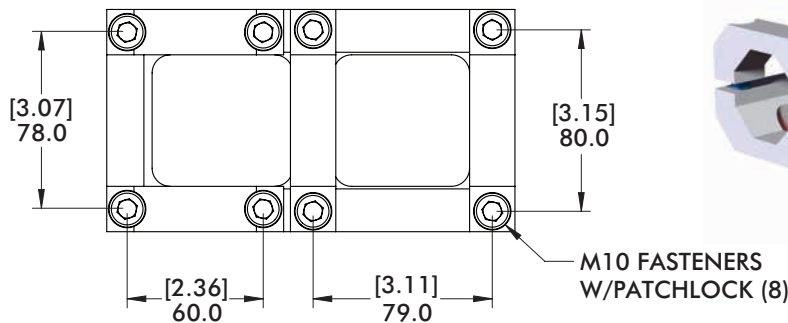
Material: Aluminum

Features:

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

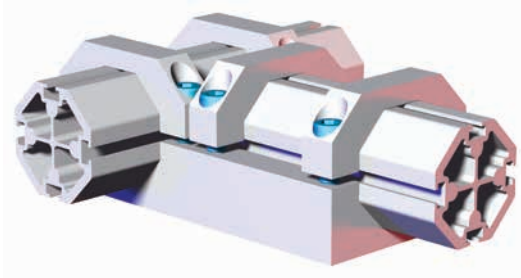


ALIGNMENT NUTS INCLUDED



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

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



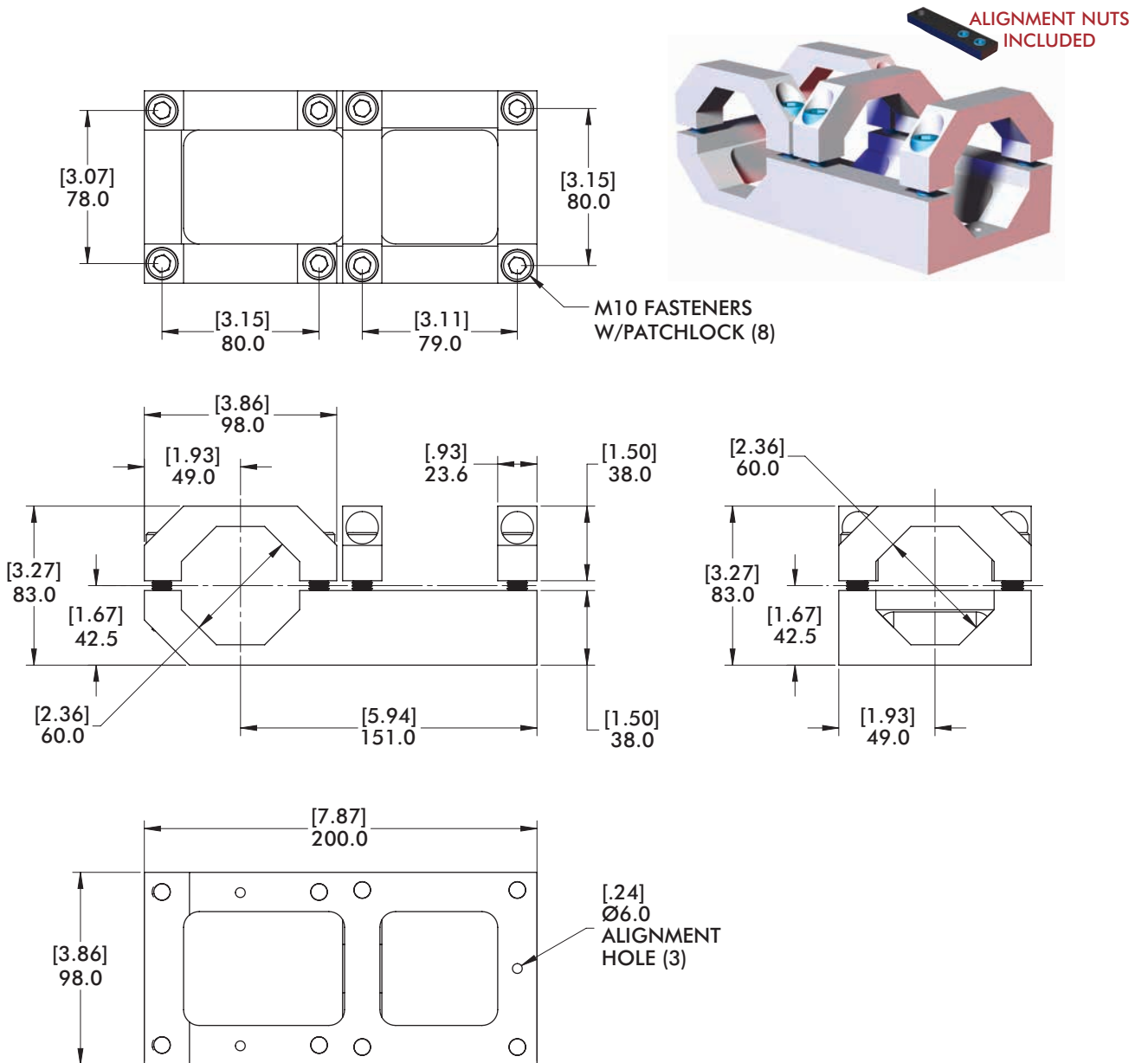
Features:

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

Specifications:

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

Material: Aluminum



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

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Specifications:

Max. Static Clamp Load:

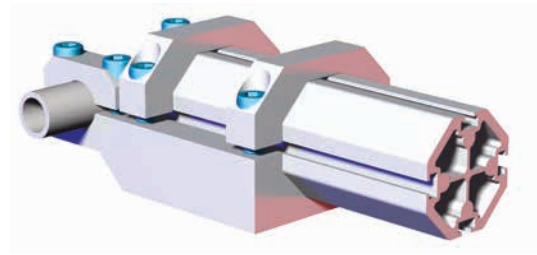
60mm: 746 Nm [550 ft-lb]

30mm: 271 Nm [200 ft-lb]

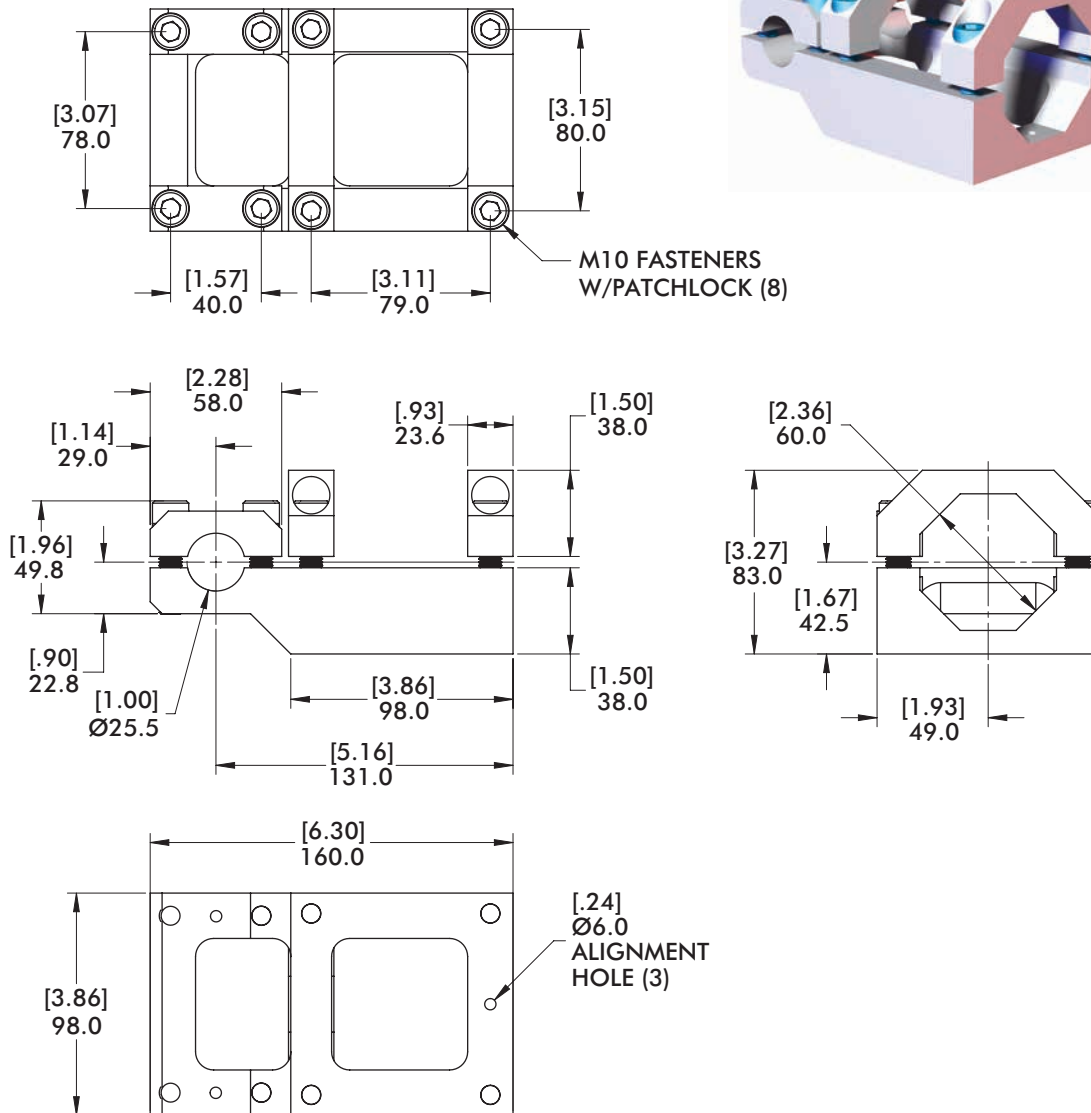
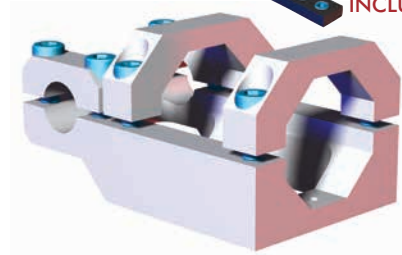
Material: Aluminum

Features:

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

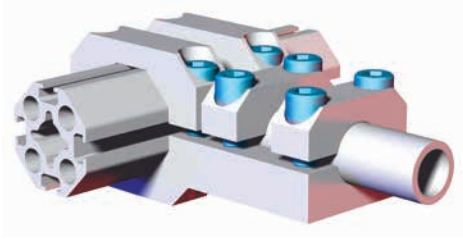


ALIGNMENT NUT INCLUDED



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

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

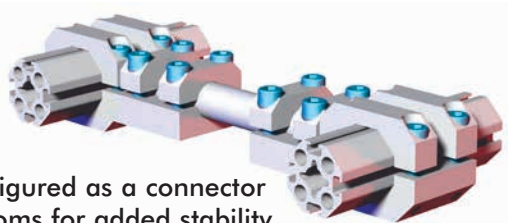


Features:

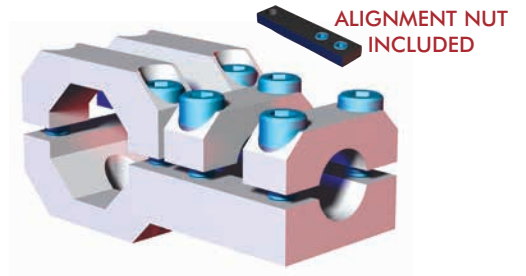
- Connects 25mm round and 45mm octagon perpendicular on the same plane.
- Lightweight, high-strength aluminum design.

Specifications:

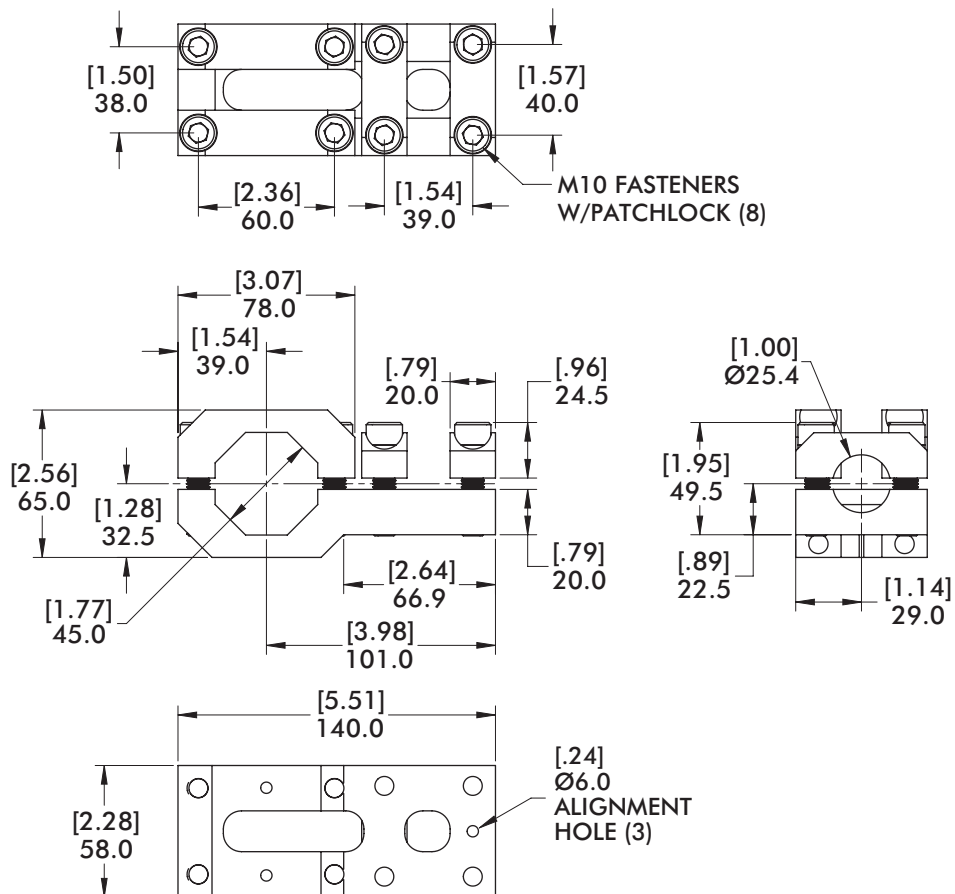
Max. Static Clamp Load:
 45mm: 475 Nm [350 ft-lb]
 25mm: 271 Nm [200 ft-lb]
Material: Aluminum



Can be configured as a connector between booms for added stability



ALIGNMENT NUT INCLUDED



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

BODYBUILDER™ T-CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

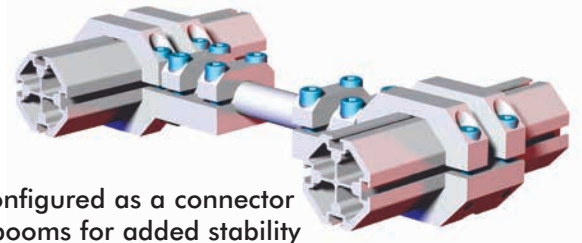
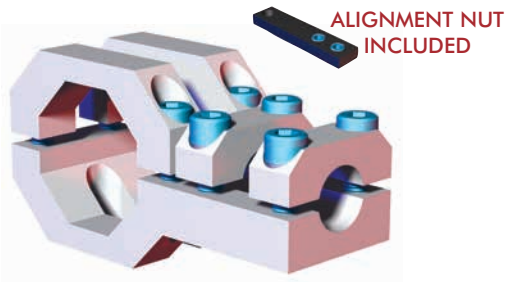
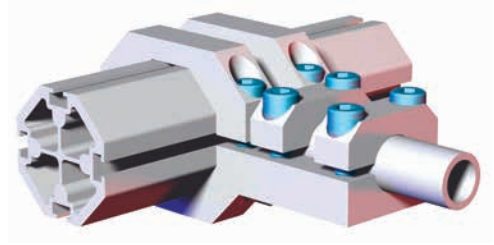
TCA-25M-60B 25mm Round to 60mm Octagon T-Clamp Bracket Assembly

Specifications:

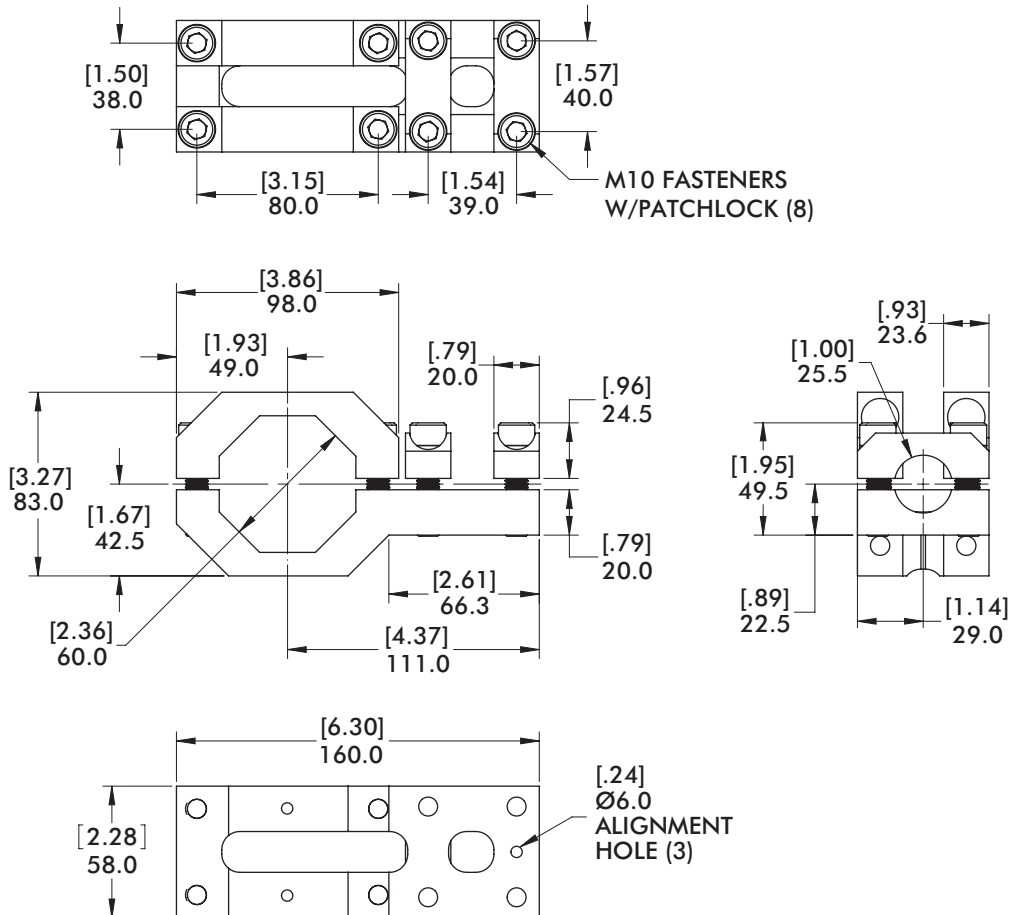
Max. Static Clamp Load:
 60mm: 746 Nm [550 ft-lb]
 25mm: 271 Nm [200 ft-lb]
Material: Aluminum

Features:

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

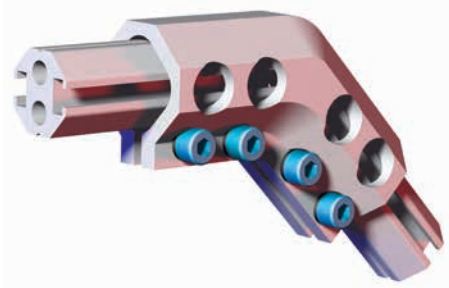


Can be configured as a connector between booms for added stability



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

45° Angular Boom Clamp Brackets



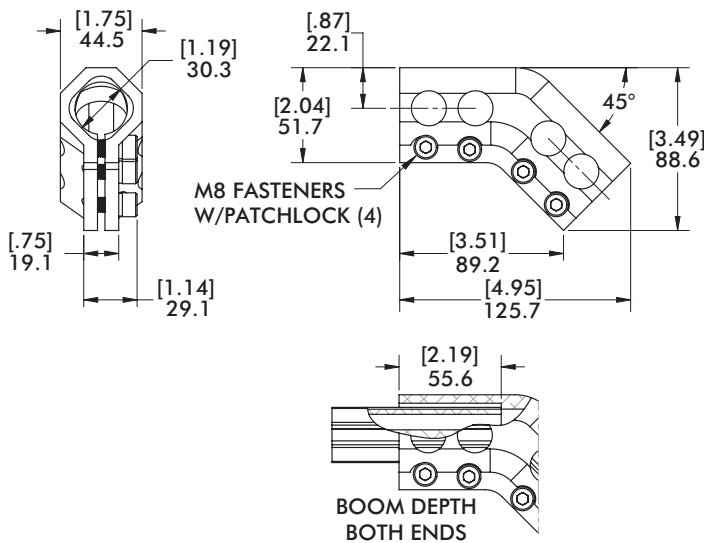
Features:

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

Specifications:

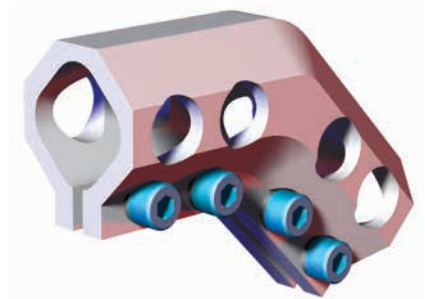
Material: Aluminum

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



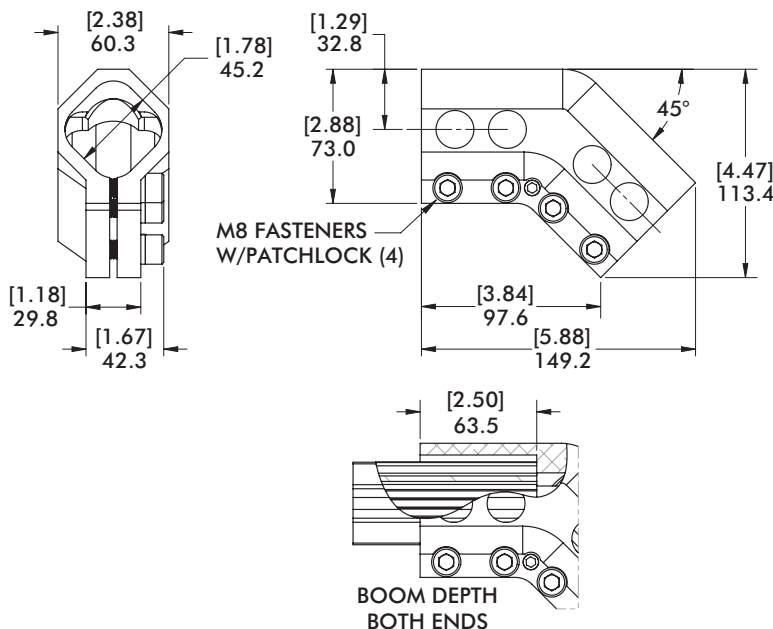
Specifications:

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



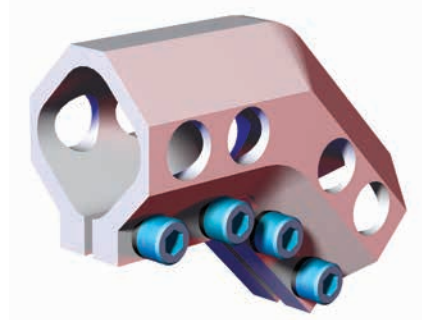
Model Number	Weight
CPI-DC-3030B-45	.30 kg [.66 lb]

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



Specifications:

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



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

BODYBUILDER™ ELBOWS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

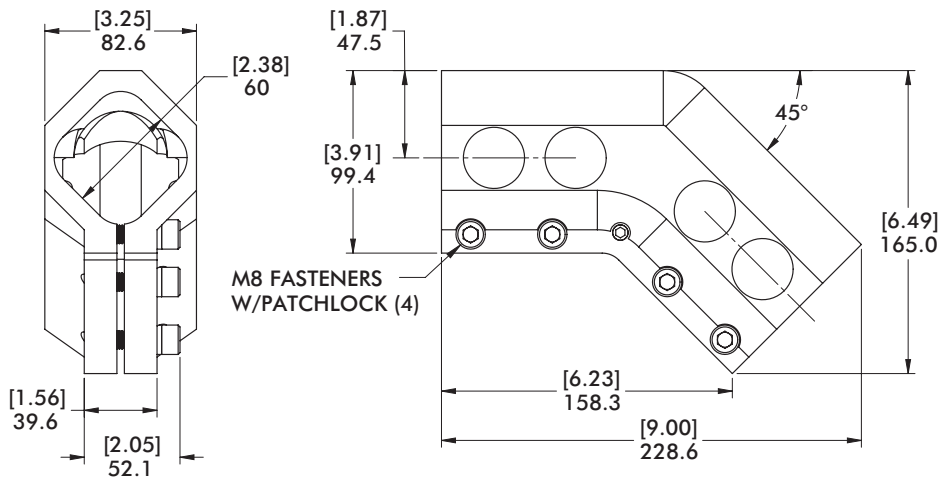
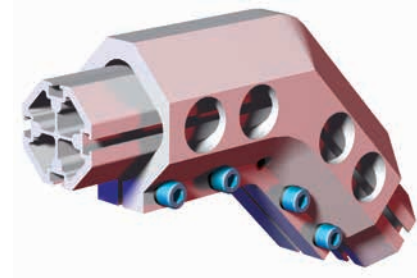
Specifications:

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

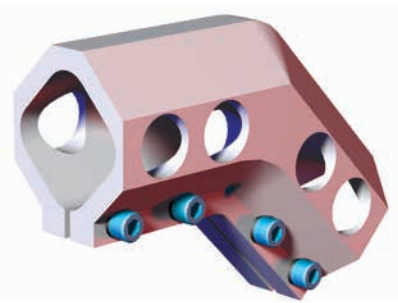
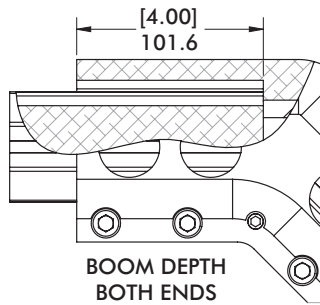
Material: Aluminum

Features:

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

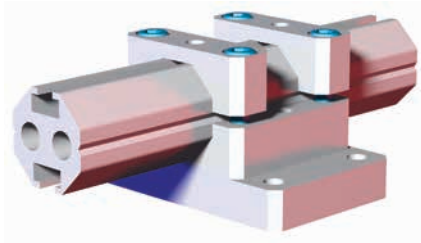


M8 FASTENERS
W/PATCHLOCK (4)



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

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



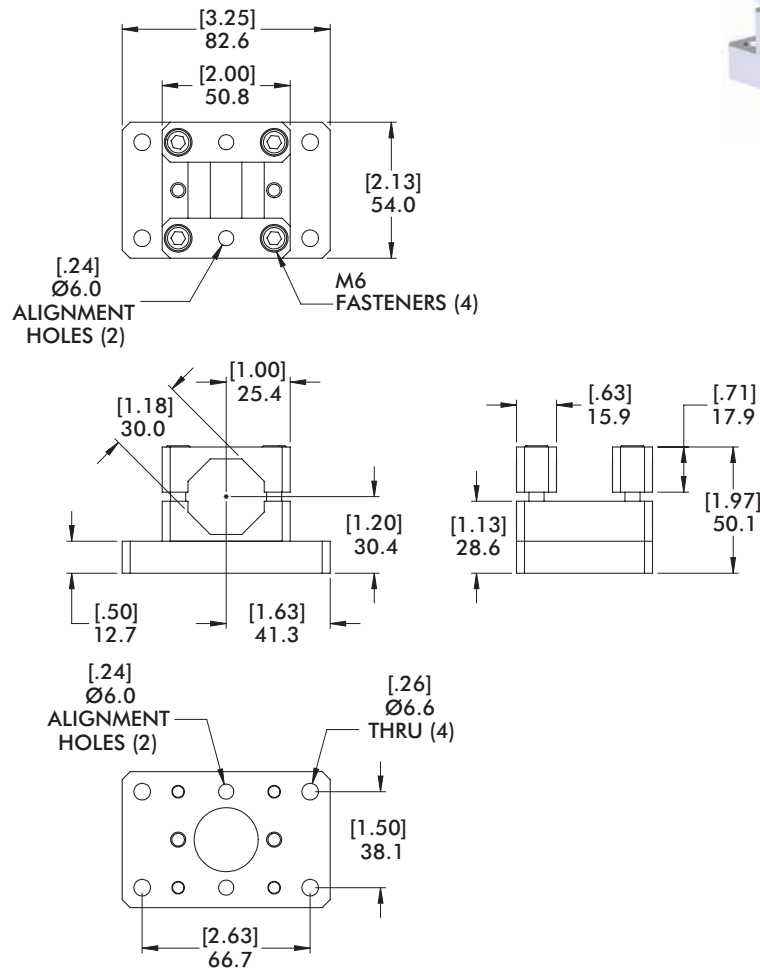
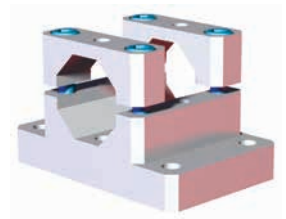
Features:

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

Specifications:

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

Material: Cast Aluminum



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

BODYBUILDER™ MID FLANGE CLAMPS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

TBC-45 45mm Mid Flange Clamp Mount

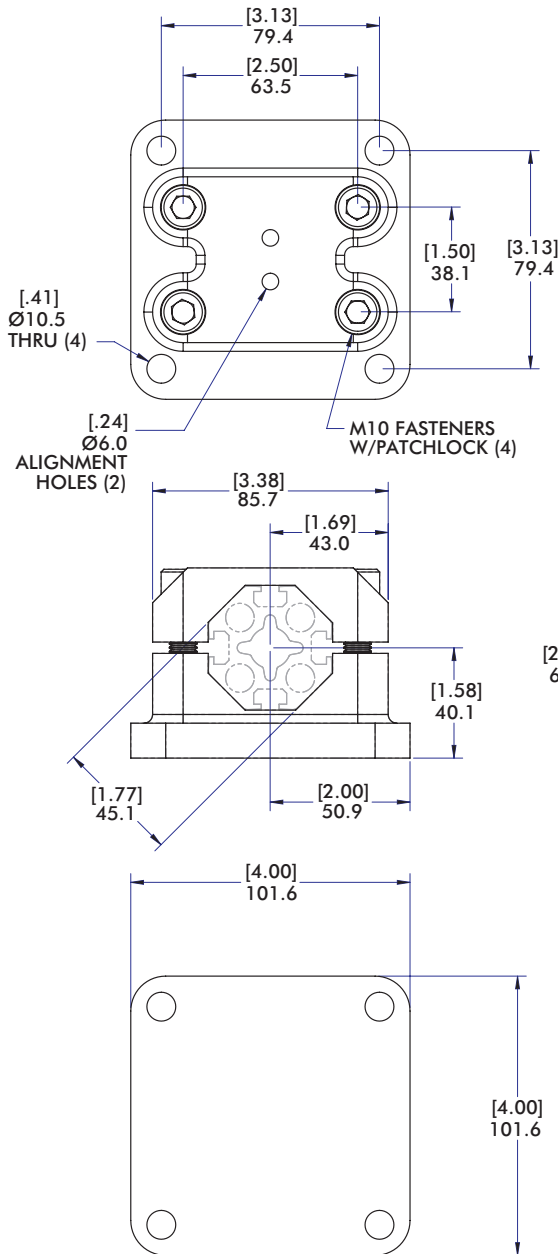
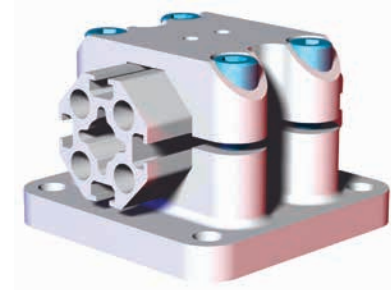
Specifications:

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

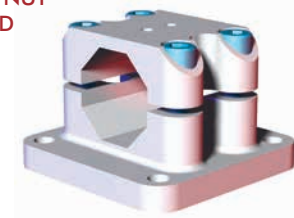
Material: Aluminum

Features:

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

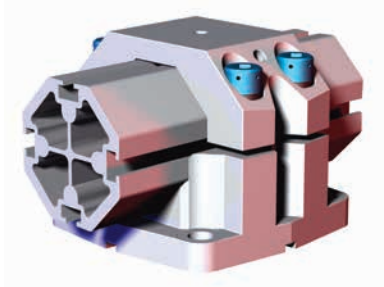


ALIGNMENT NUT INCLUDED



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

TBC-60 60mm Mid Flange Clamp Mount

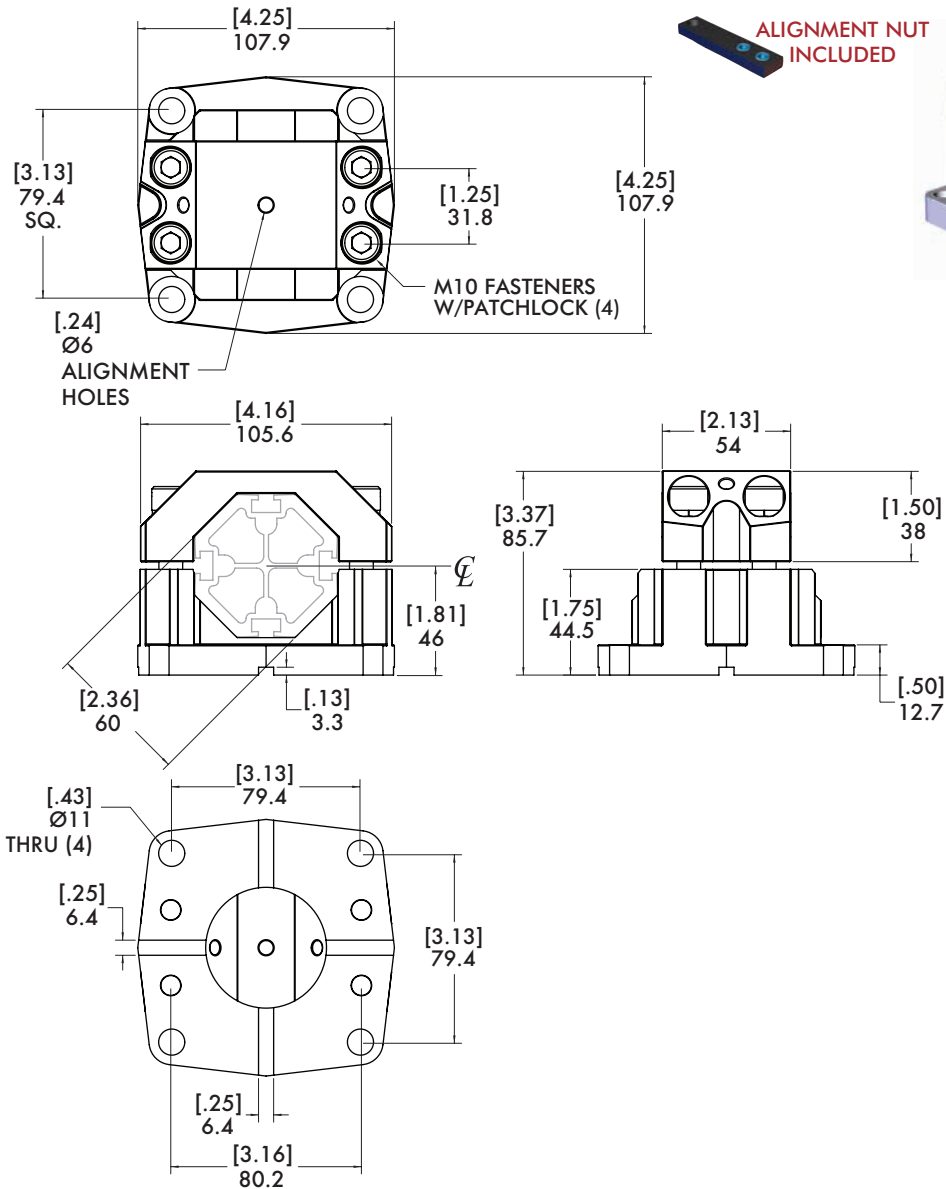


Features:

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

Specifications:

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



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

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

BODYBUILDER™ END FLANGE CLAMPS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

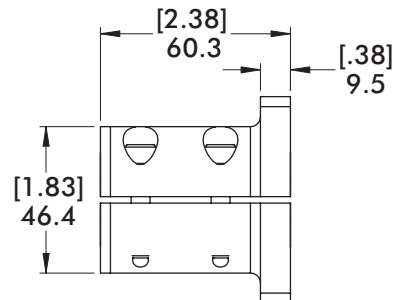
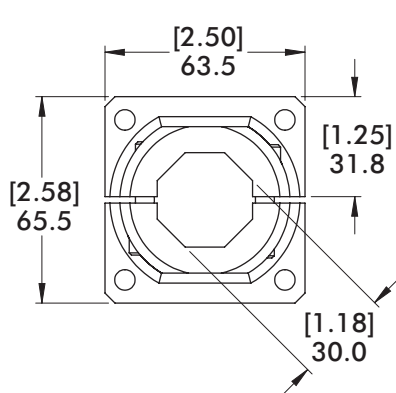
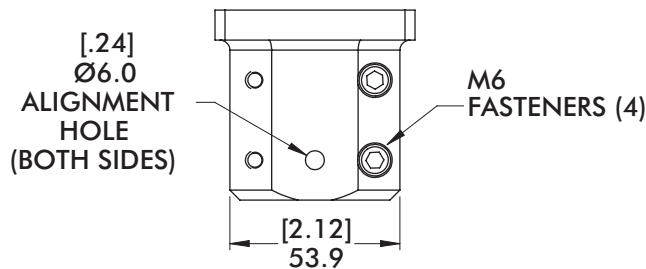
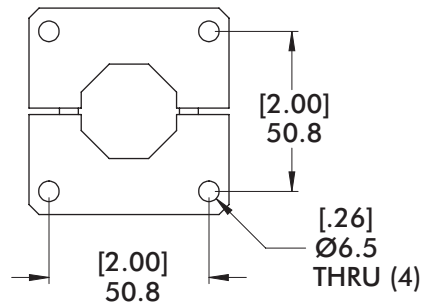
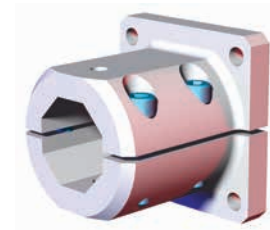
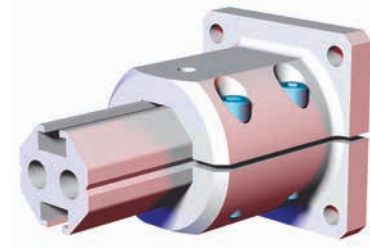
Specifications:

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

Material: Aluminum

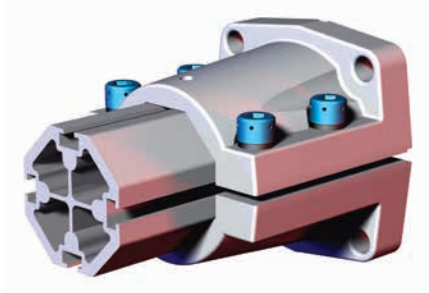
Features:

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



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

BECC-60 60mm End Flange Clamp Mount

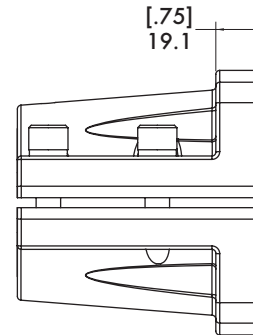
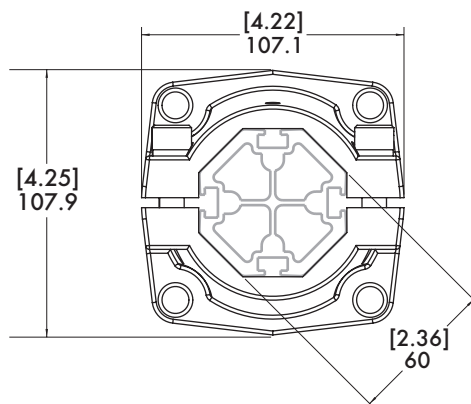
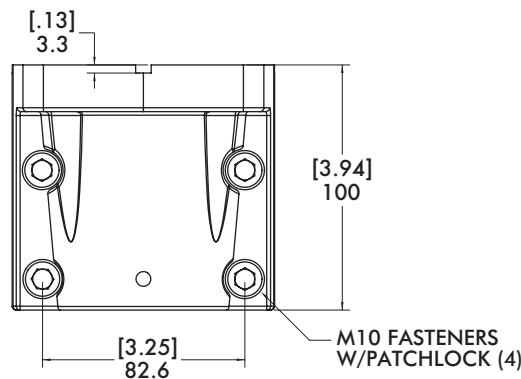
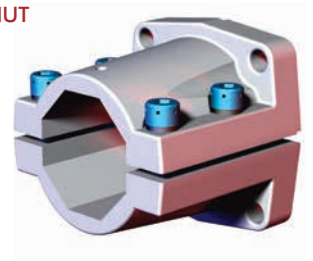
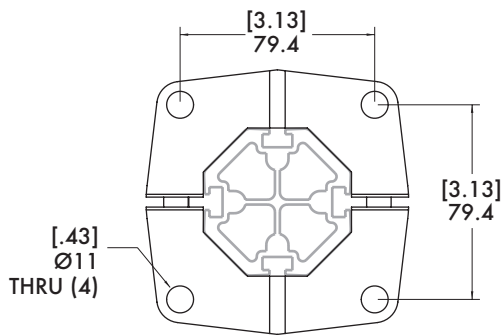


Features:

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

Specifications:

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



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

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

BODYBUILDER™ ACCESSORY MOUNTS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

TPM-30 30mm Accessory Mounting Bracket

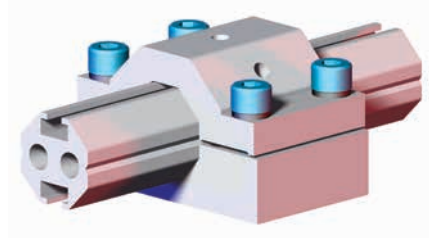
Specifications:

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

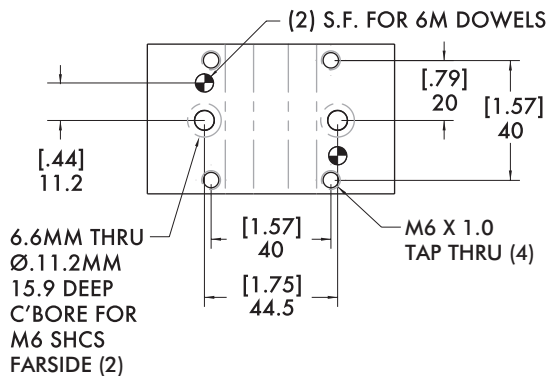
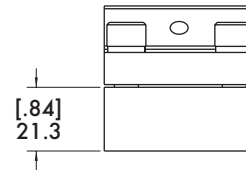
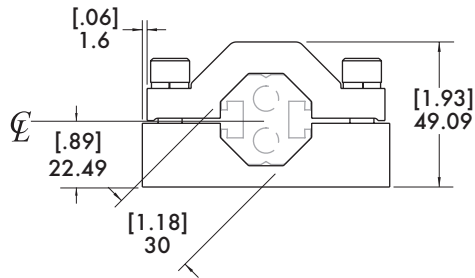
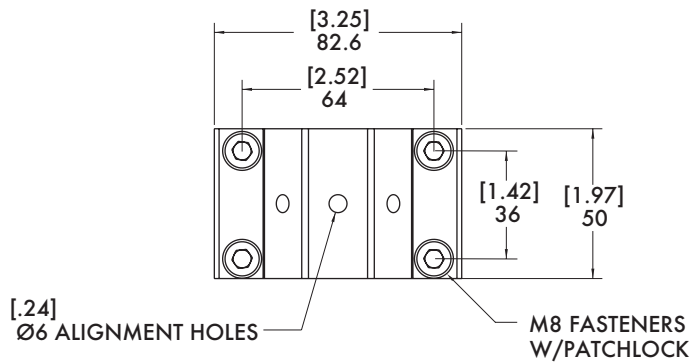
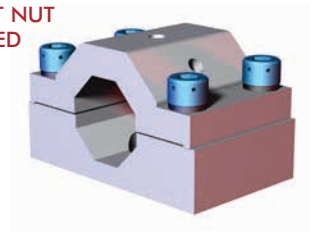
Material: Aluminum

Features:

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



ALIGNMENT NUT INCLUDED



Model Number
TPM-30

Weight
.36 kg [.80 lb]



TPM(S)-45 45mm Accessory Mounting Bracket



Features:

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

Specifications:

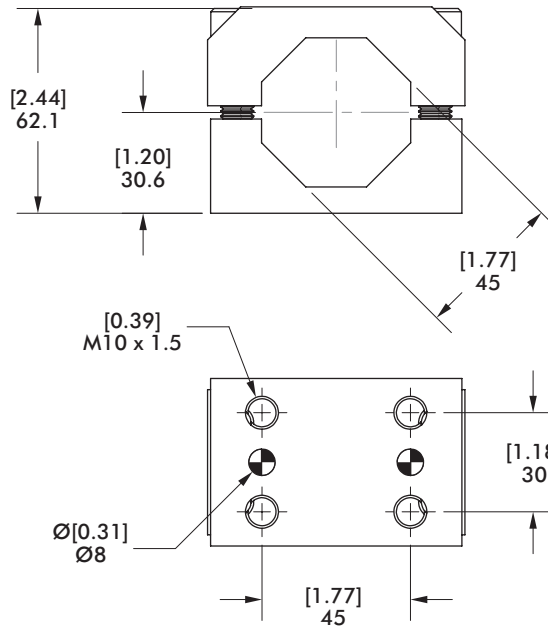
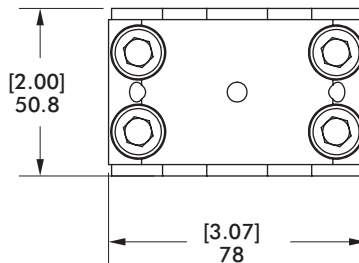
Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material:

TPMS-45: Steel

TPM-45: Aluminum

ALIGNMENT NUT INCLUDED



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

BODYBUILDER™ ACCESSORY MOUNTS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



TPMS-60 60mm Accessory Mounting Bracket.

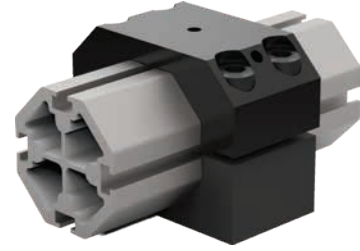
Specifications:

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

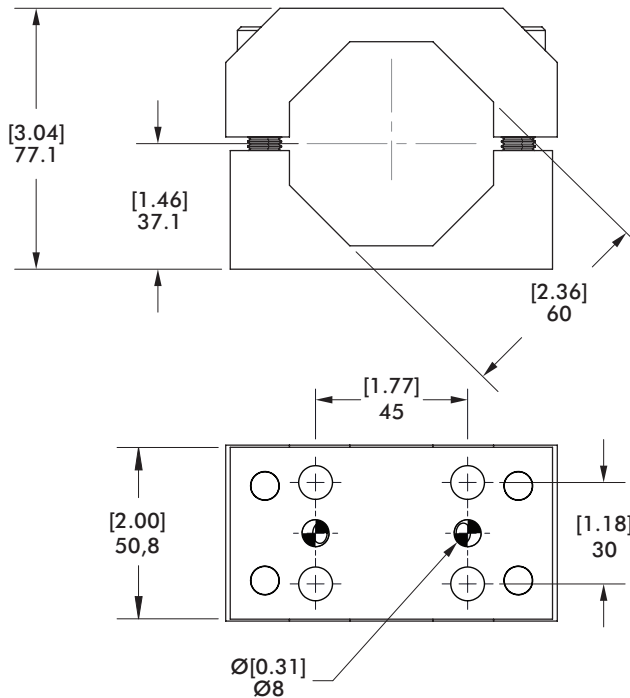
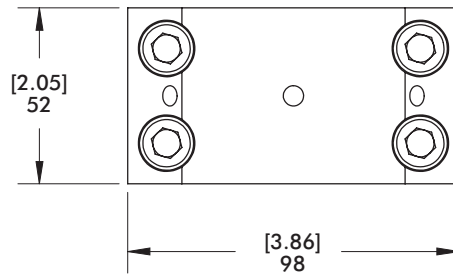
Material: Steel

Features:

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



ALIGNMENT NUT INCLUDED



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

TPMS-90 90mm Accessory Mounting Bracket

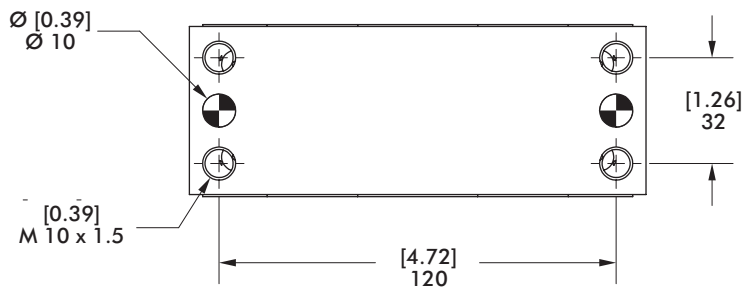
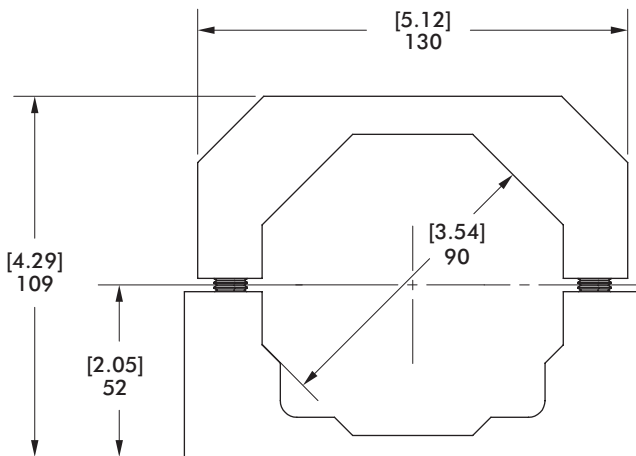
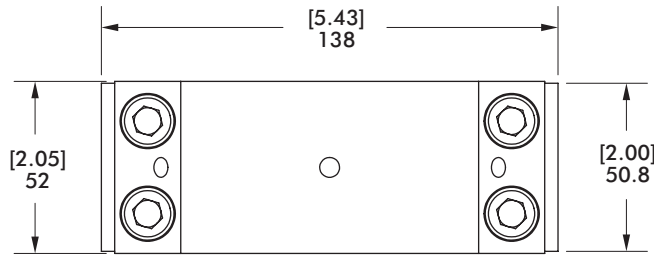


Features:

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

Specifications:

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



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

BODYBUILDER™ GRIPPER MOUNTS

BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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

Specifications:

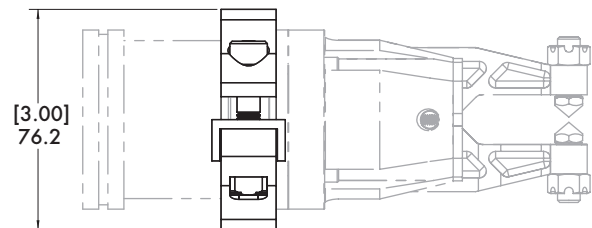
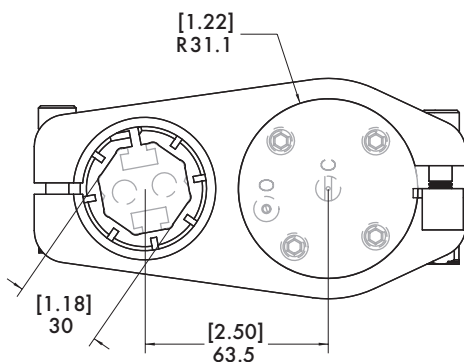
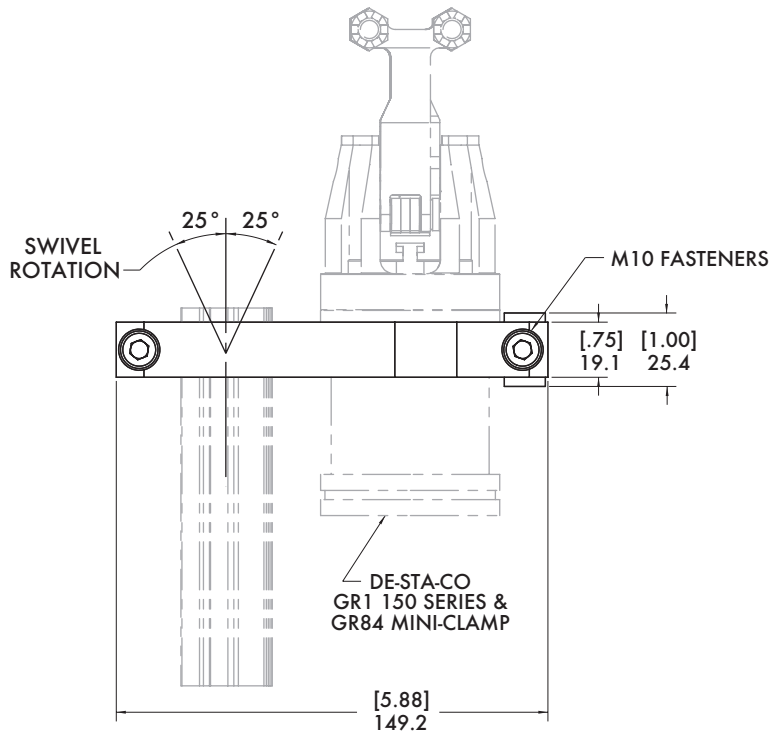
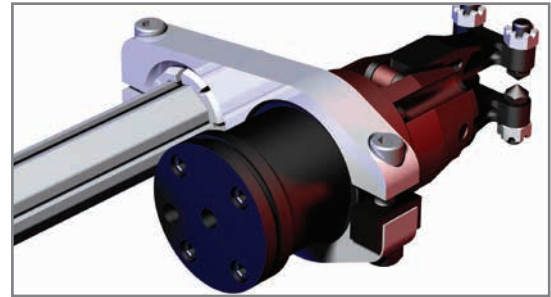
Max. Static Clamp Load:
271 Nm [200 ft-lb]

Material:

Body: Aluminum
Swivel Ball: Steel

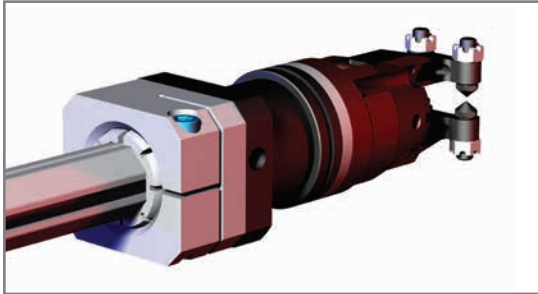
Features:

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



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

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



Features:

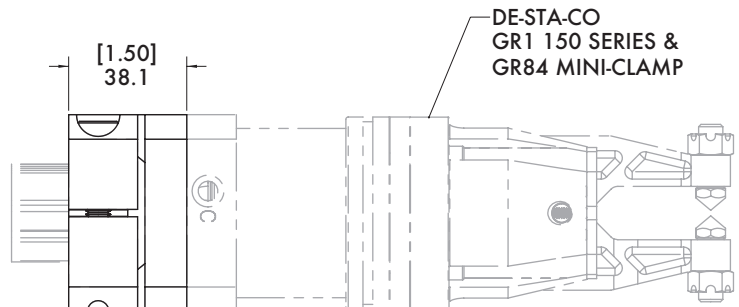
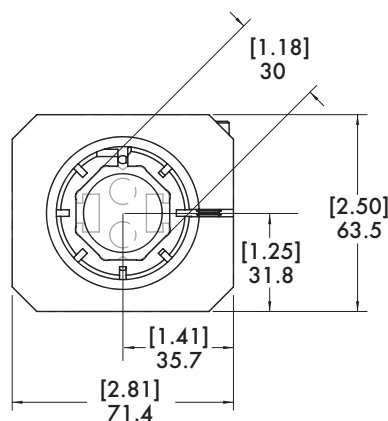
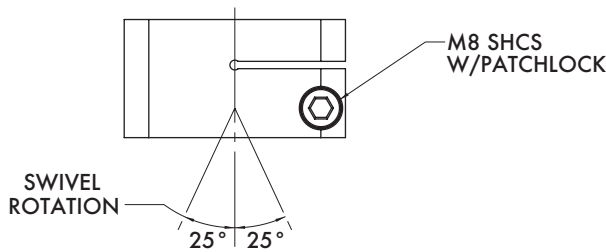
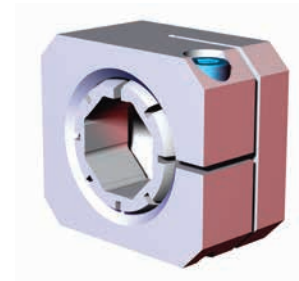
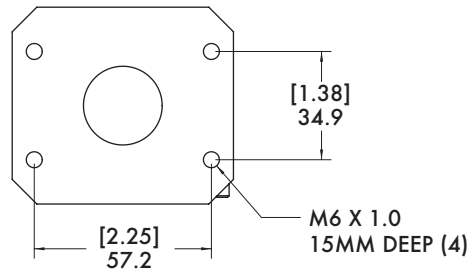
- Swivel ball allows for $\pm 25^\circ$ adjustment of swivel rotation.

Specifications:

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

Material:

Housing:
Machined Aluminum
Swivel: Steel



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

BODYBUILDER™ GRIPPER MOUNTS



BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications

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

Specifications:

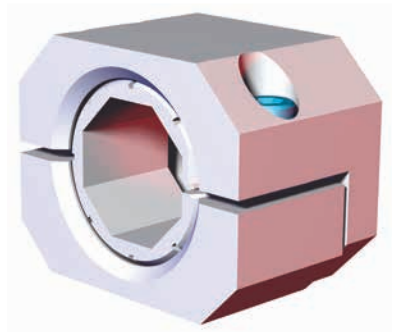
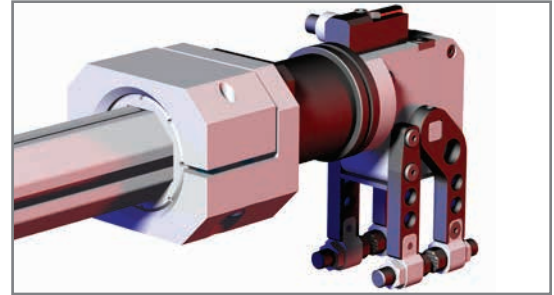
Max. Static Clamp Load:
475 Nm [350 ft-lb]

Material:

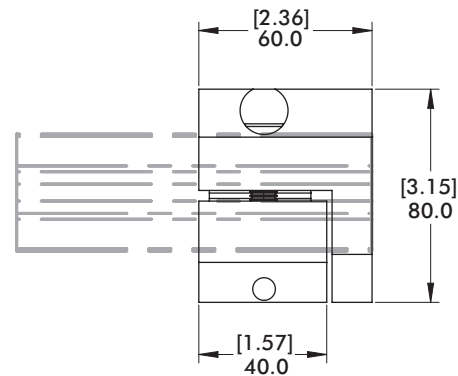
Housing:
Machined Aluminum
Swivel: Steel

Features:

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



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



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

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



Features:

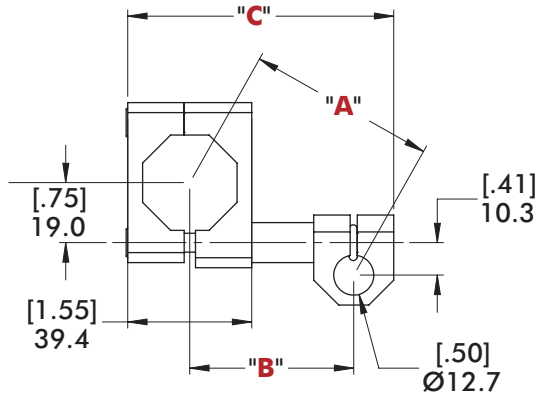
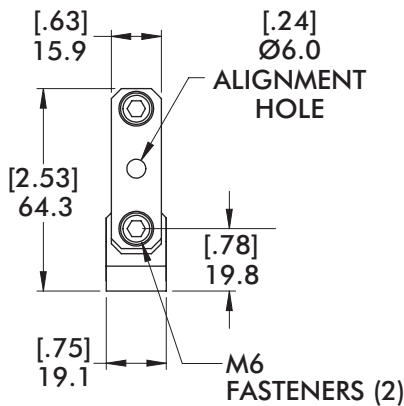
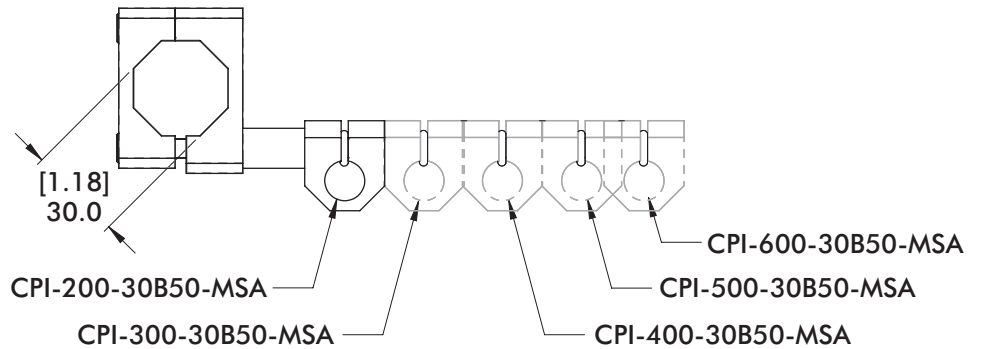
- Mounts to BodyBuilder™ 30mm extrusion boom.
- One bolt design for easy assembly and adjustment, allowing accessories to be repositioned easily.
- Provides 360° of adjustments in (3) axes.
- Used to mount venturi, bumpers, round locators, and proximity switches.

Specifications:

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

Material:

Body:
Cast Aluminum
Insert:
Machined Aluminum



CPI- L -30B50-MSA SWIVEL ARM

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

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



Features:

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

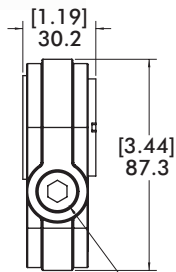
Specifications:

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

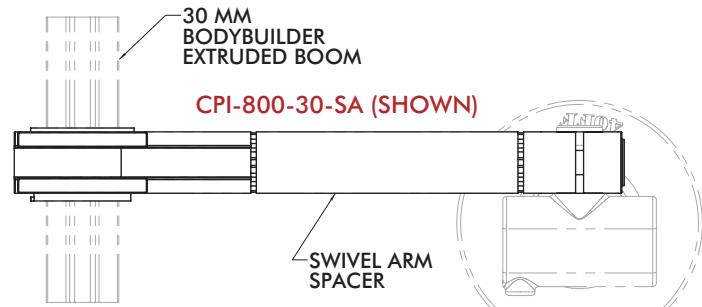
Material:
Body: Cast Aluminum
Insert: Machined Aluminum



CPI-400-30-SA SHOWN



M10 FASTENERS



CPI-800-30-SA (SHOWN)

BODYBUILDER™ INSERT

DE-STA-CO VACUUM CUPS

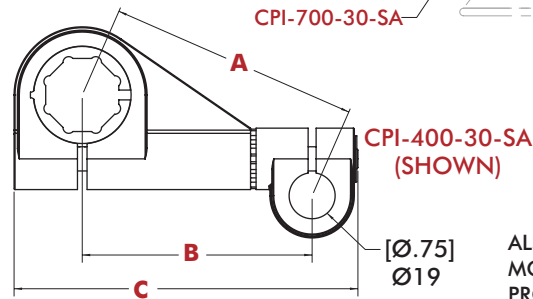
CPI-800-30-SA

SHOWN WITH 750 SERIES VENTURI

CPI-500-30-SA

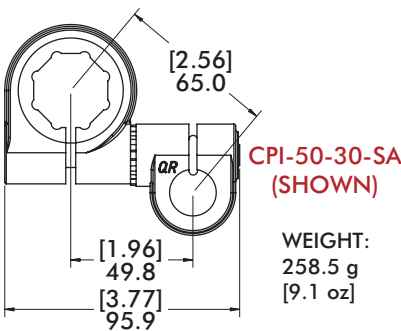
CPI-600-30-SA

CPI-700-30-SA



CPI-400-30-SA (SHOWN)

ALSO USED TO MOUNT SAP AND PSM SERIES PROXIMITY MOUNTS.



CPI-50-30-SA (SHOWN)

WEIGHT:
258.5 g
[9.1 oz]

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

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

BODYBUILDER™ SWIVEL ARMS

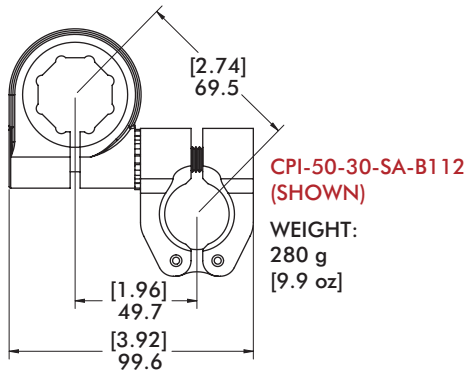
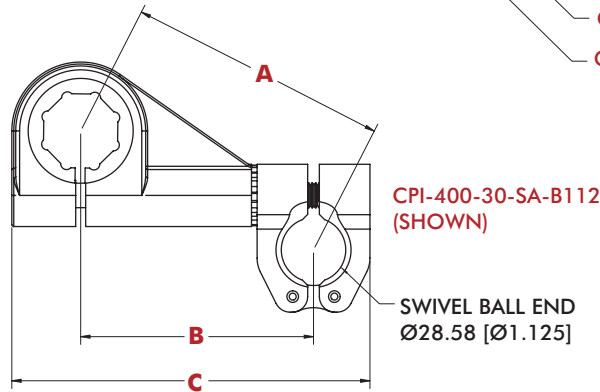
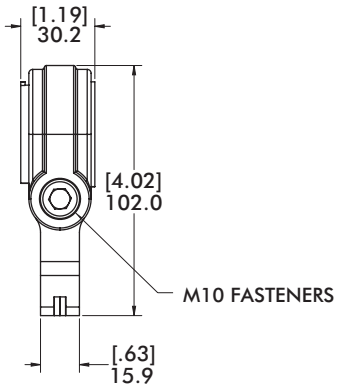
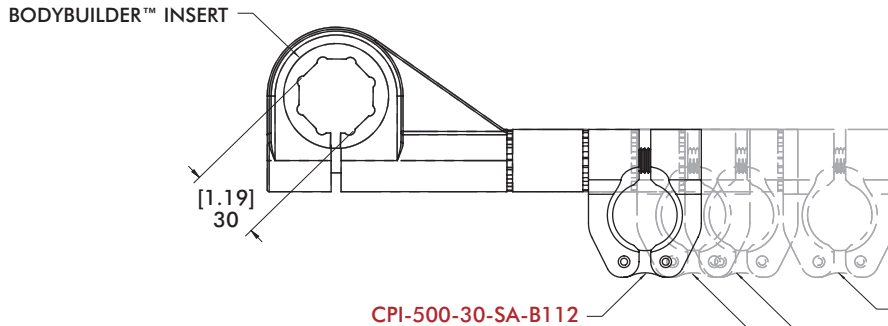
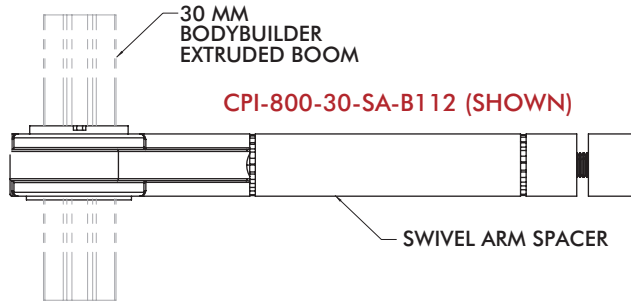
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



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



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



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

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



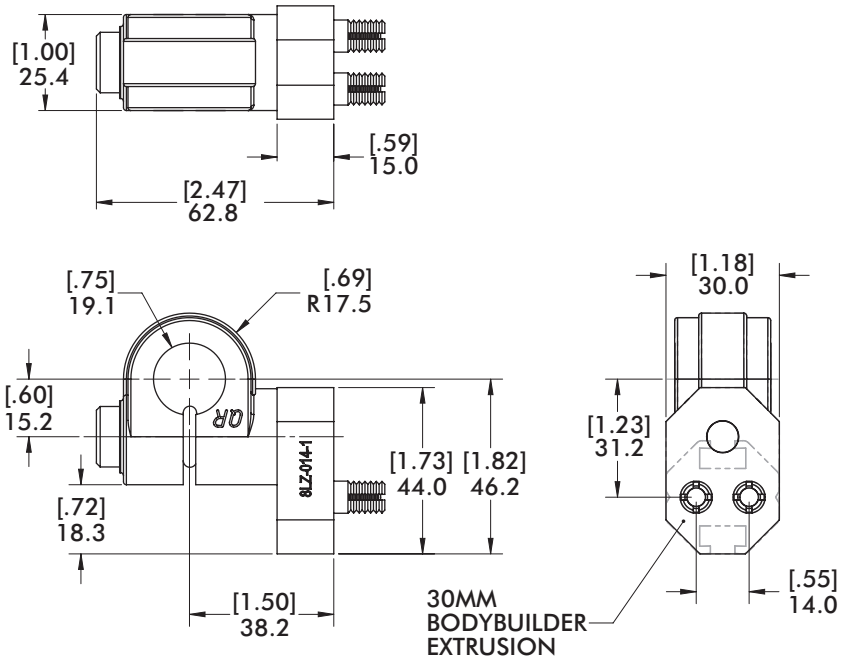
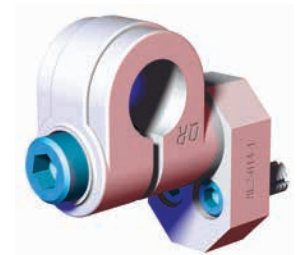
Features:

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

Specifications:

Material:
Aluminum

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



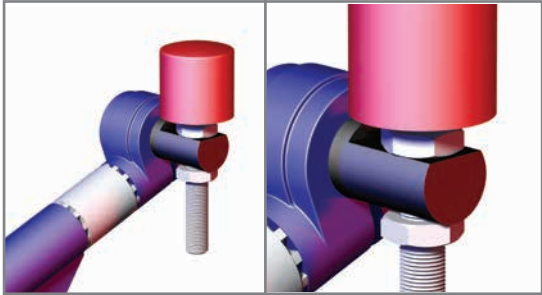
Model Number	Weight
CPI-BC-19	.13 kg [.28 lb]

BODYBUILDER™ SWIVEL ARM ACCESSORIES

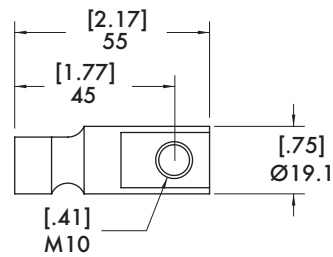
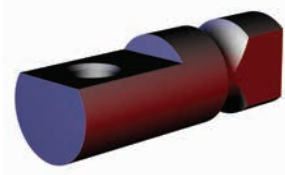
BodyBuilder™ Octagonal Tooling | Dimensions | Technical Specifications



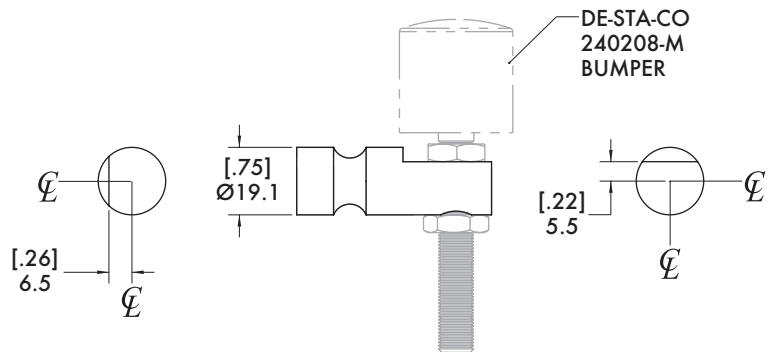
SAP-BM10 Ø19mm [.75 in] Apple Core Nest Bumper Mount

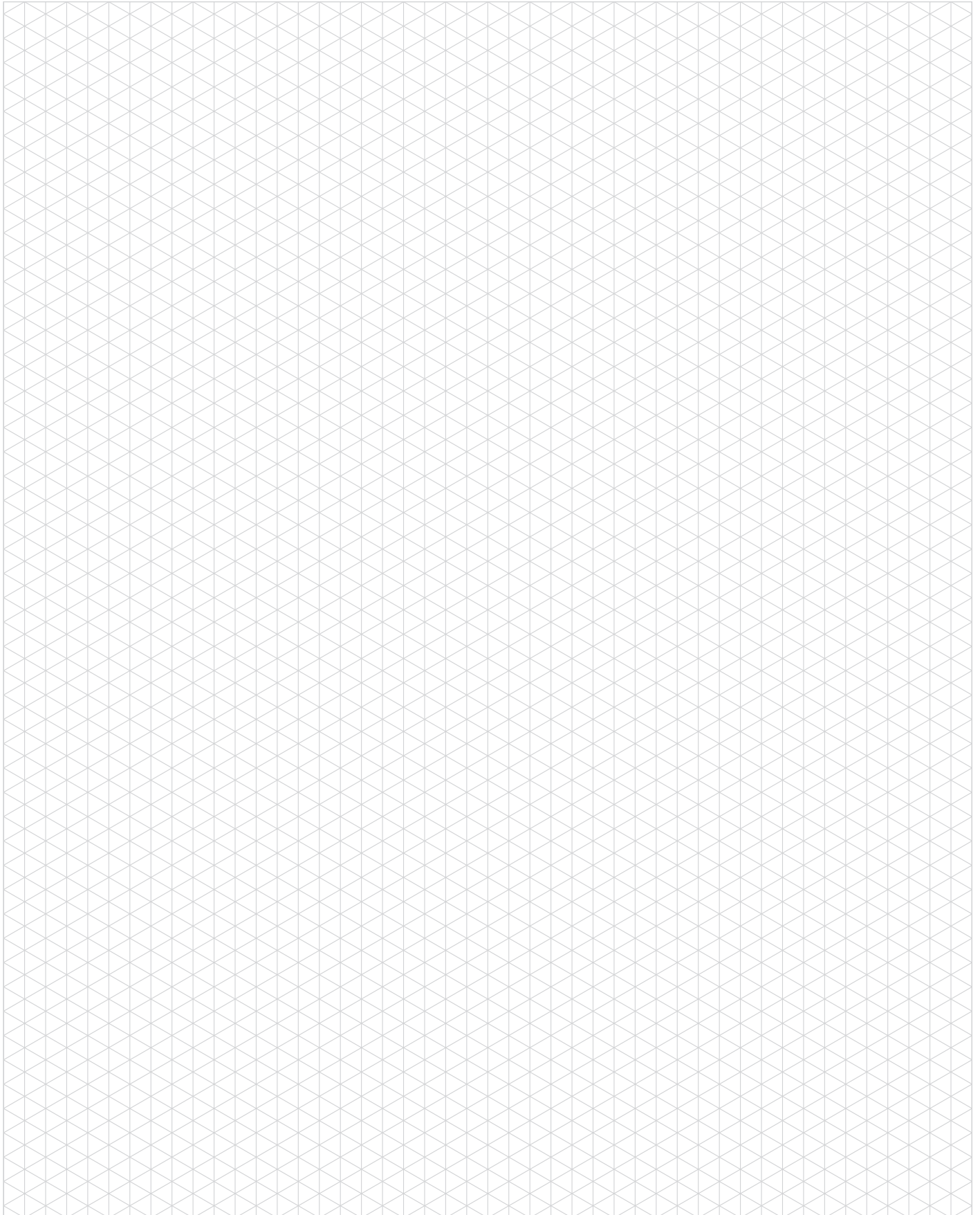


Specifications:
Max. Static Clamp Load:
 271 Nm [200 ft-lb]
Material:
 Steel



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

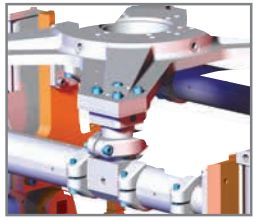




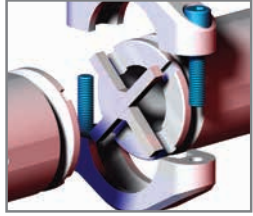
SPIDERGRIP END EFFECTOR TOOLING SYSTEMS



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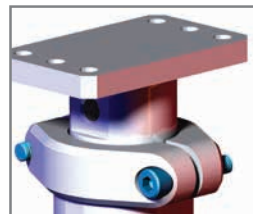
SpiderGrip Booms and Spacers..... 17



SpiderGrip Junction Components.....21



SpiderGrip Single End Extension Mount26

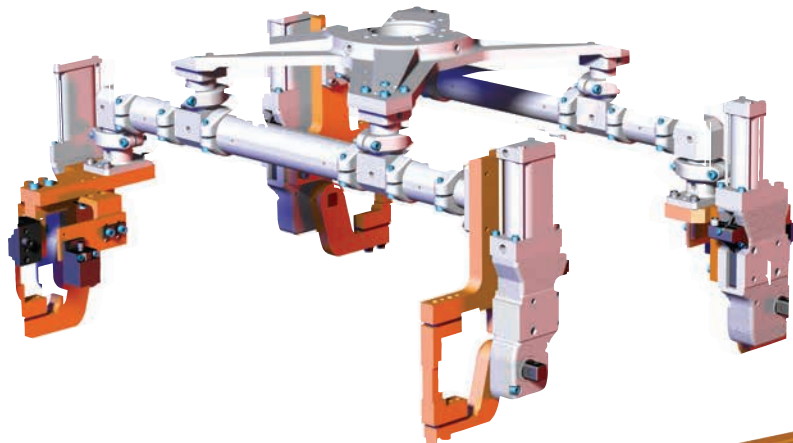


SpiderGrip Edge Mounting Components27



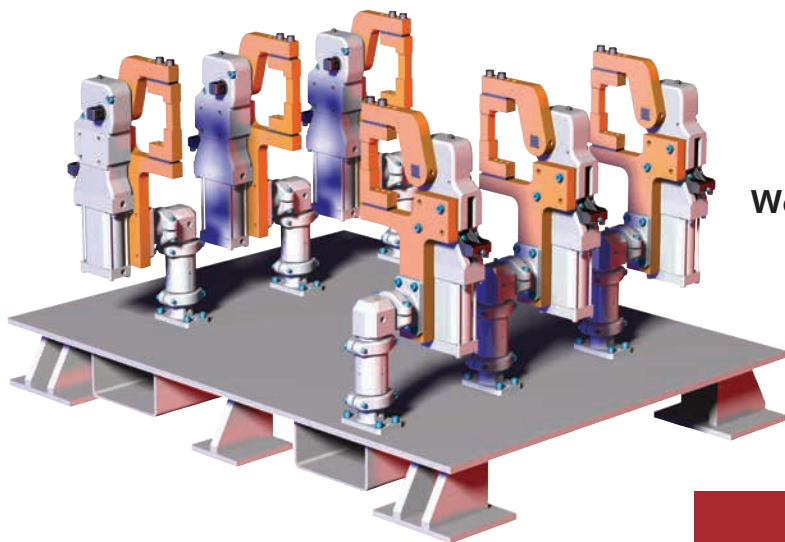
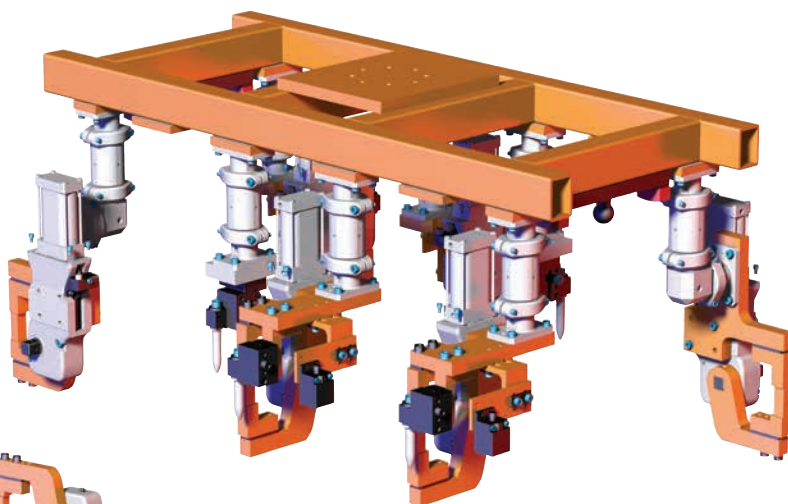
SPIDERGRIP GEOMETRIC END EFFECTOR SYSTEM

Spidergrip Tooling Components | Typical Application Build Examples

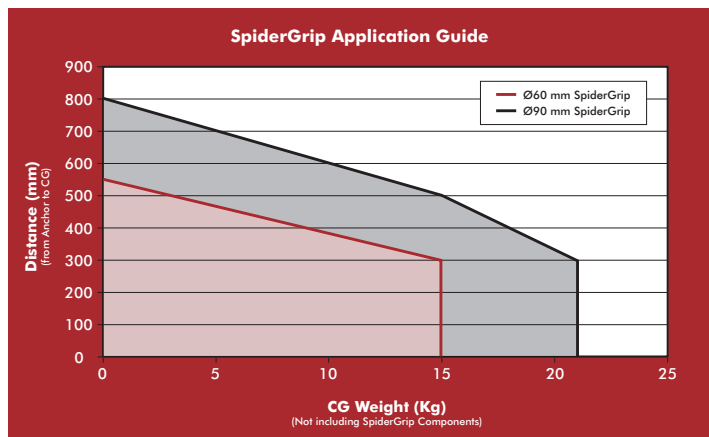


Materials Handling End Effector Tooling System with RM4 Heavy Duty Mid-Mount Assembly (RM4-ST5).

Geometric End Effector Tooling System with Steel Frame Backbone.



Weld Fixture Tooling System



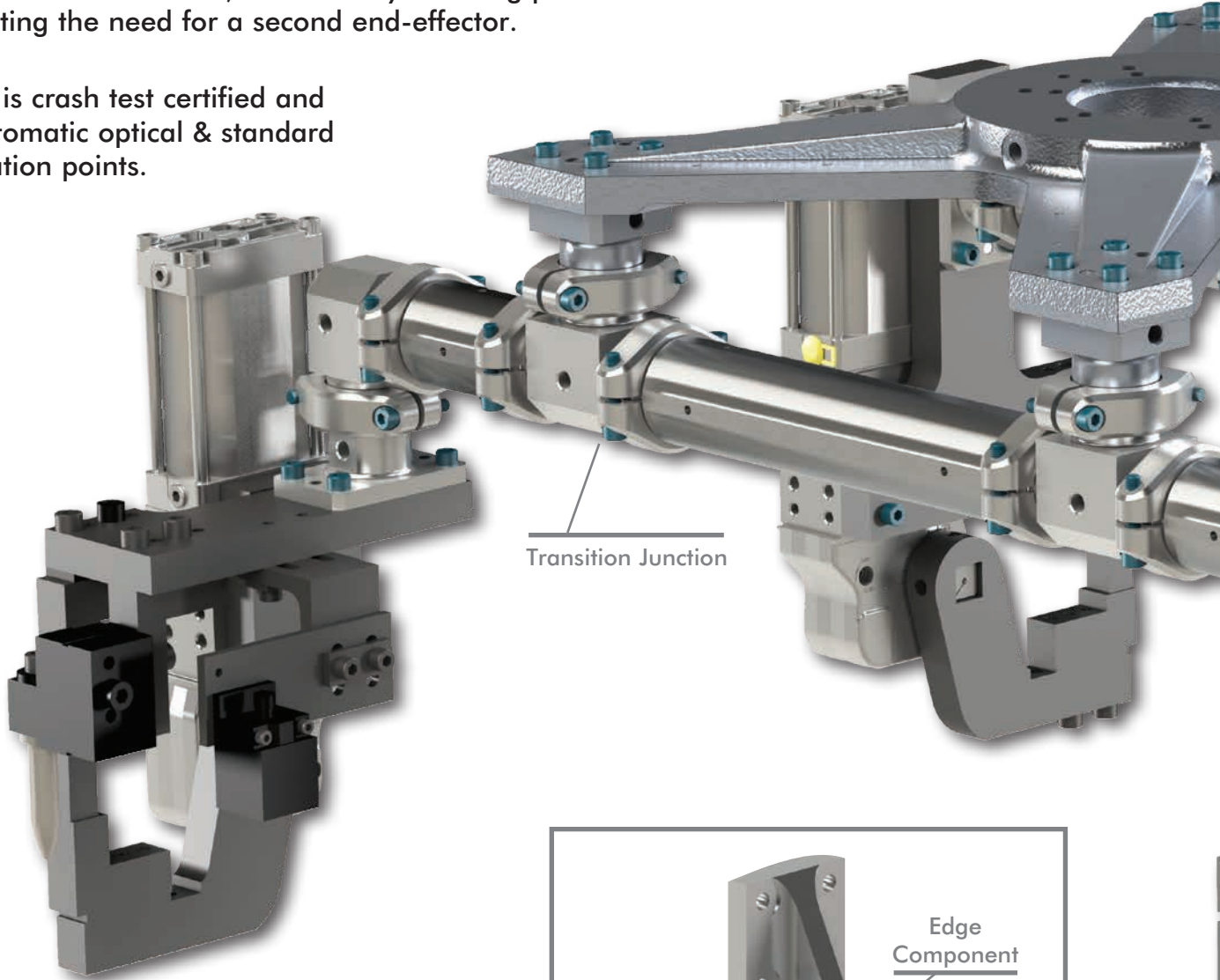
SPIDERGRIP GEOMETRIC END EFFECTOR SYSTEM

Product Overview

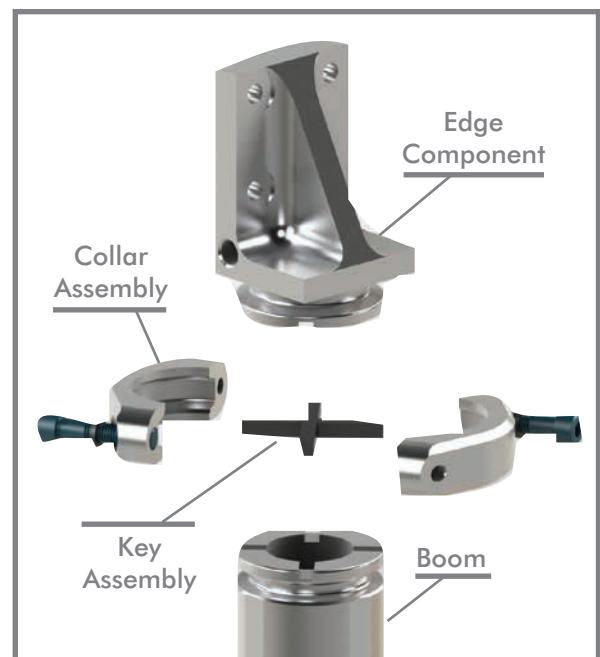


SpiderGrip Geometric End Effector Tooling System offers a standard cost effective solution by making it easy for each component to be replaced individually in the robotic cell, dramatically reducing production downtime and eliminating the need for a second end-effector.

This system is crash test certified and features automatic optical & standard CMM validation points.



Spidergrip modular components are easily configurable and offer high strength to weight ratios while maintaining dimensional accuracy after continuous minor collisions. The patented collar/key design and engineered breakaway base anchor provides quick crash recovery.



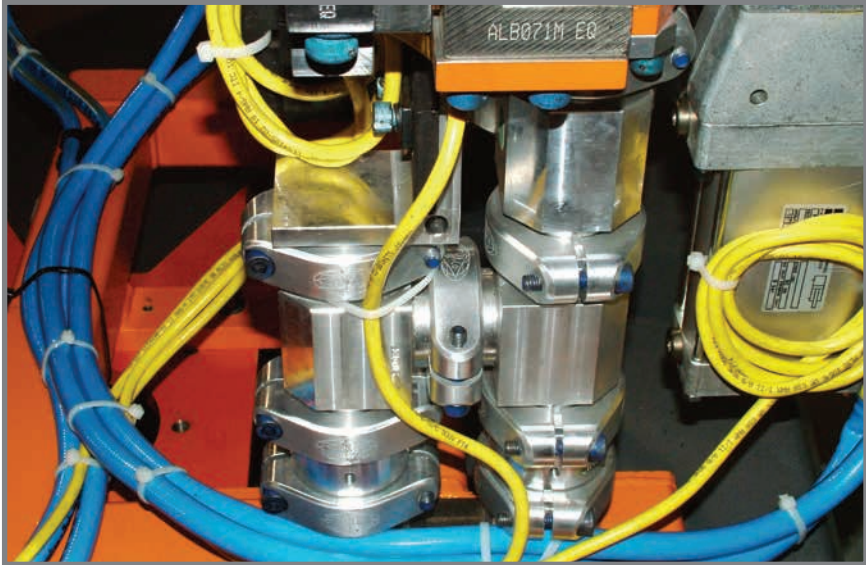
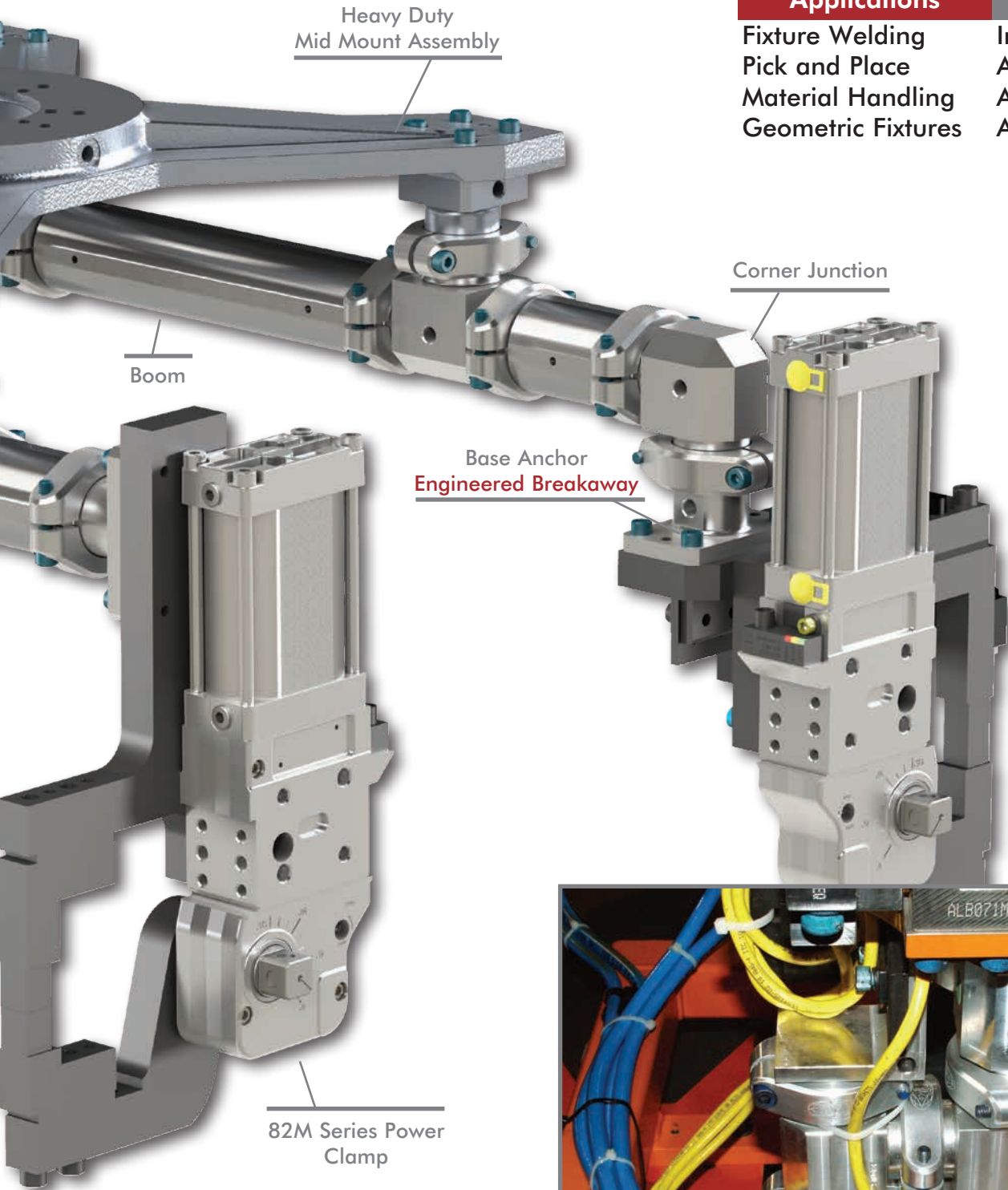
SPIDERGRIP GEOMETRIC END EFFECTOR SYSTEM

Product Overview



Most commonly used in:

Applications	Markets
Fixture Welding	Industrial
Pick and Place	Automotive
Material Handling	Aerospace
Geometric Fixtures	Appliance

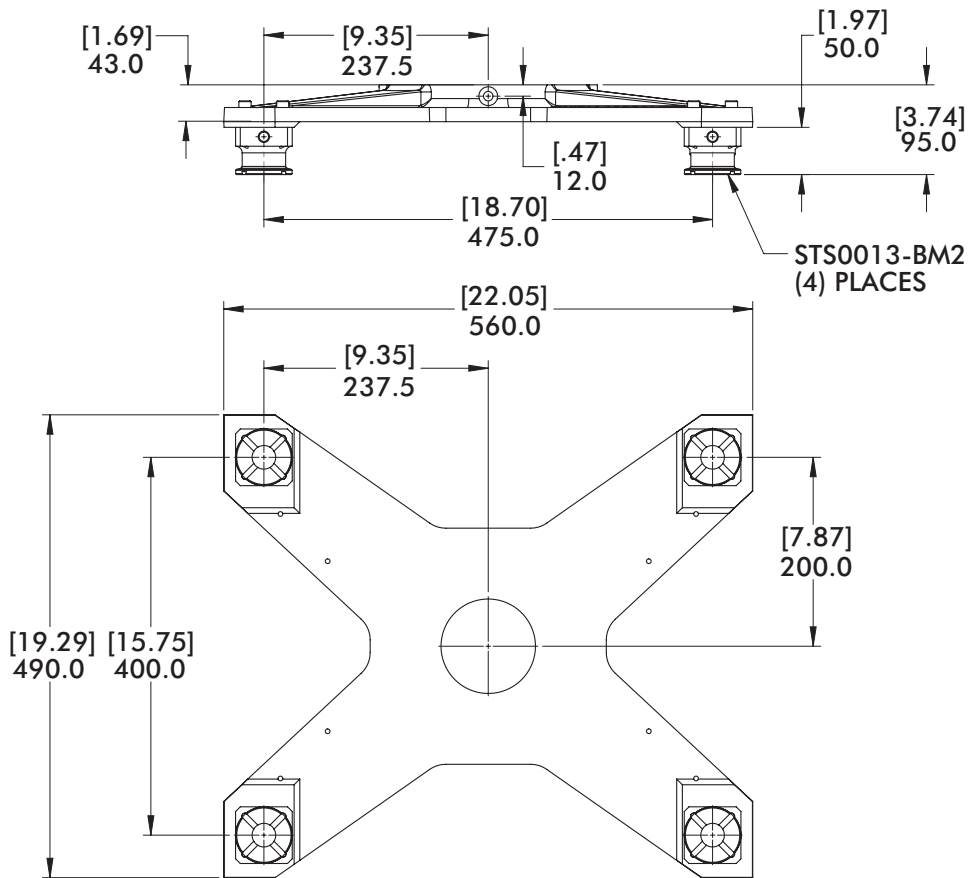
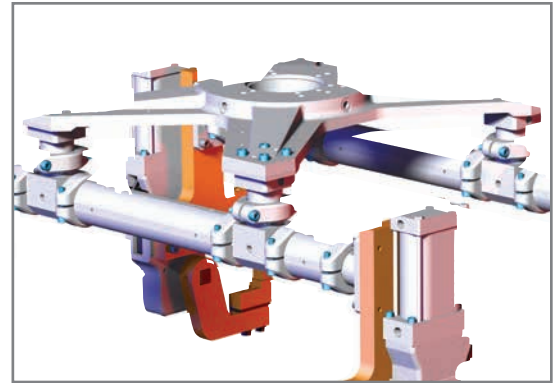


SPIDERGRIP MID MOUNT ASSEMBLY



Spidergrip Tooling Components | Dimensions | How To Order

Heavy-Duty Mid Mount Assembly



Base Model	Robot Interface Pattern	Accessory Mount Plate
RM4-ST5	RXX	(A)
	Skip if NONE. (See Pages 17-19)	(e.g. EPM-01) Skip if NONE. See page 6.

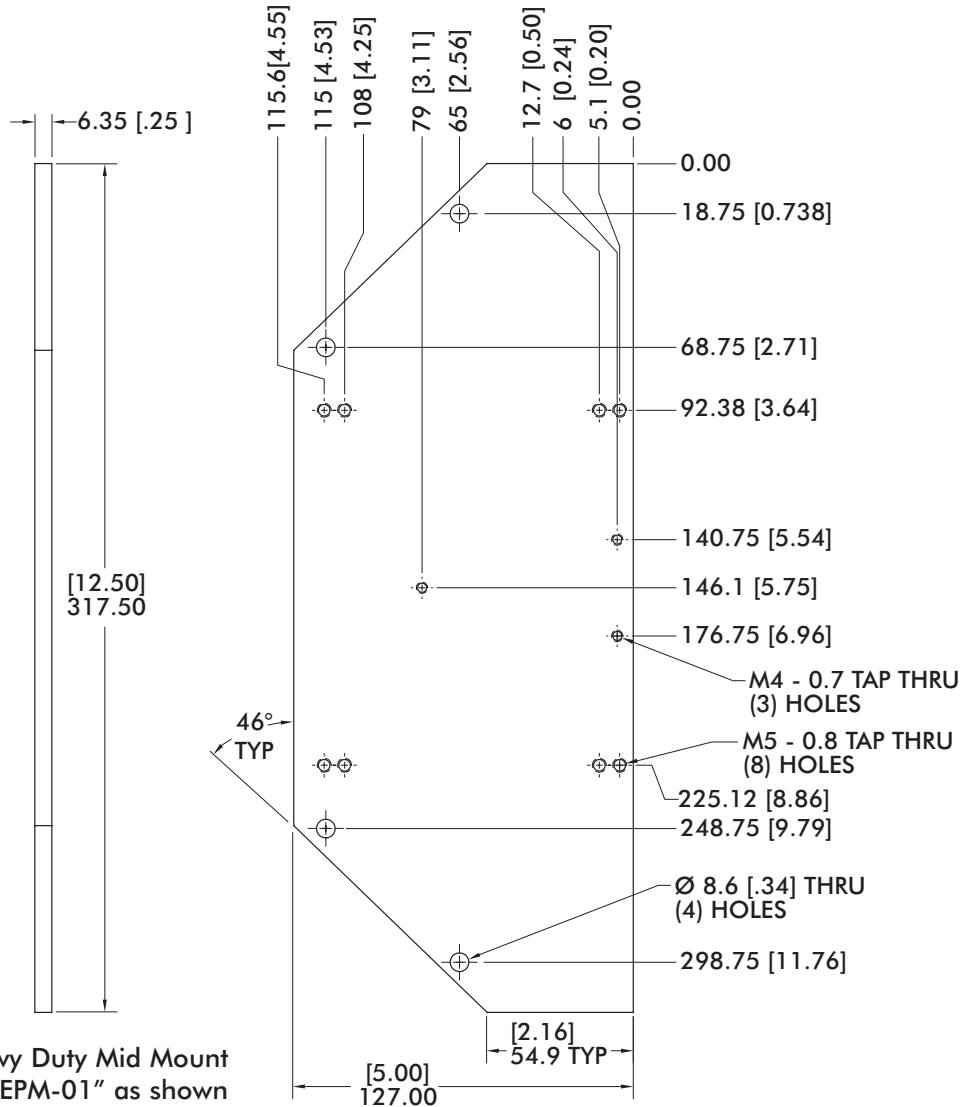
Weight
10.4 kg [22.89 lb]



SPIDERGRIP MID MOUNT ACCESSORY PLATE

Spidergrip Tooling Components | Dimensions | How To Order

Accessory Mount Plate



When ordering with Heavy Duty Mid Mount
Please add designation "EPM-01" as shown
RM4-ST5-RXX-EPM-01 or
add designation "EPM-BLK" to order blank
RM4-ST5-RXX-EPM-BLK
To order separately use Model Number

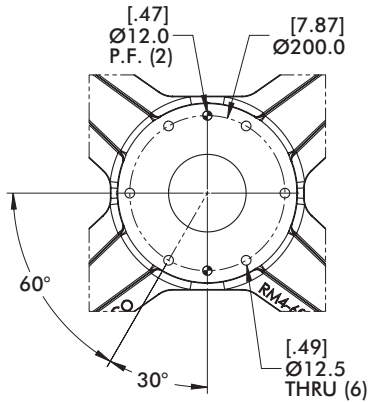
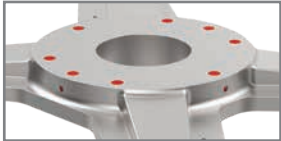
(A)	Pattern	For Model RM4-ST5	Weight
EPM-01	Standard	CPI-BM2-EPM-01	.63 kg [1.39 lb]
EPM-BLK	Blank	CPI-BM2-EPM-BLK	

MID MOUNT BOLT PATTERN

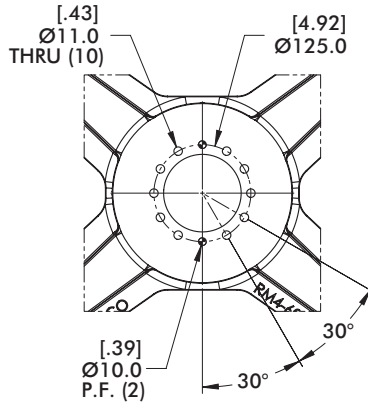
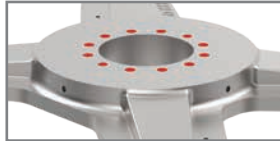
Robot Interface Bolt Patterns



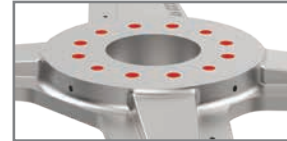
R01 (Ø200mm Bolt Circle)



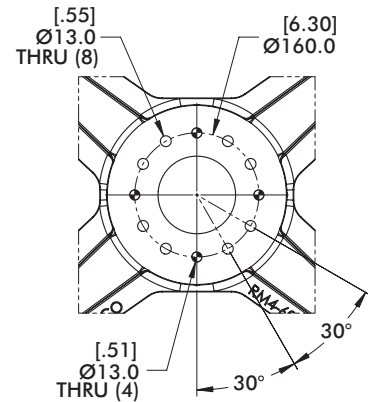
R02 (Ø125mm Bolt Circle)



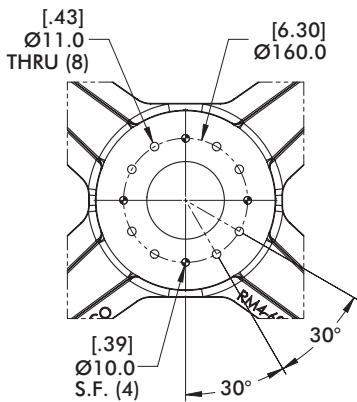
R03 (Ø160mm Bolt Circle)



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



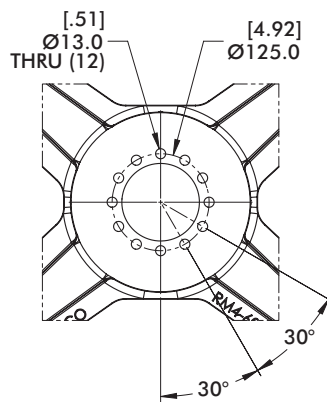
R04 (Ø160mm Bolt Circle)



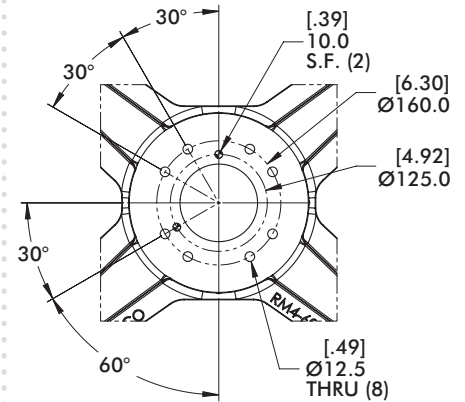
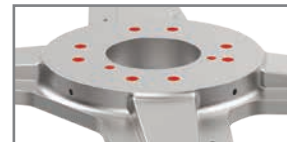
R05 (Ø125mm Bolt Circle)



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



R06 (Ø125/160mm Bolt Circle)



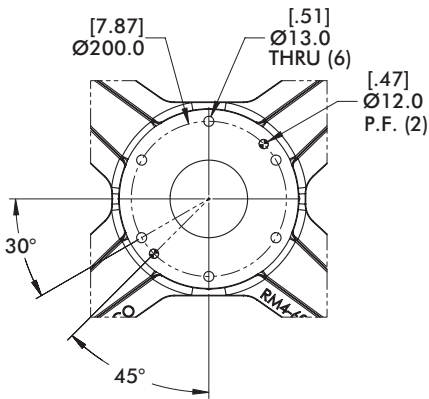
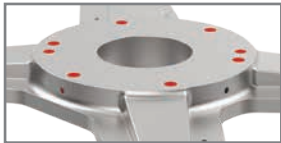


MID MOUNT BOLT PATTERN

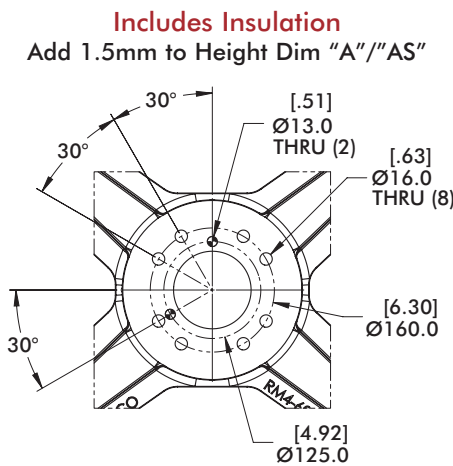
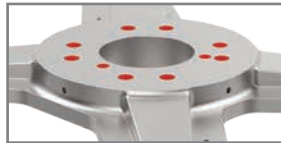
Robot Interface Bolt Patterns



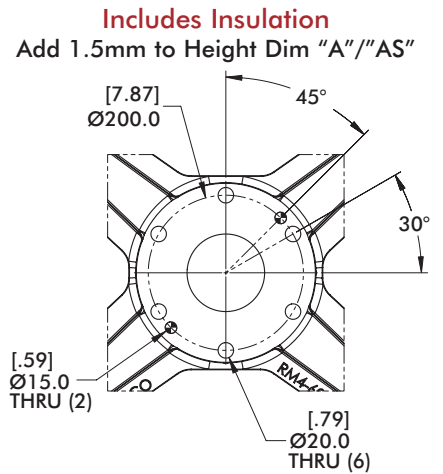
R07 (Ø200mm Bolt Circle)



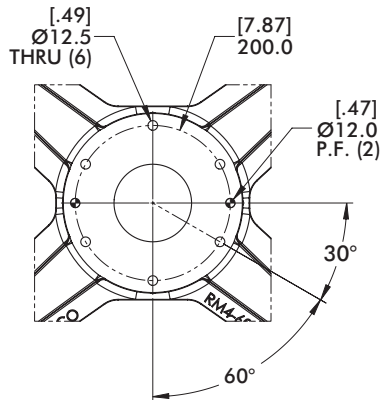
R08 (Ø125/160mm Bolt Circle)



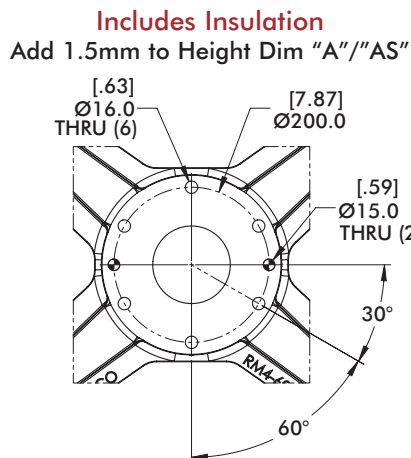
R09 (Ø200mm Bolt Circle)



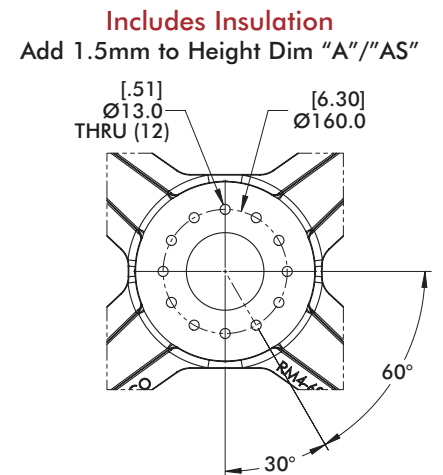
R10 (Ø200mm Bolt Circle)



R11 (Ø200mm Bolt Circle)



R12 (Ø160mm Bolt Circle)

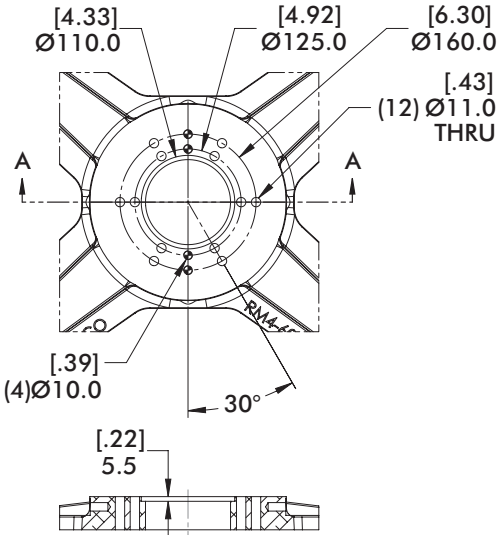


MID MOUNT BOLT PATTERN

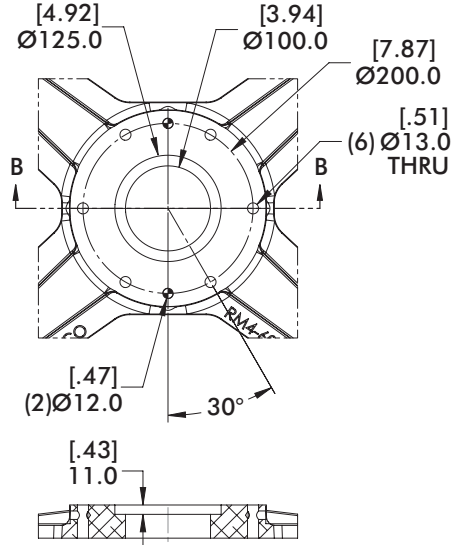
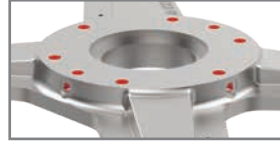


Spidergrip Tooling Components | Robot Interface Bolt Patterns

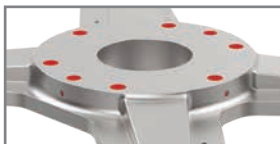
**R13 (Ø125/160mm Bolt Circle)
(Ø110mm Pilot, 5.5mm Deep)**



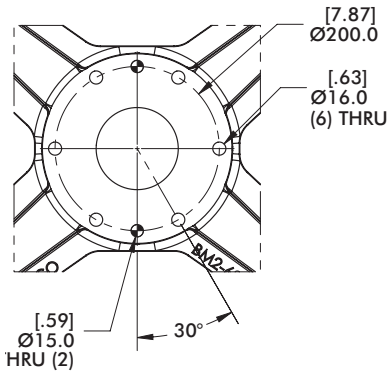
**R14 (Ø200mm Bolt Circle)
(Ø125mm Pilot, 11mm Deep)**



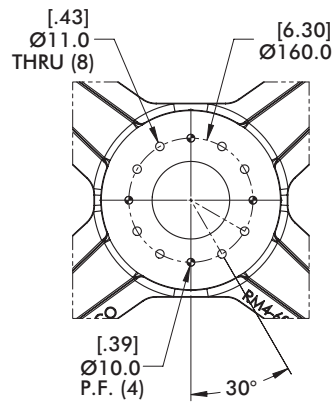
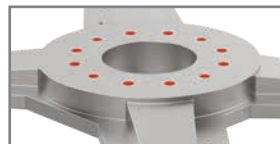
R16 (Ø200mm Bolt Circle)



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



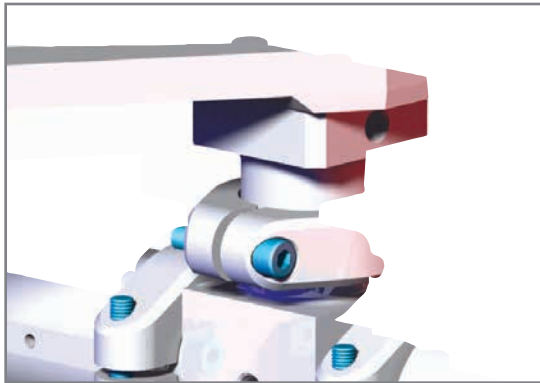
R17 (Ø160mm Bolt Circle)



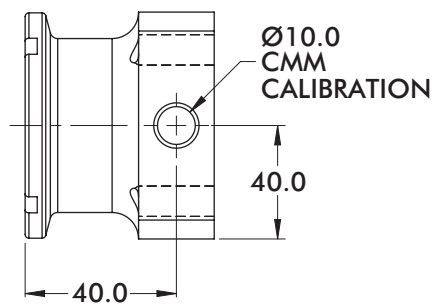
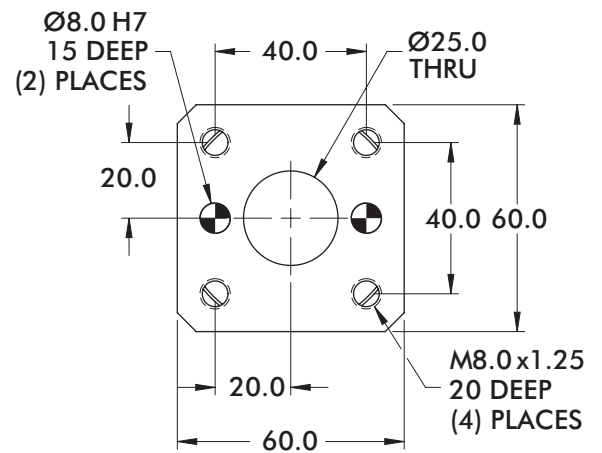
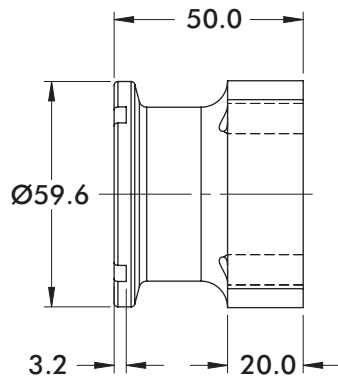
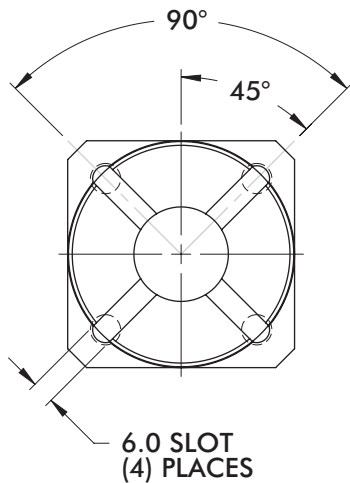


SPIDERGRIP MID MOUNT ANCHOR

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm Mid Mount Anchor
40mm x 40mm Mounting Pattern - 50mm Face Offset



Model Number

Weight

STS0013-BM2

.25 kg [.55 lb]

SPIDERGRIP MID MOUNT ANCHOR



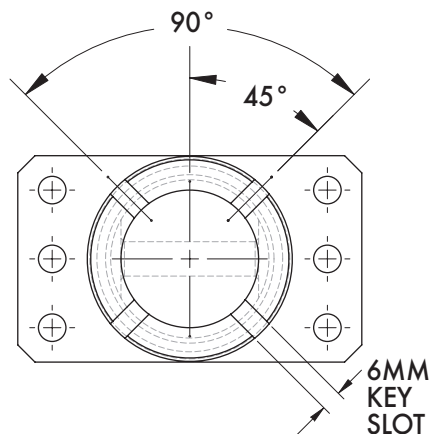
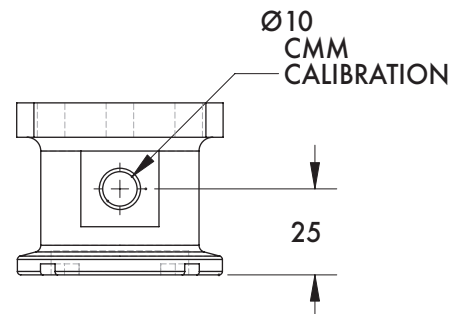
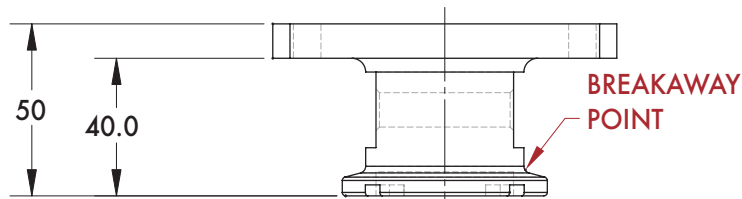
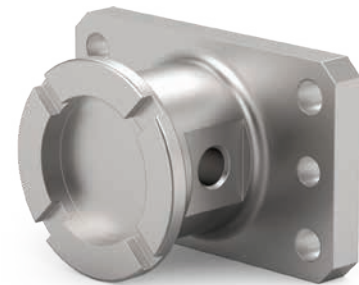
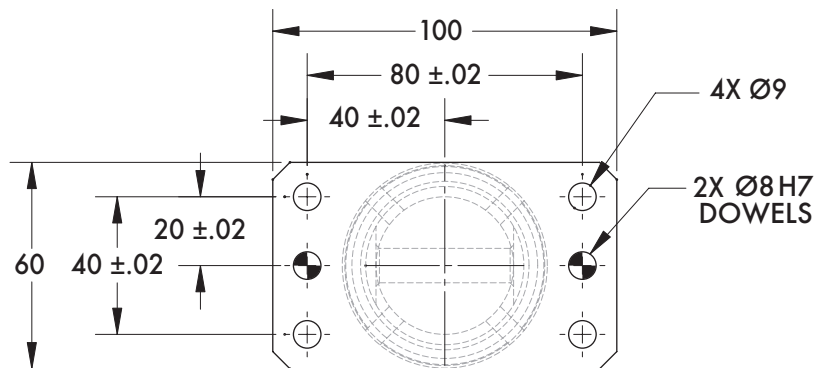
Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm Base Anchor with 50mm Face Offset
80mm x 40mm Mounting Pattern



US PATENT# 7,331,104
ALL OTHER PATENTS PENDING

Engineered Breakaway Part



This Product is designed to breakaway at 1627 N*m [1200 ft-lb]

Model Number	Weight
STS0016-NA-2P	.31 kg [.68 lb]

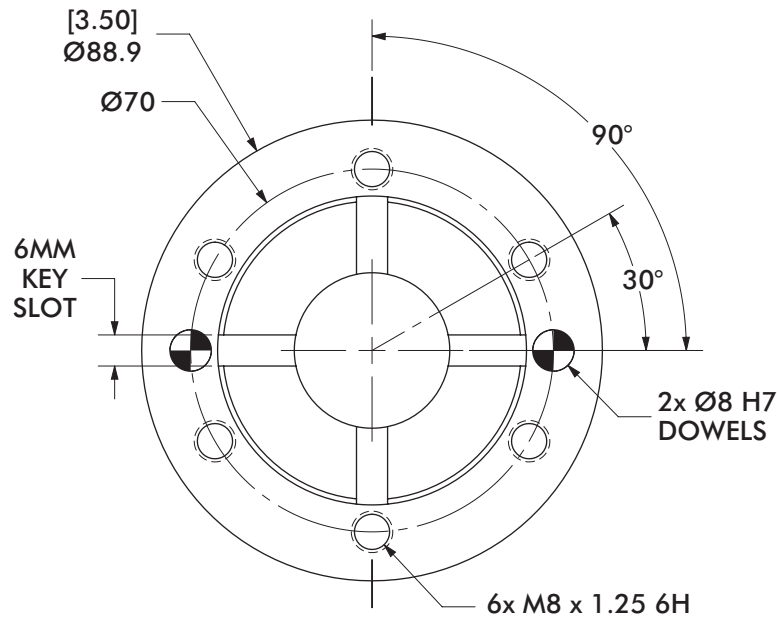
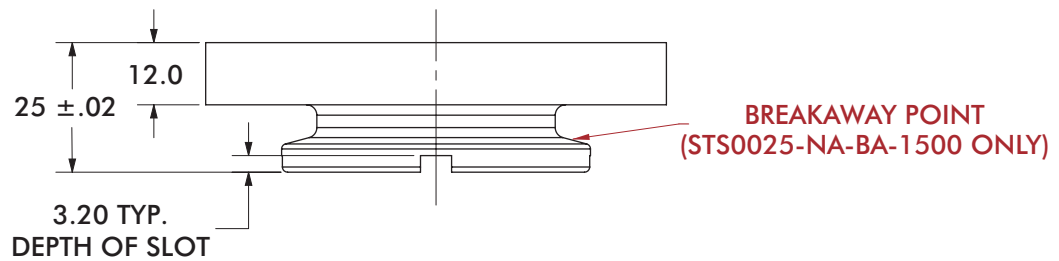


SPIDERGRIP MID MOUNT ANCHOR

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm Base Anchor with 25mm Face Offset
(6) Hole Ø70mm Mount Pattern



Model Number	Weight
STS0025-NA	252g [0.6 lb]
STS0025-NA-BA-1500*	242g [0.5 lb]

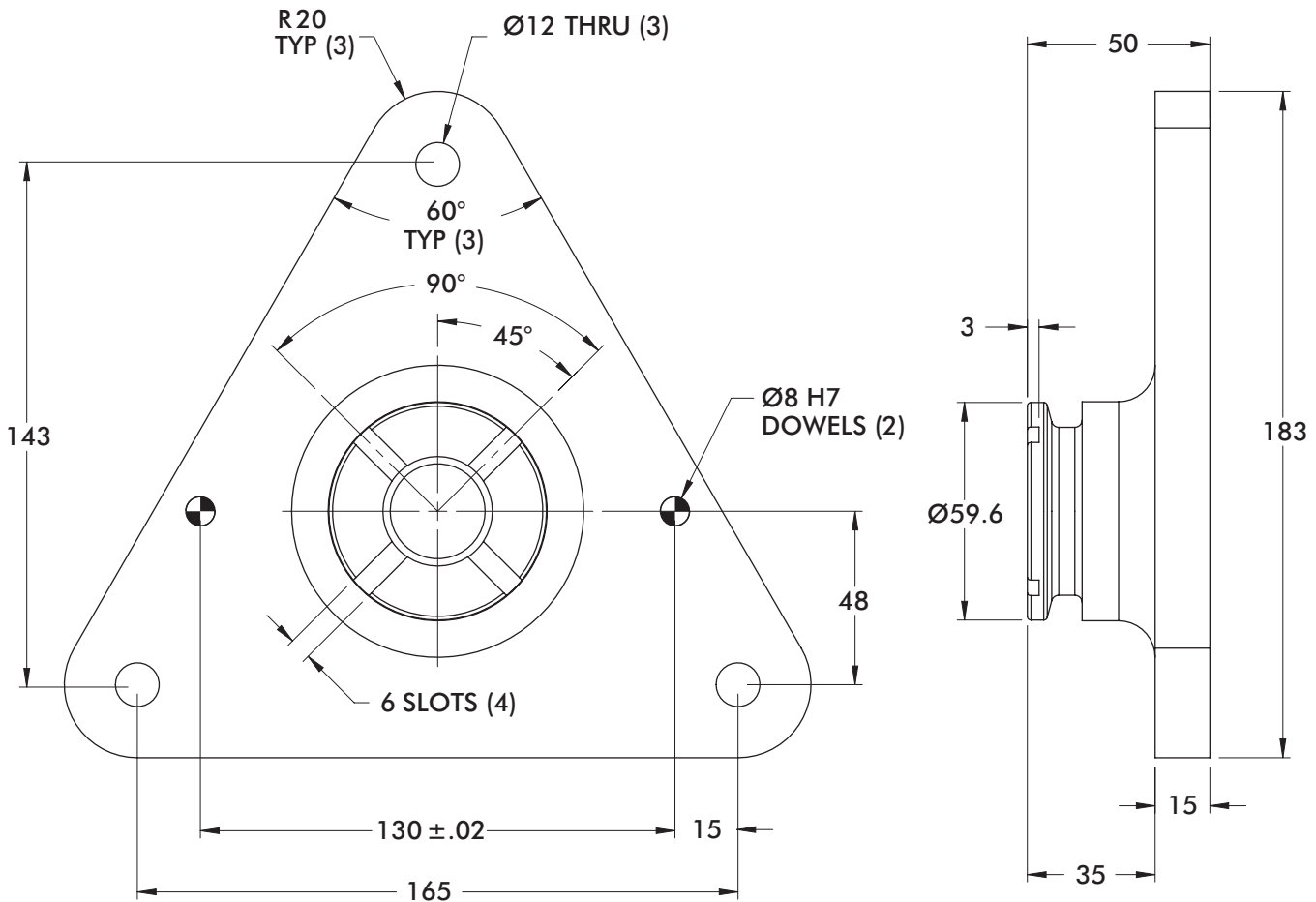
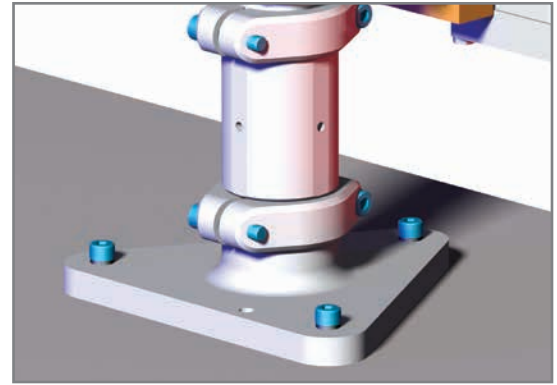
*This Product is designed to breakaway at 1500 N*m [1106 ft-lb]

SPIDERGRIP MID MOUNT ANCHOR



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm HD Anchor Mount
(3) Hole Ø190mm Mount Pattern

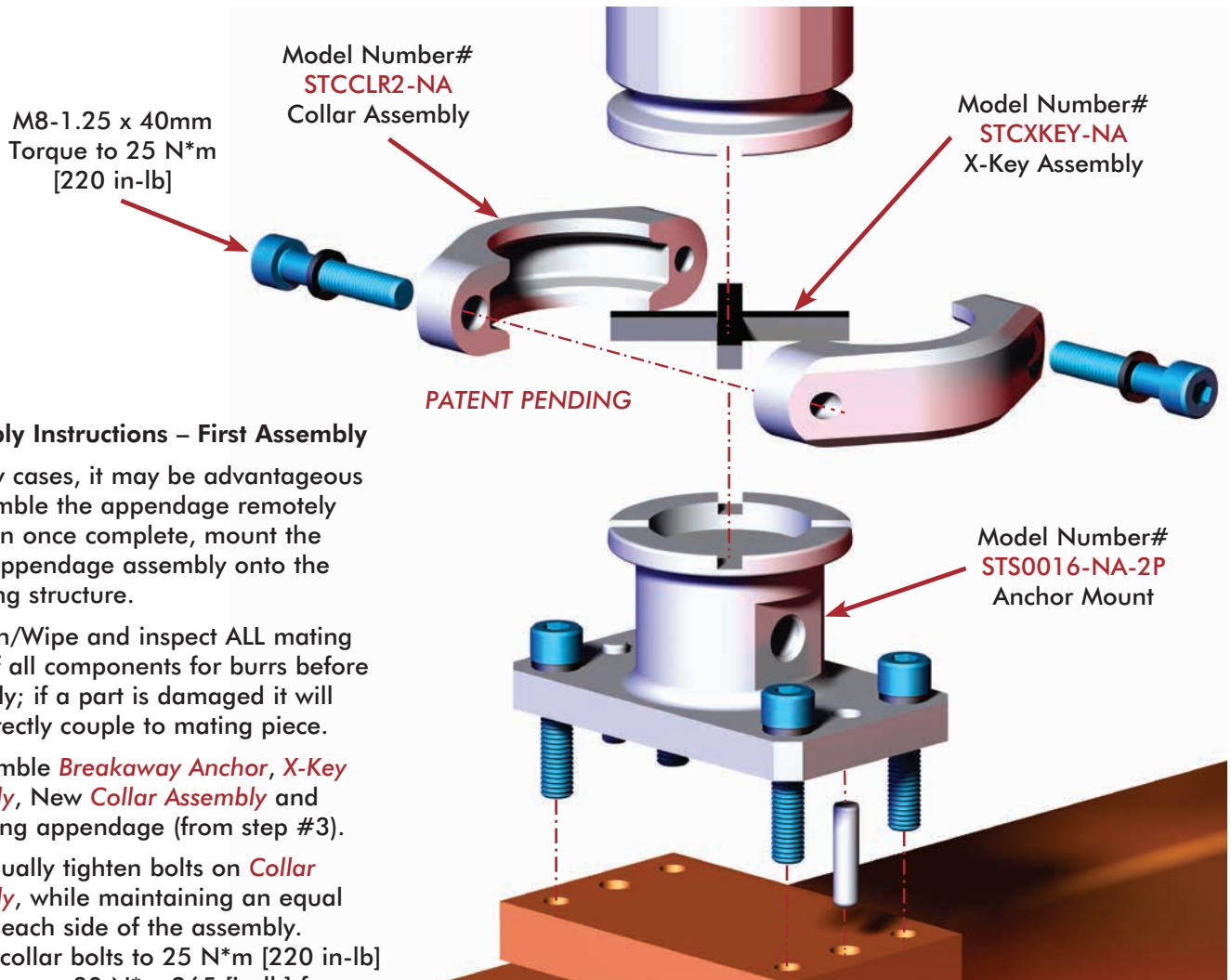


Model Number	Weight
STP0001-NA	1.09 kg [2.40 lb]



SPIDERGRIP END EFFECTOR TOOLING SYSTEMS

Spidergrip Tooling Components | Assembly Instructions



Assembly Instructions – First Assembly

In many cases, it may be advantageous to assemble the appendage remotely and then once complete, mount the entire appendage assembly onto the mounting structure.

1. Clean/Wipe and inspect ALL mating faces of all components for burrs before assembly; if a part is damaged it will not correctly couple to mating piece.
2. Assemble *Breakaway Anchor*, *X-Key Assembly*, New *Collar Assembly* and remaining appendage (from step #3).
3. Gradually tighten bolts on *Collar Assembly*, while maintaining an equal gap on each side of the assembly. Torque collar bolts to 25 N*m [220 in-lb] for 60mm, or 30 N*m 265 [in-lb] for 90mm. Do not re-torque once desired torque is reached.
4. Mount appendage as assembled to steel backbone and insert new 8mm dowels into the dowel holes on the *Breakaway Anchor*.
5. Insert new M8-1.25 patchlock bolts into *Breakaway Anchor*, torque in a cross pattern following NAAMS recommended torque.
6. Attach steel tether (*STS-TETHER-08* or *STS-TETHER-16*) to appendage via one of the bolts located on the base of the *Breakaway Anchor*. The other loop will be attached to the first threaded M6 hole (located on the boom) or the M8 hole located on the edge part. The tether may also be wrapped around the appendage to reduce cable slack.



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

SPIDERGRIP COLLAR ASSEMBLY



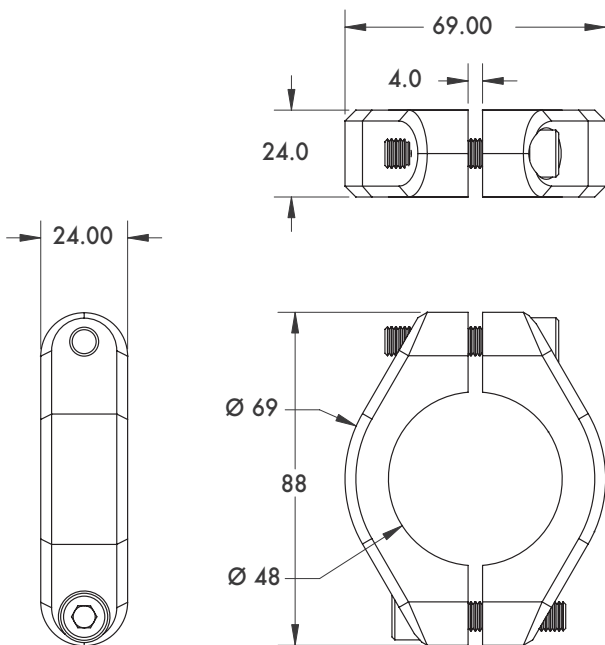
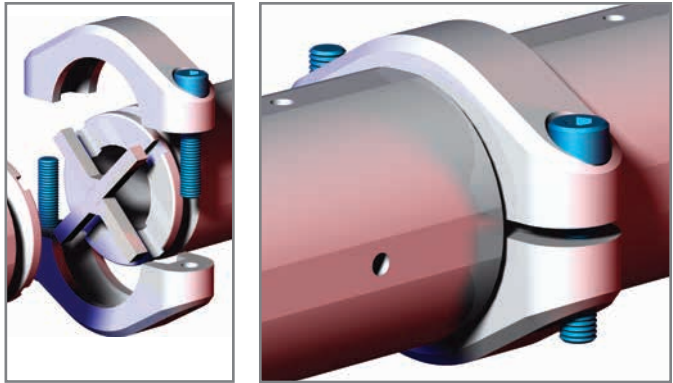
Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm Collar Components and Assembly

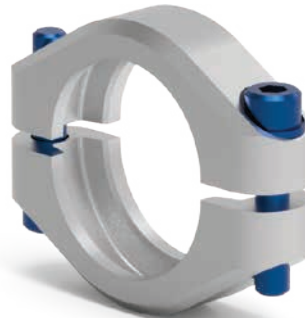
Assembly Number	Weight
STCCLR2-NA	.19 kg [.42 lb]

Includes (1) Collar Assembly (STCCLR2-NA) and (1) X-Key Assembly (STCXKEY-NA). Patch-lock fasteners included.

Max bolt torque when clamping to: 25 N*m [220 in-lbs]

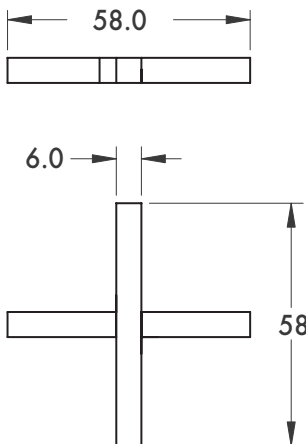


US PATENT# 7,331,104
ALL OTHER PATENTS PENDING



Patch-lock fasteners included.

Model Number	Weight
STCCLR2-NA	.16 kg [.35 lb]



Material: Steel

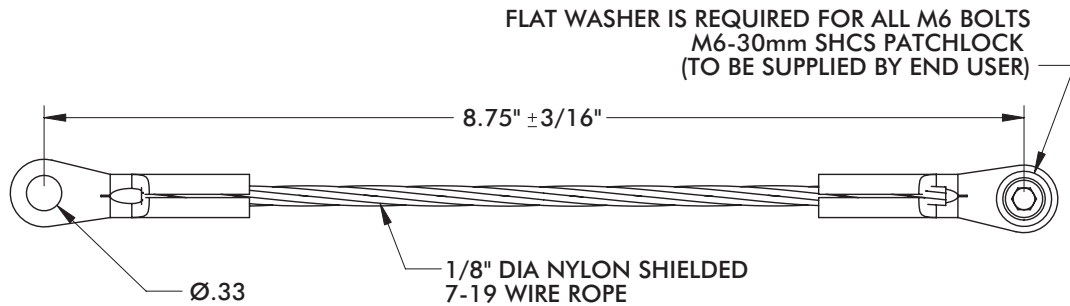
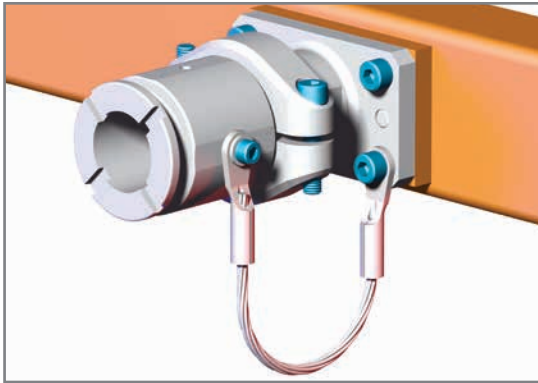
Model Number	Weight
STCXKEY-NA	.03 kg [.07 lb]



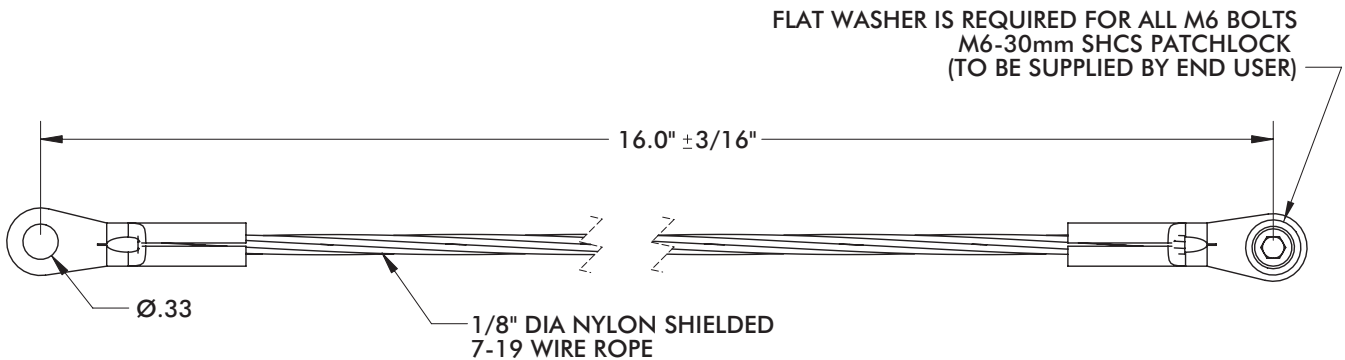
SPIDERGRIP TETHERS

Spidergrip Tooling Components | Dimensions | Technical Specifications

9 inch and 16 inch Tether Assemblies



Model Number	Weight
STS-TETHER-09	.07 kg [.15 lb]



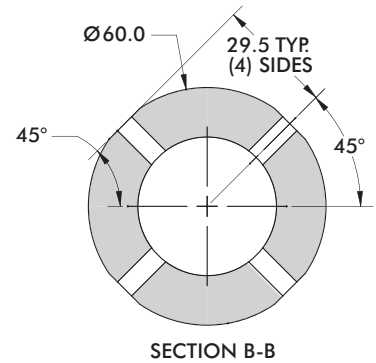
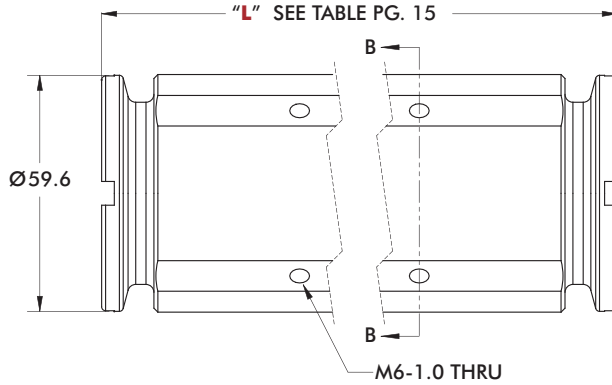
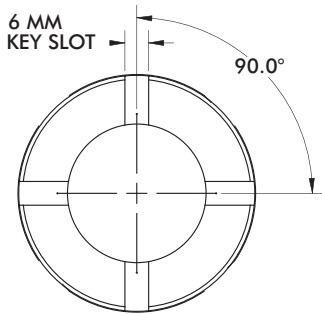
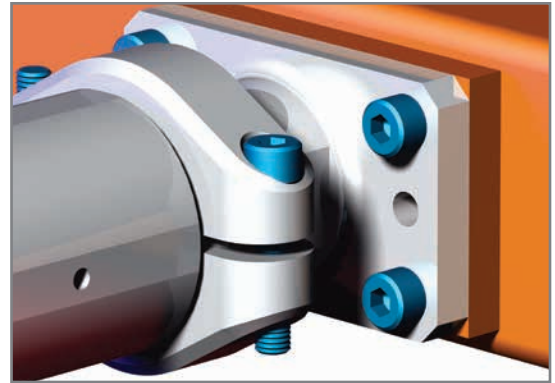
Model Number	Weight
STS-TETHER-16	.09 kg [.19 lb]

SPIDERGRIP BOOMS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm Boom



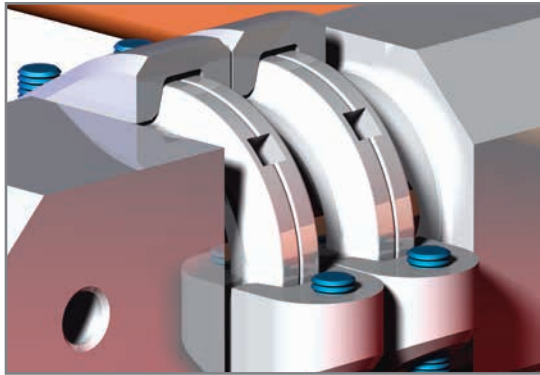
M6 tap holes along the boom are used to mount accessories

M6 Hole Spacing	Model Number	Length "L"	Weight
	STB0050-NA	50mm ±0.02	.20 kg [.43 lb]
	STB0075-NA	75mm ±0.02	.32 kg [.71 lb]
	STB0100-NA	100mm ±0.02	.45 kg [.99 lb]
	STB0150-NA	150mm ±0.02	.70 kg [1.54 lb]
	STB0200-NA	200mm ±0.02	.95 kg [2.09 lb]
	STB0250-NA	250mm ±0.02	1.20 kg [2.64 lb]
	STB0300-NA	300mm ±0.02	1.44 kg [3.18 lb]
	STB0350-NA	350mm ±0.02	1.74 kg [3.84 lb]

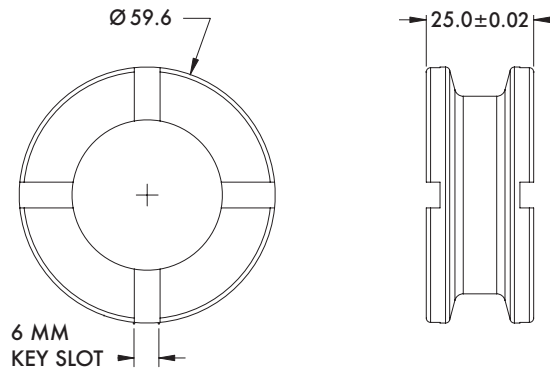
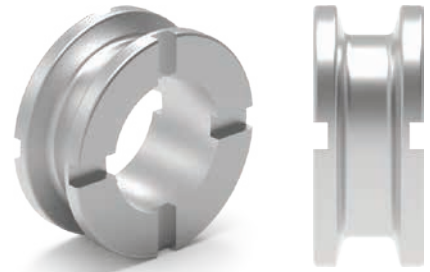


SPIDERGRIP BOOM SPACERS

Spidergrip Tooling Components | Dimensions | Technical Specifications

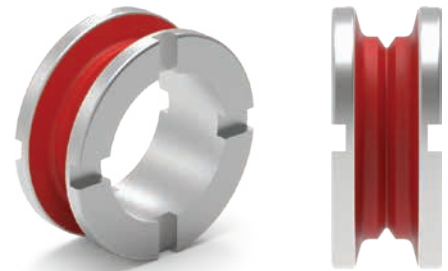
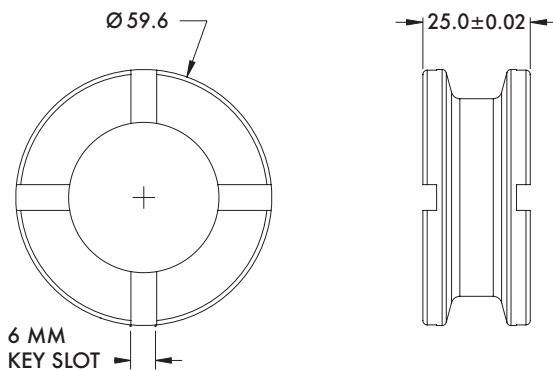


Ø60mm Breakaway and Non-Breakaway Boom Spacers



Model Number	Weight
STB0025-NA	.08 kg [.18 lb]

Ø60mm 25mm Engineered Breakaway Boom Spacers



Model Number	Weight
STB0025-BA-800	.08 kg [.18 lb]

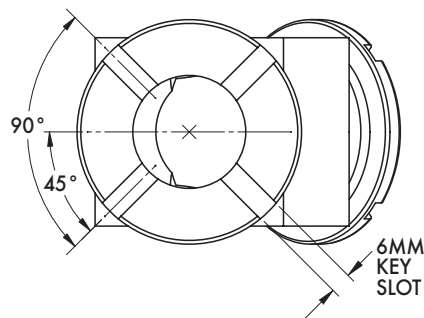
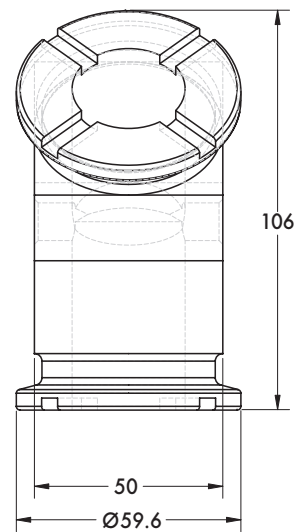
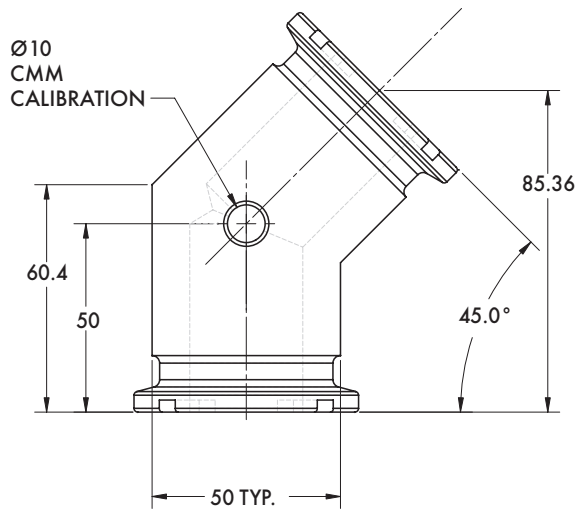
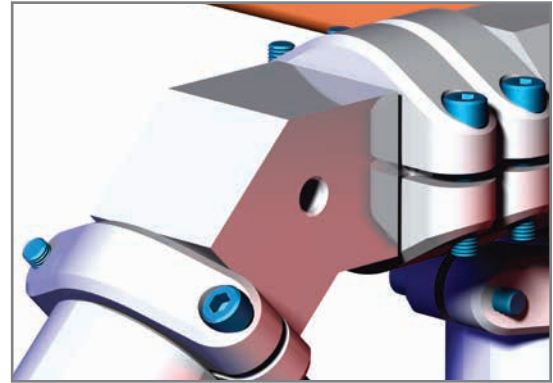
This Product is designed to breakaway at 800 N*m [590 ft-lb]

SPIDERGRIP JUNCTION COMPONENTS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 2-Face 45° Junction



Model Number

STN0C45-NA

Weight

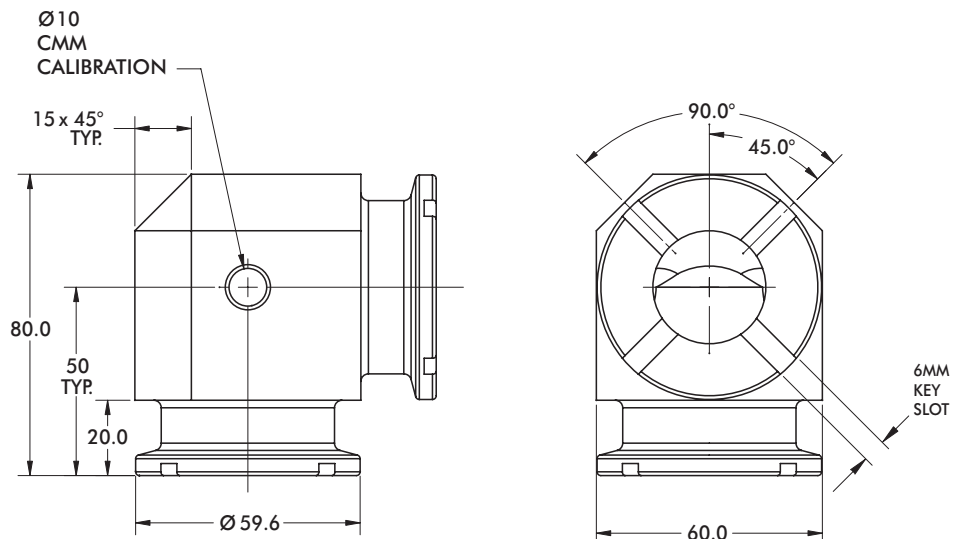
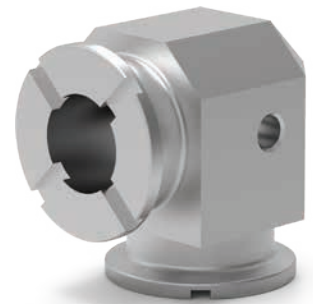
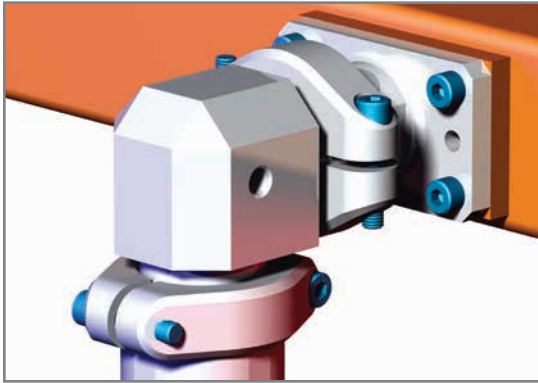
.42 kg [.93 lb]



SPIDERGRIP JUNCTION COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 2-face 90° Junction



Model Number
STN0C90-NA

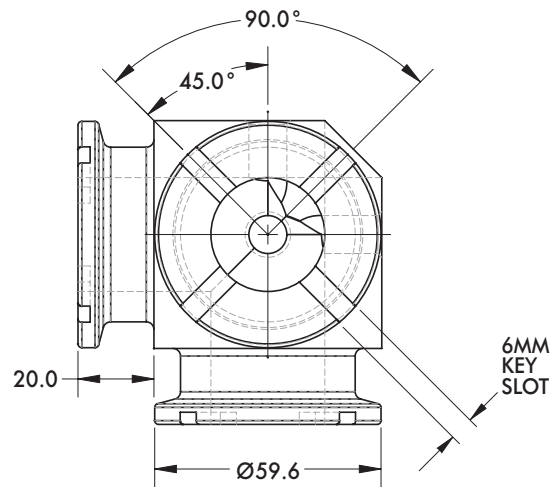
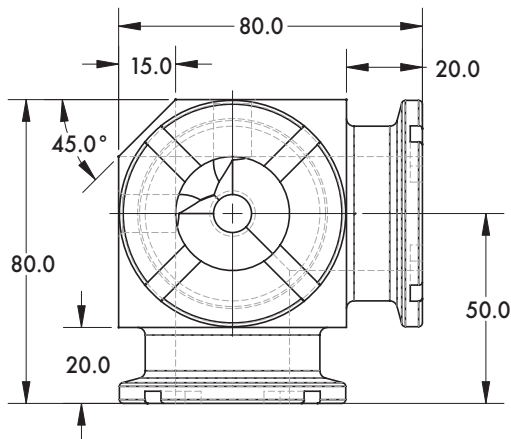
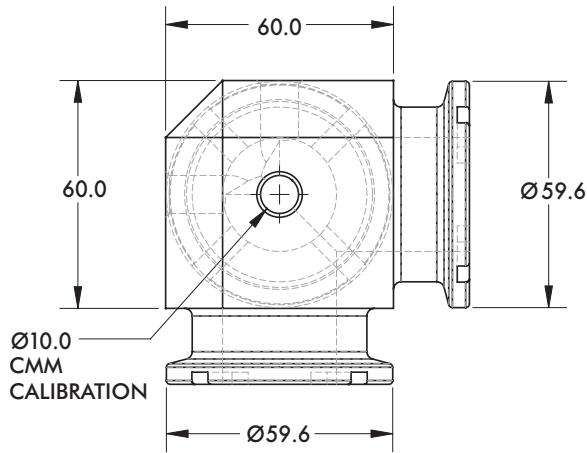
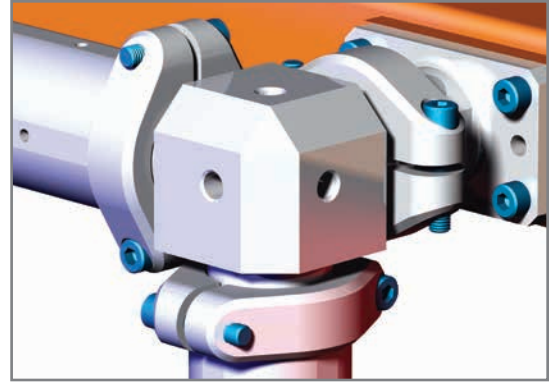
Weight
.53 kg [1.16 lb]

SPIDERGRIP JUNCTION COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm 3-Face Junction



Model Number

Weight

STN0C3F-NA

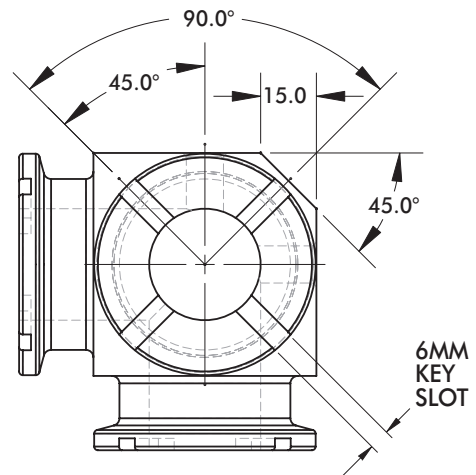
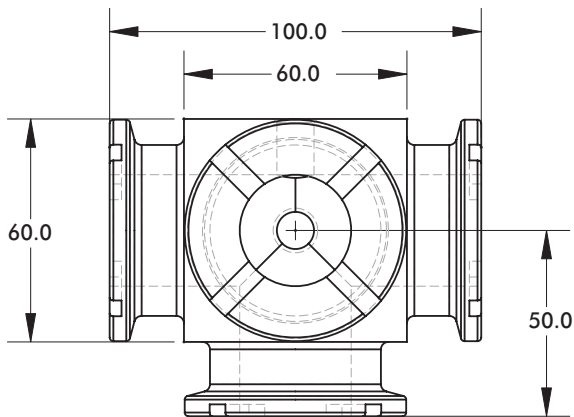
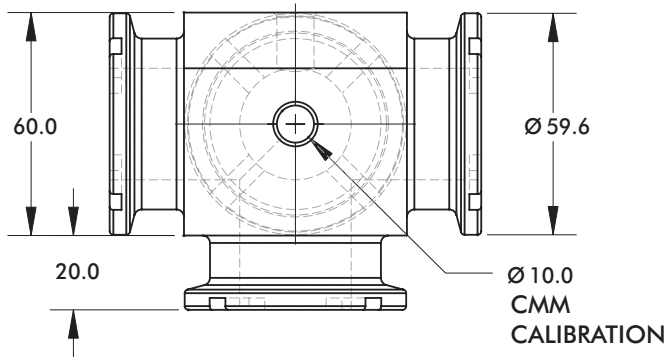
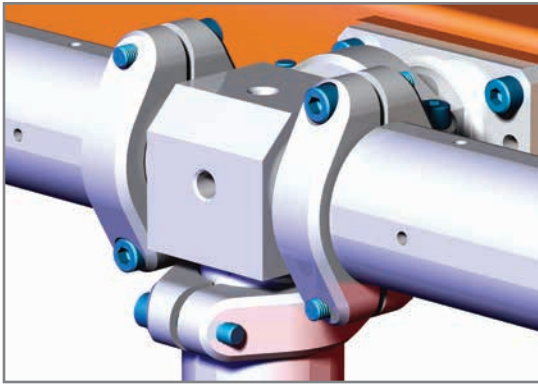
.58 kg [1.29 lb]



SPIDERGRIP JUNCTION COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 4-Face Junction



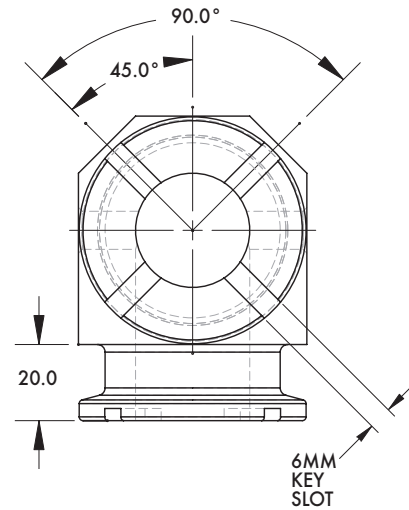
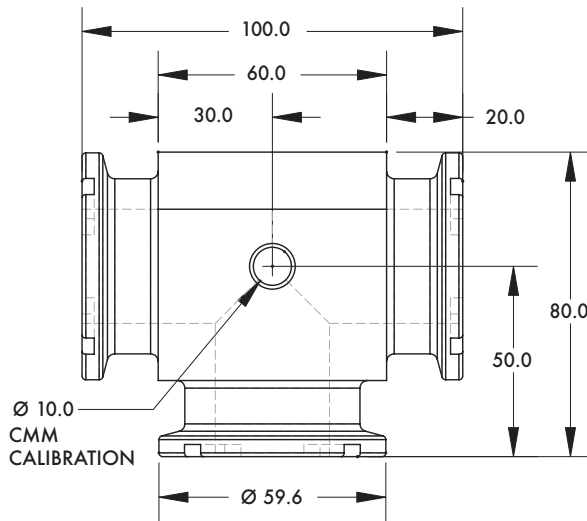
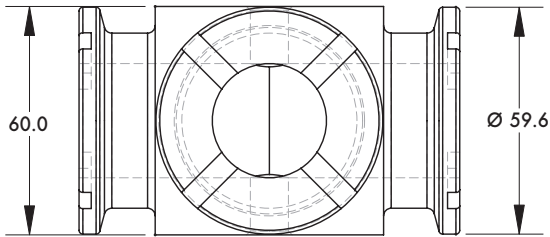
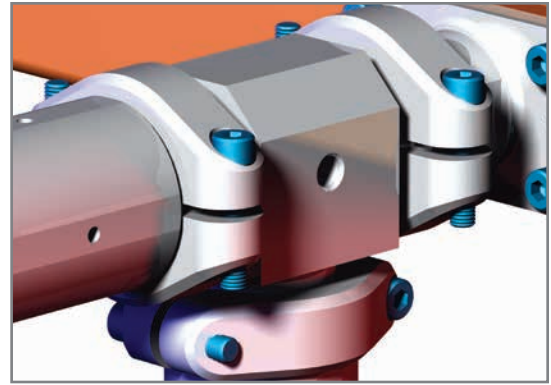
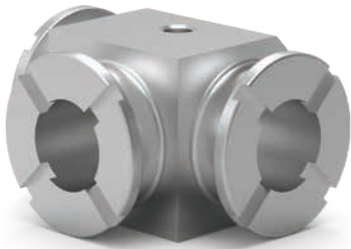
Model Number	Weight
STN0C4F-NA	.65 kg [1.43 lb]

SPIDERGRIP JUNCTION COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm 3-Face Junction



Model Number

STN0T3F-NA

Weight

.60 kg [1.31 lb]

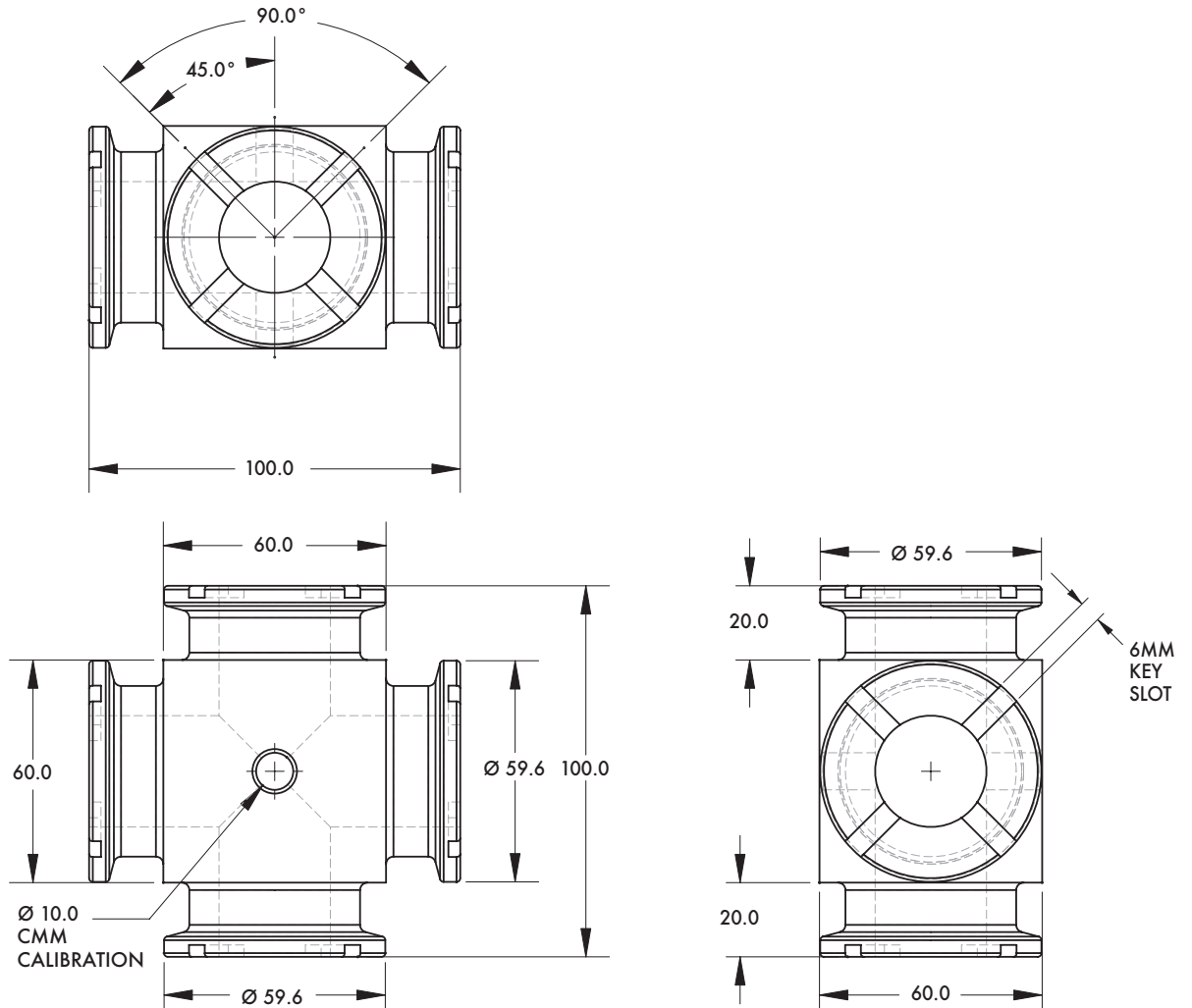


SPIDERGRIP JUNCTION COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm 4-Face Junction



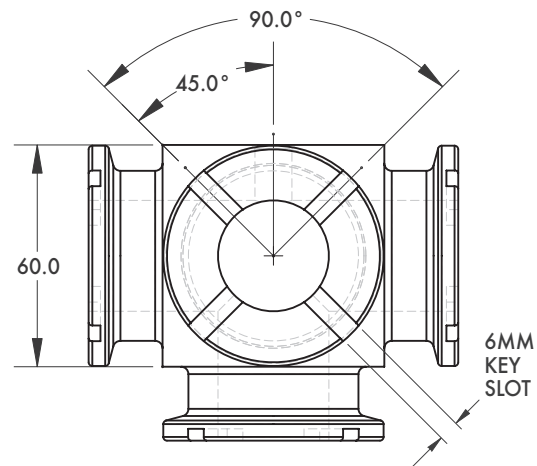
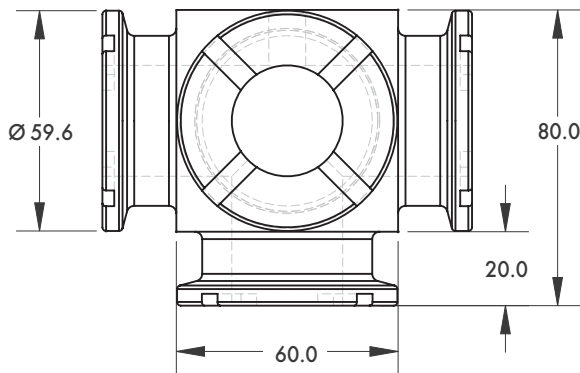
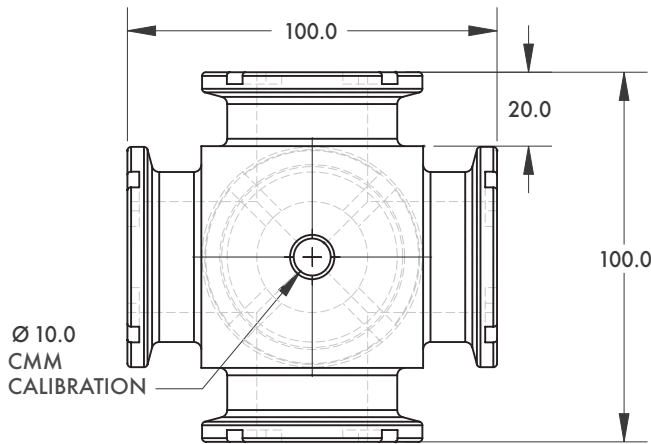
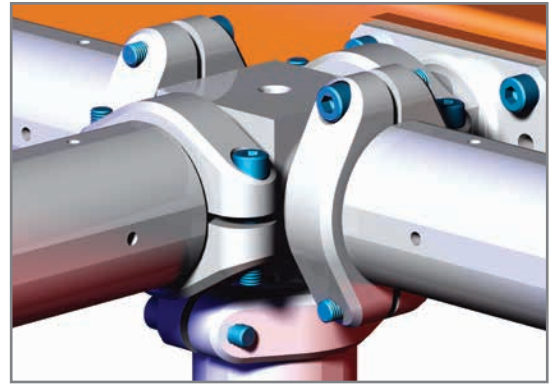
Model Number	Weight
STN0T4F-NA	.67 kg [1.47 lb]

SPIDERGRIP JUNCTION COMPONENTS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 5-Face Junction



Model Number

STN0T5F-NA

Weight

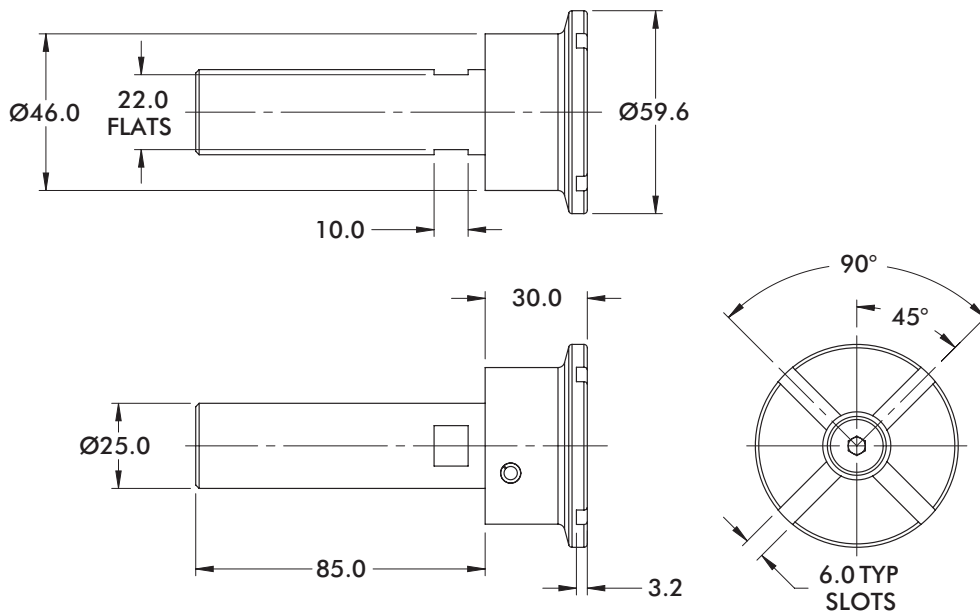
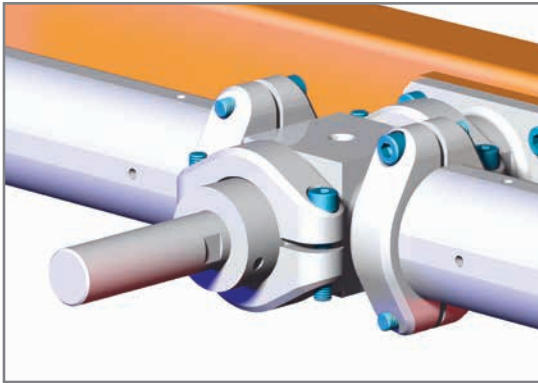
.71 kg [1.56 lb]



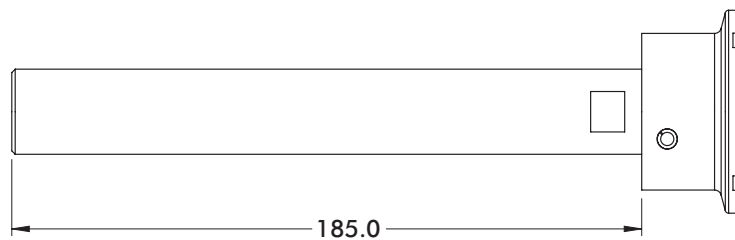
SPIDERGRIP SINGLE END EXTENSIONS

Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm to Ø25mm Single End Extension



Model Number	Weight
STV0100-NA	.26 kg [.58 lb]



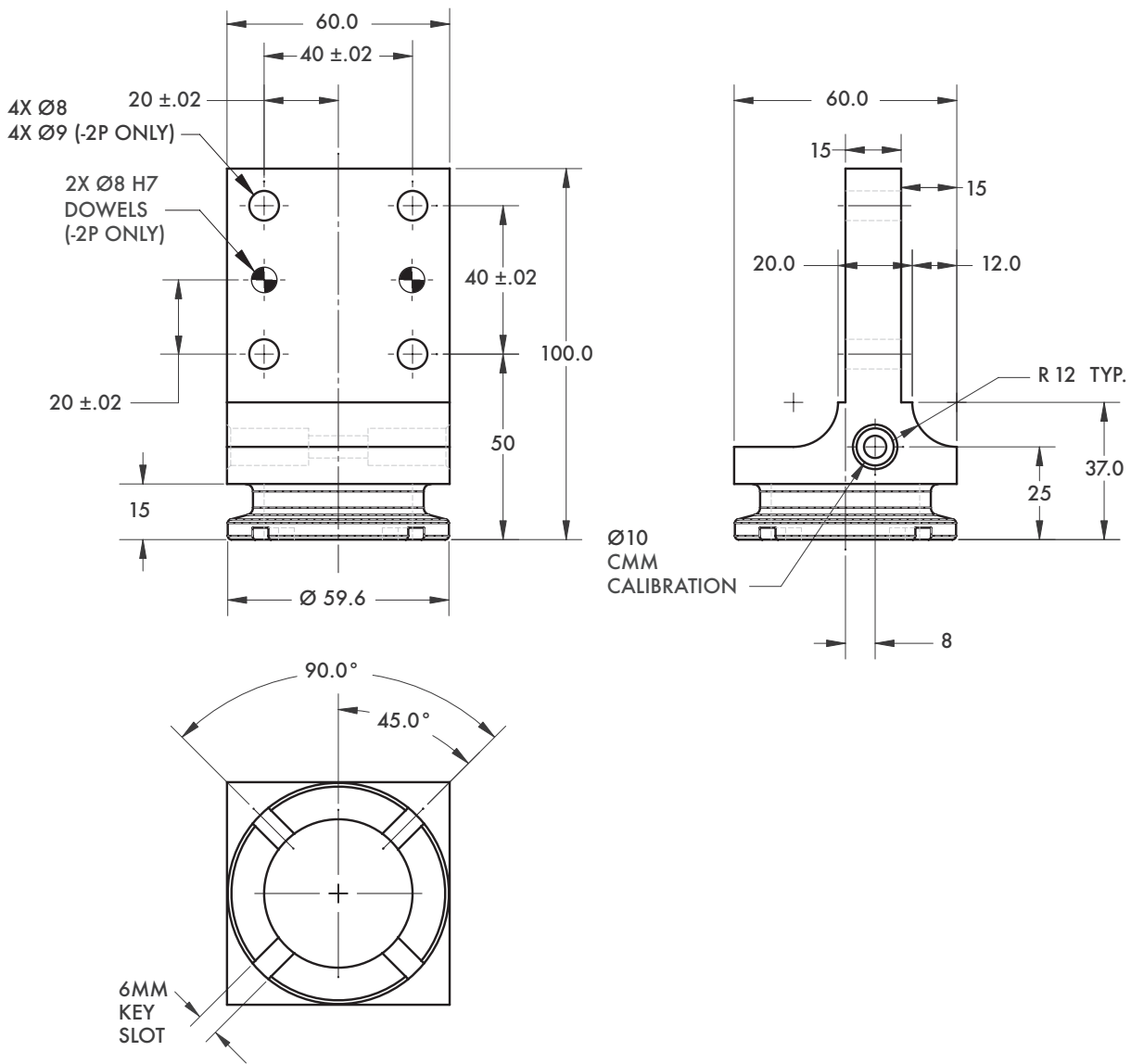
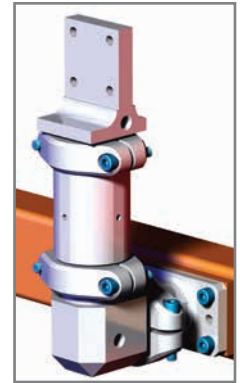
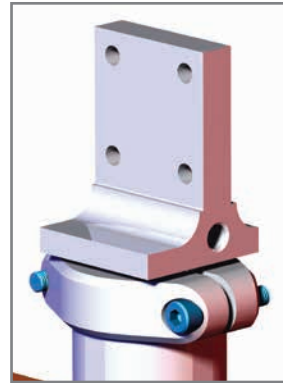
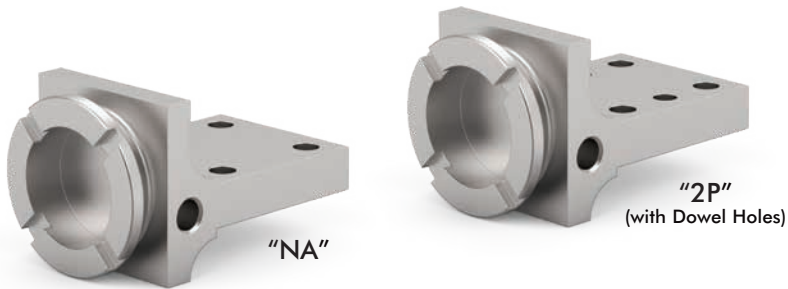
Model Number	Weight
STV0200-NA	.40 kg [.87 lb]

SPIDERGRIP EDGE MOUNTING COMPONENTS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 90° Edge Part with 15mm Center to Face Offset
40mm x 40mm Mounting Pattern

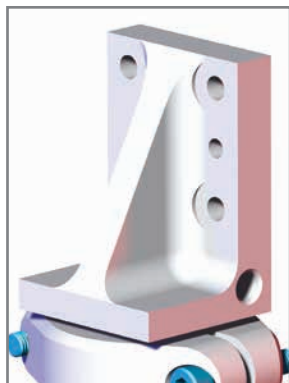
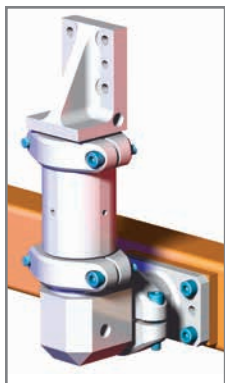


Model Number	Weight
STS0010-NA	.31 kg [.69 lb]
STS0010-NA-2P	

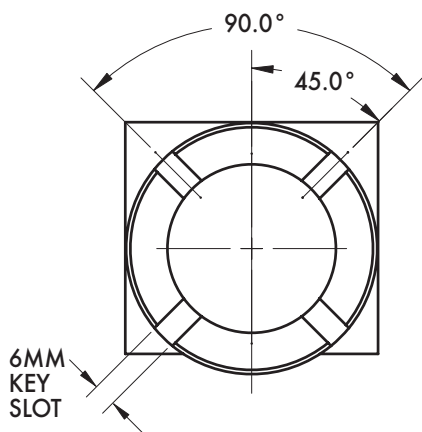
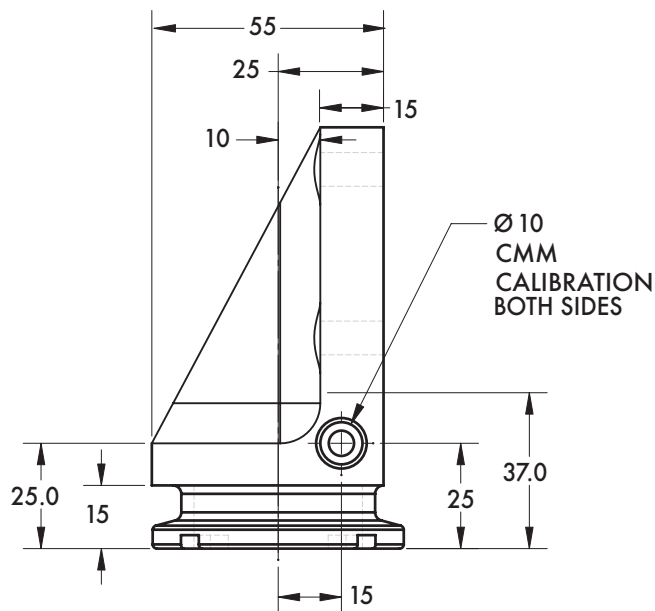
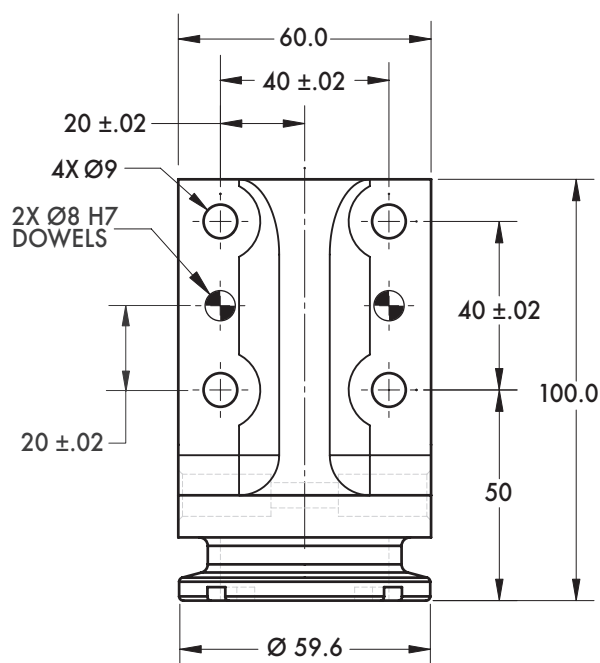


SPIDERGRIP EDGE MOUNTING COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm 90° Edge Part with 25mm Center to Face Offset
40mm x 40mm Mounting Pattern



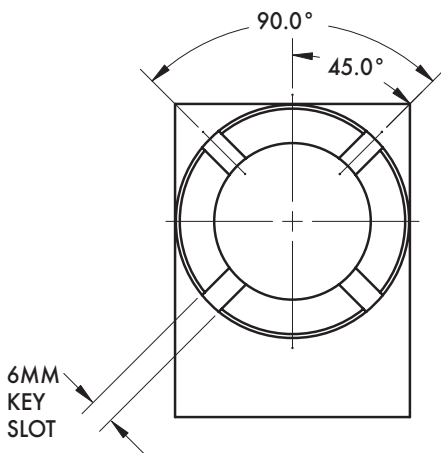
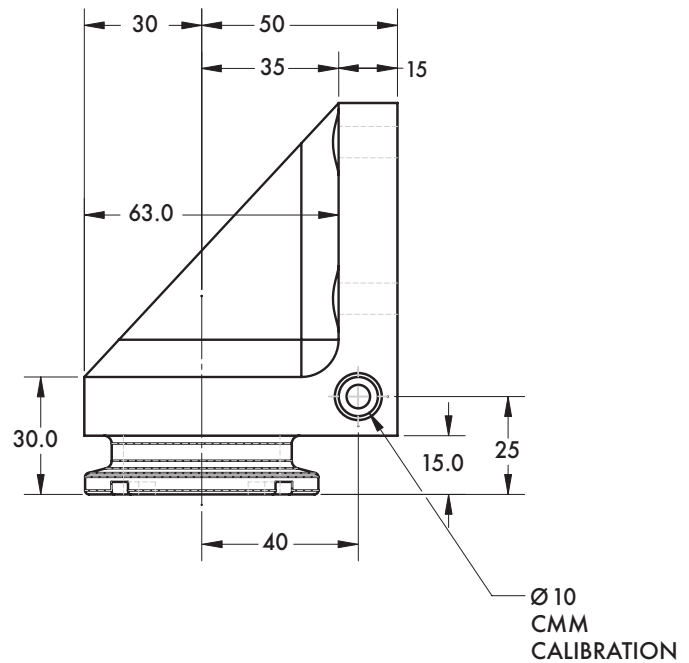
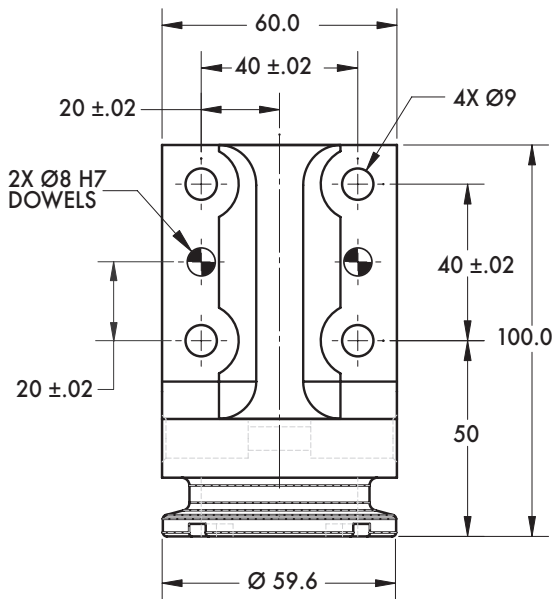
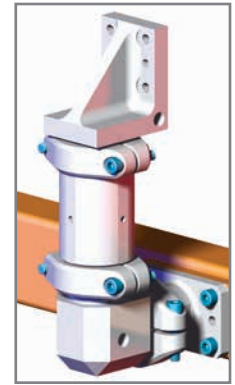
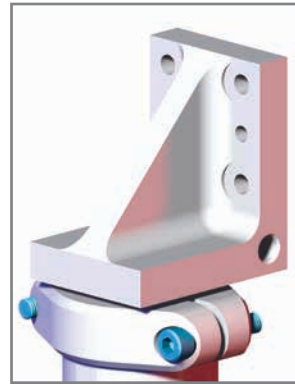
Model Number	Weight
STS0011-NA-2P	.35 kg [.77 lb]

SPIDERGRIP EDGE MOUNTING COMPONENTS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm 90° Edge Part with 50mm Center to Face Offset
40mm x 40mm Mounting Pattern

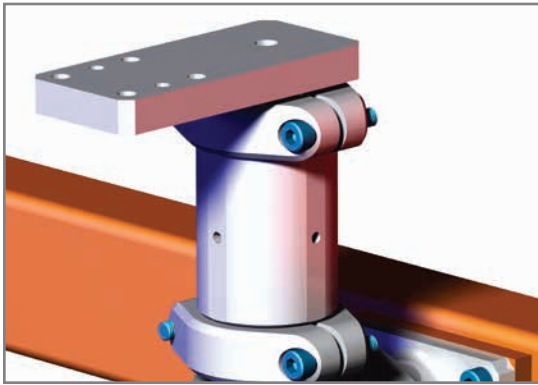


Model Number	Weight
STS0012-NA-2P	.47 kg [1.04 lb]

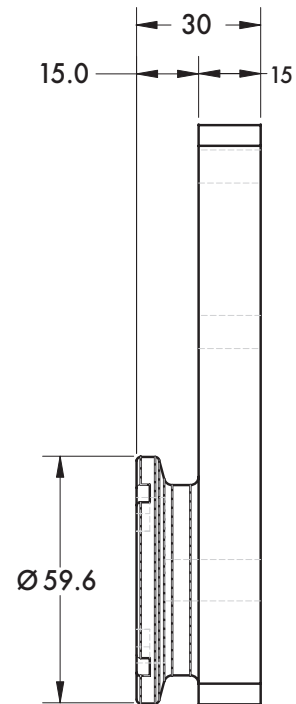
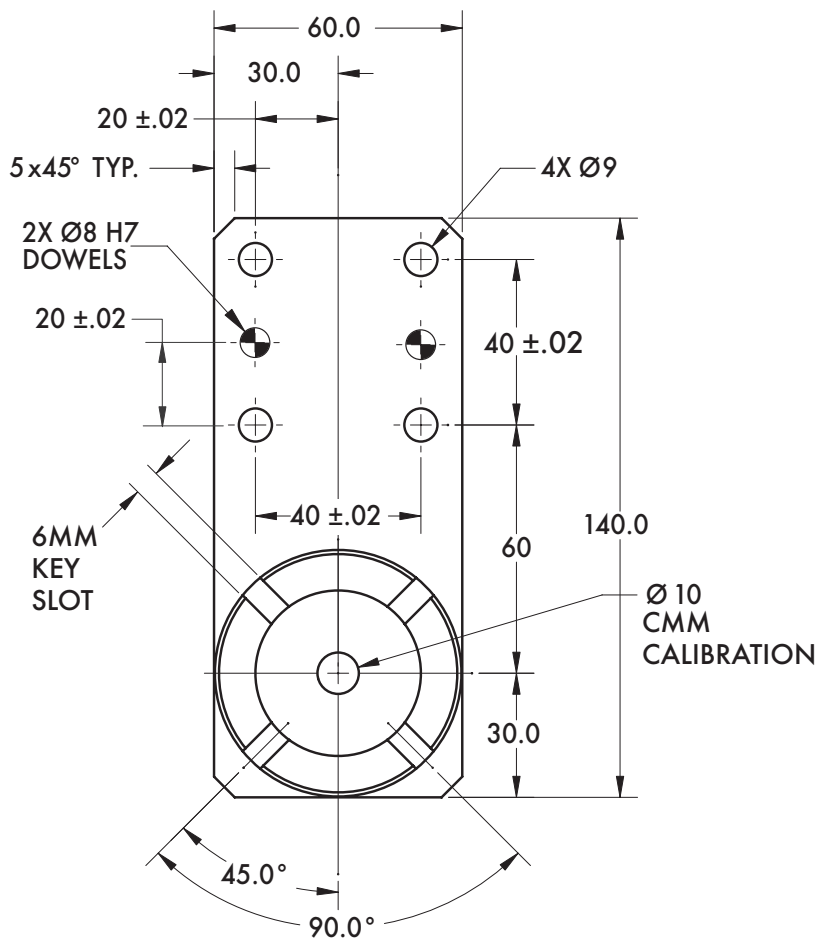


SPIDERGRIP EDGE MOUNTING COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm Offset Edge Part with 25mm Face Offset
40mm x 40mm Mounting Pattern



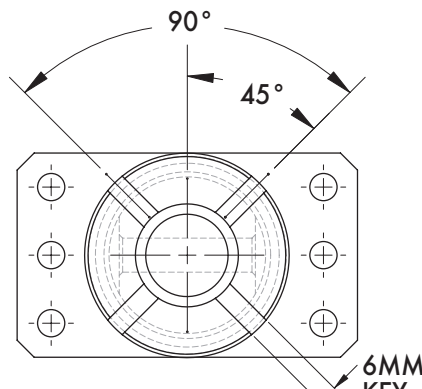
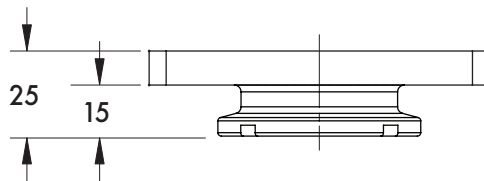
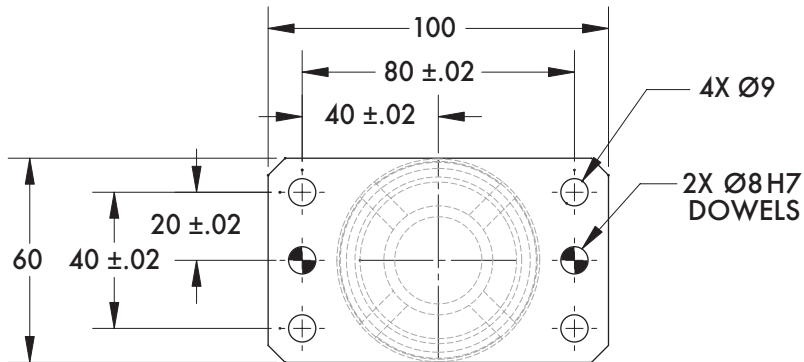
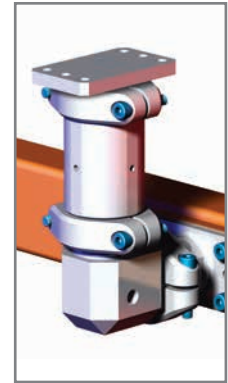
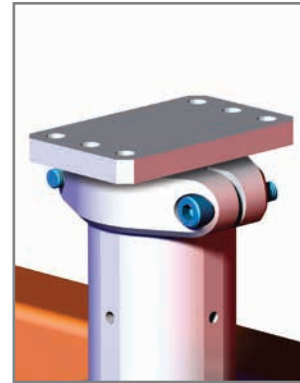
Model Number	Weight
STS0014-NA-2P	.39 kg [.85 lb]

SPIDERGRIP EDGE MOUNTING COMPONENTS



Spidergrip Tooling Components | Dimensions | Technical Specifications

Ø60mm In-line Edge Part with 25mm Face Offset
80mm x 40mm Mounting Pattern

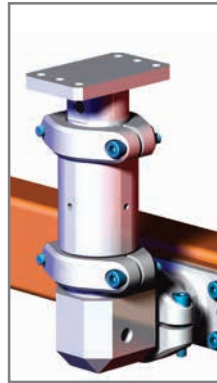
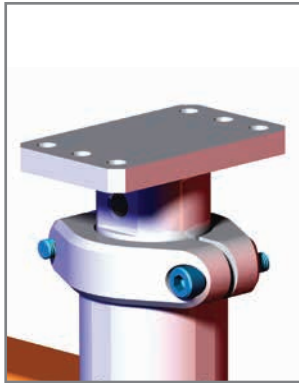


Model Number	Weight
STS0015-NA-2P	.21 kg [.46 lb]

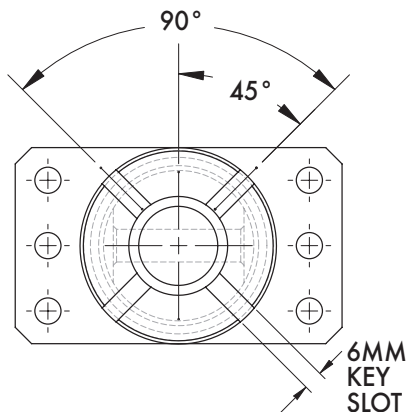
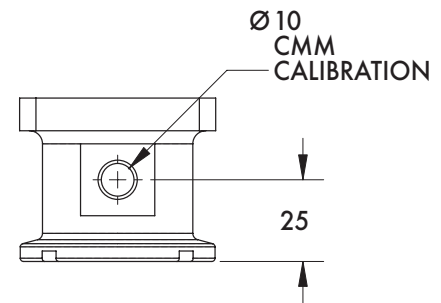
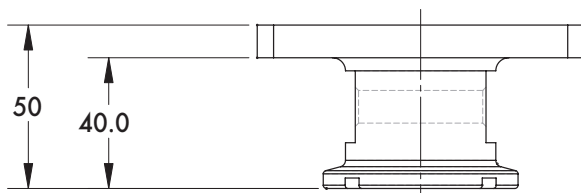
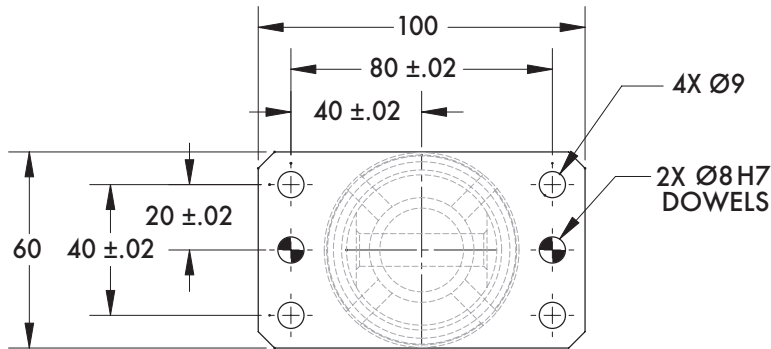
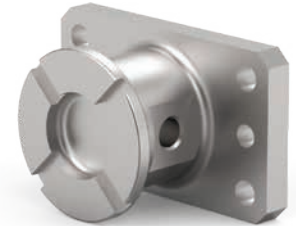


SPIDERGRIP EDGE MOUNTING COMPONENTS

Spidergrip Tooling Components | Dimensions | Technical Specifications



Ø60mm In-line Edge Part with 50mm Face Offset
80mm x 40mm Mounting Pattern



Model Number	Weight
STS0019-NA-2P	.32 kg [.71 lb]

BAG GRIPPING AND PALLETIZING SOLUTIONS

DBG Series

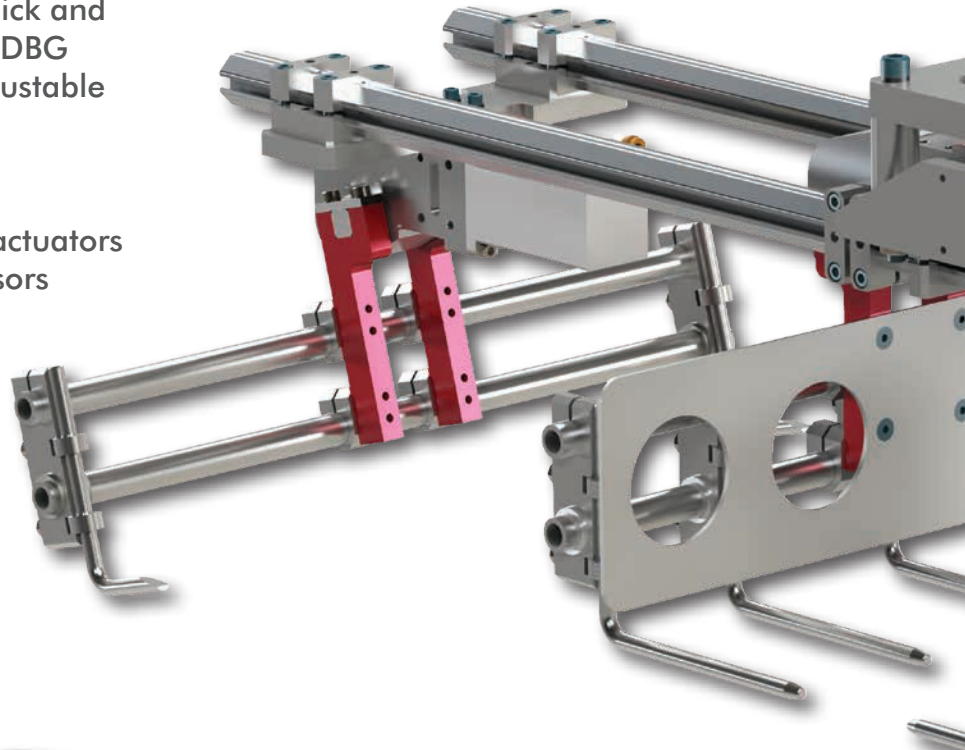
DESTACO DBG Series bag gripping end effector solutions offers end of line pick and place and palletizing solutions. The DBG has a simplified design with field adjustable finger position and opening angle.

Features also include:

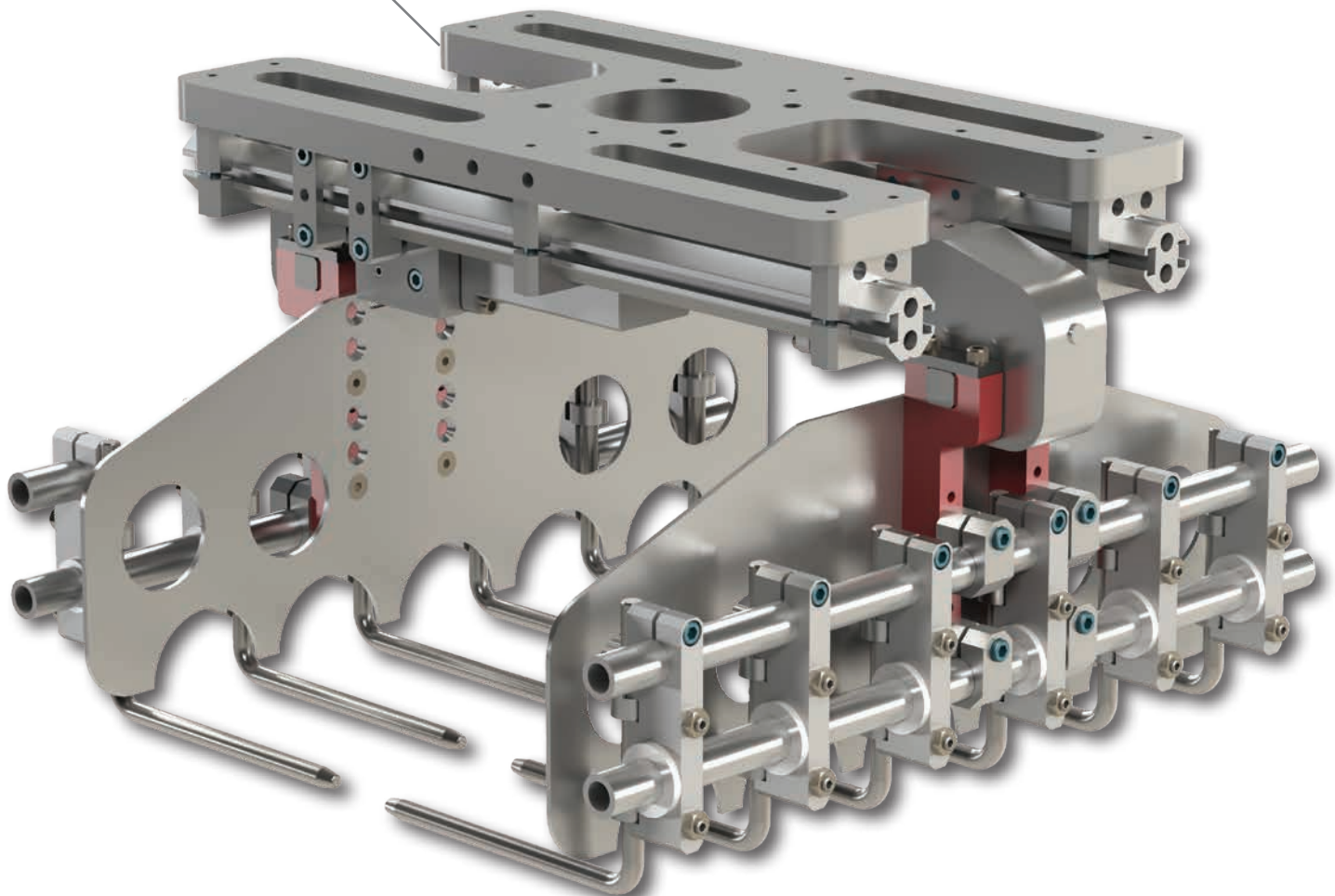
- Pneumatic or electric fully enclosed actuators
- Integrated open/closed position sensors
- Standard off-the-shelf components

Two sizes available:

- DBG50** (50lb Max Load)
- DBG100** (100lb Max Load)

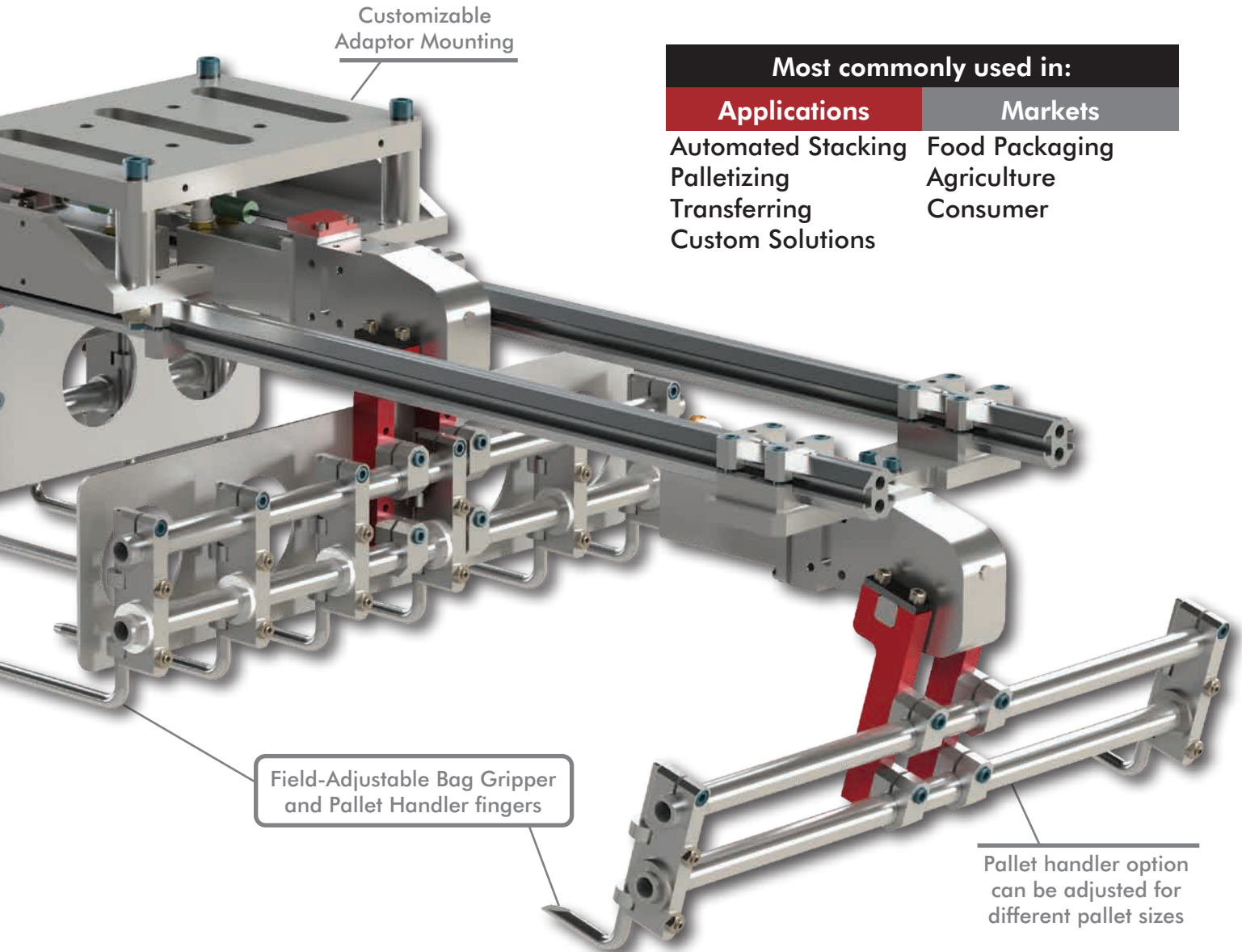


Customer Specified
Robot Mounting Pattern



BAG GRIPPING AND PALLETIZING SOLUTIONS

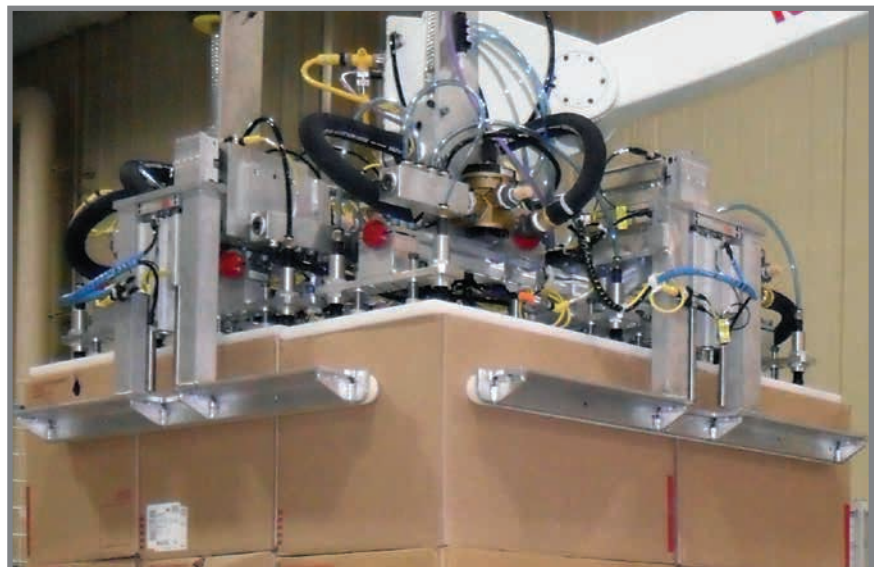
DBG Series



DESTACO DBG Series bag gripper also features optional integrated slip sheet and pallet handling. Products are held secure even if air pressure is lost.

With rapid actuation, the DBG can palletize up to 30 bags per minute when working in concert with robotic automation.

DESTACO also provides custom design and build solutions for handling any packaging transfer and palletizing needs.



DBG SERIES BAG GRIPPER

Product Overview

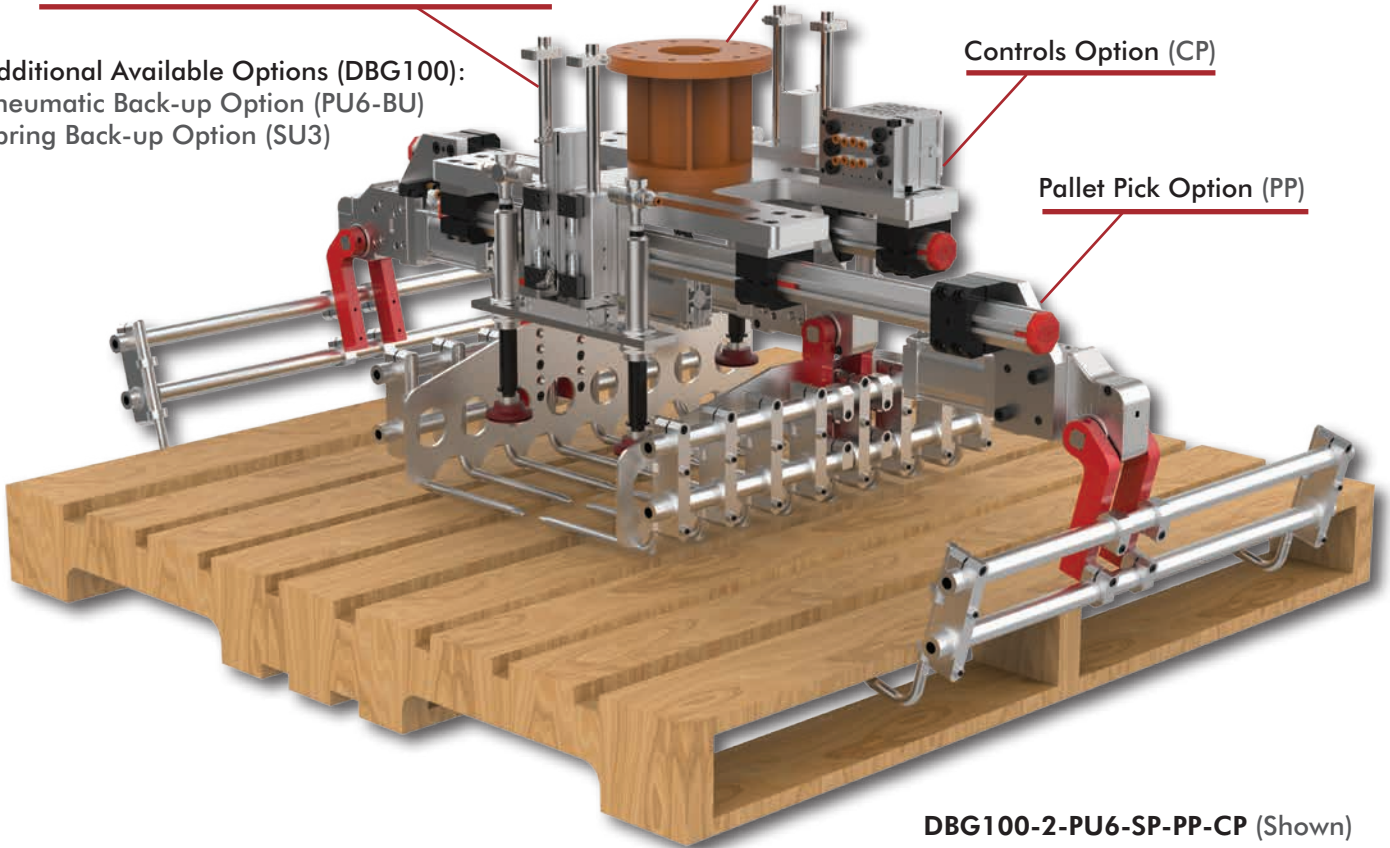
Robot Mount Stand-Off
(Sold Separately)

Pneumatic Slip Sheet Pick Option (PU6-SP)

Additional Available Options (DBG100):
Pneumatic Back-up Option (PU6-BU)
Spring Back-up Option (SU3)

Controls Option (CP)

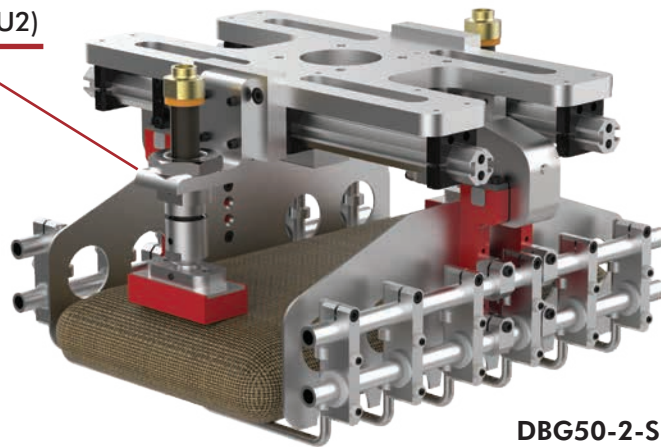
Pallet Pick Option (PP)



DBG100-2-PU6-SP-PP-CP (Shown)

Spring Back-up Option (SU2)

Additional Available Options (DBG50):
Pneumatic Back-up Option (PU4-BU)
Pneumatic Slip Sheet Pick Option (PU4-SP)
Controls Option (CP)
Pallet Pick Option (PP)



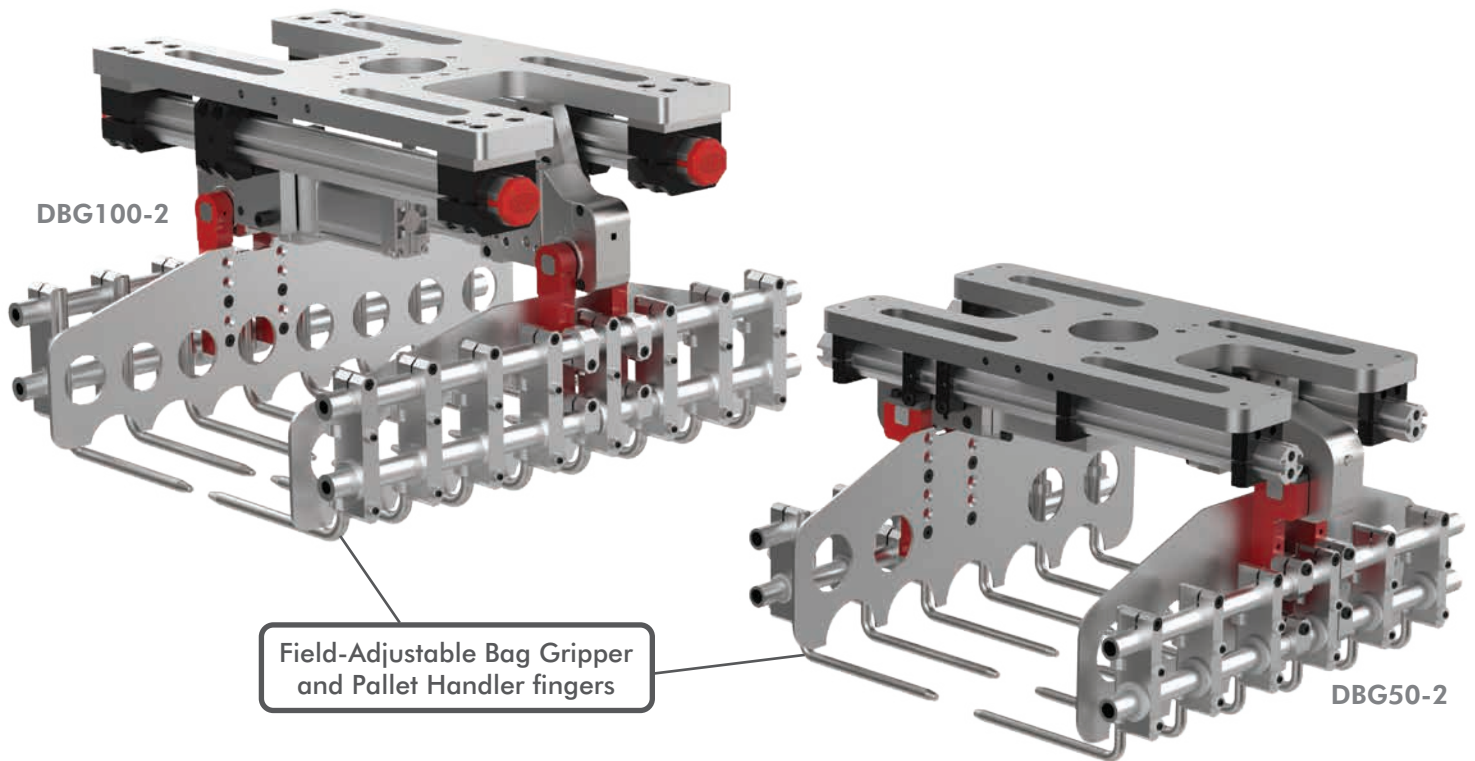
DBG50-2-SU2 (Shown)



Scan the QR Codes to see the bag gripper application videos.

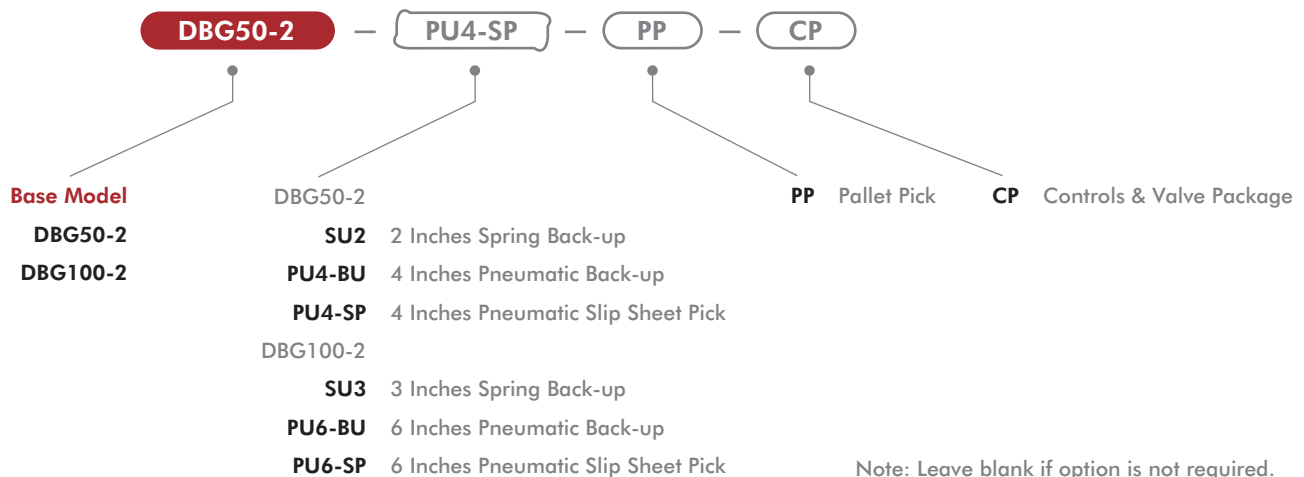
DBG SERIES BAG GRIPPER

Base Models



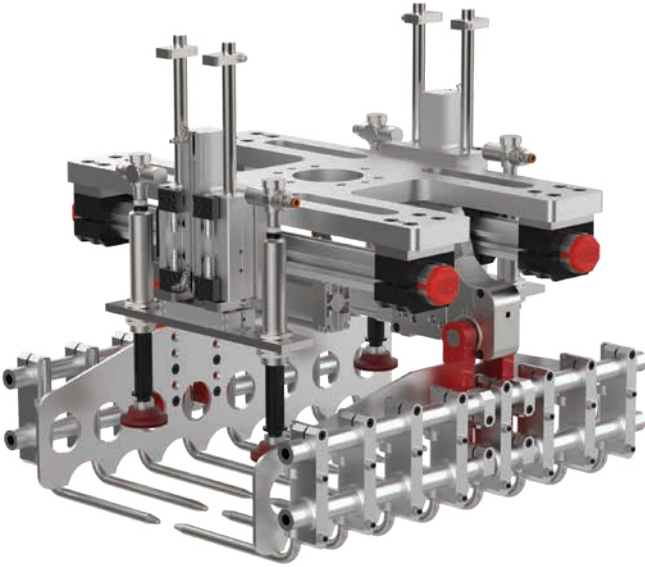
DBG Series Bag Grippers		
Specifications	DBG50-2	DBG100-2
Unit Weight:	17kg [38 lbs]	43kg [95 lbs]
Maximum Payload:	23Kg [50 lbs]	45Kg [100 lbs]
Maximum Bag Size:	432 x 711 x 122mm [17 x 28 x 5 in]	610 x 1016 x 170mm [24 x 40 x 6.7 in]

DBG Bag Gripper Order Information



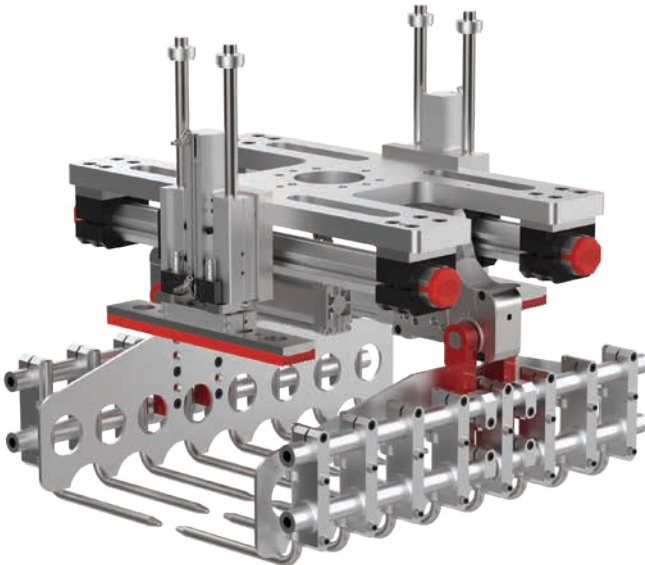
DBG SERIES BAG GRIPPER

Options



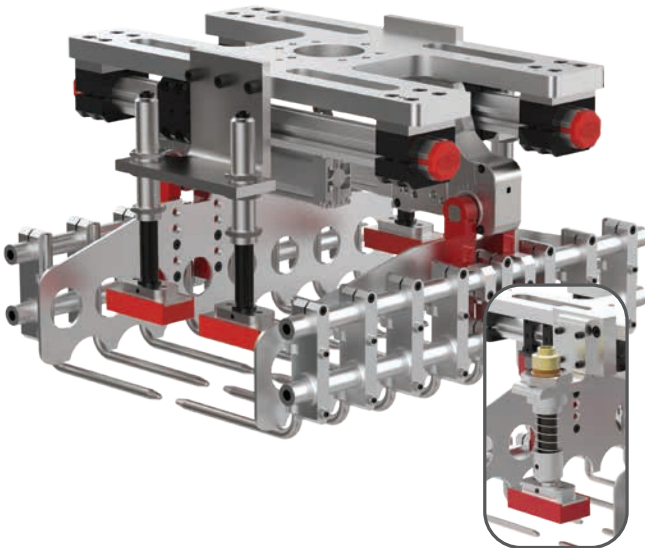
PU(x)-SP Pneumatic Slip Sheet Pick Option

- In addition to the spring compensator option, a vacuum system can be added to the package which will handle the slip sheet.
- Eliminate the need for a second end effector or secondary operation.
- 4" Stroke for DBG50-2 (PU4-SP)
(Add option weight of 5kg [11 lbs] to base model)
- 6" Stroke for DBG100-2 (PU6-SP)
(Add option weight of 10kg [23 lbs] to base model)



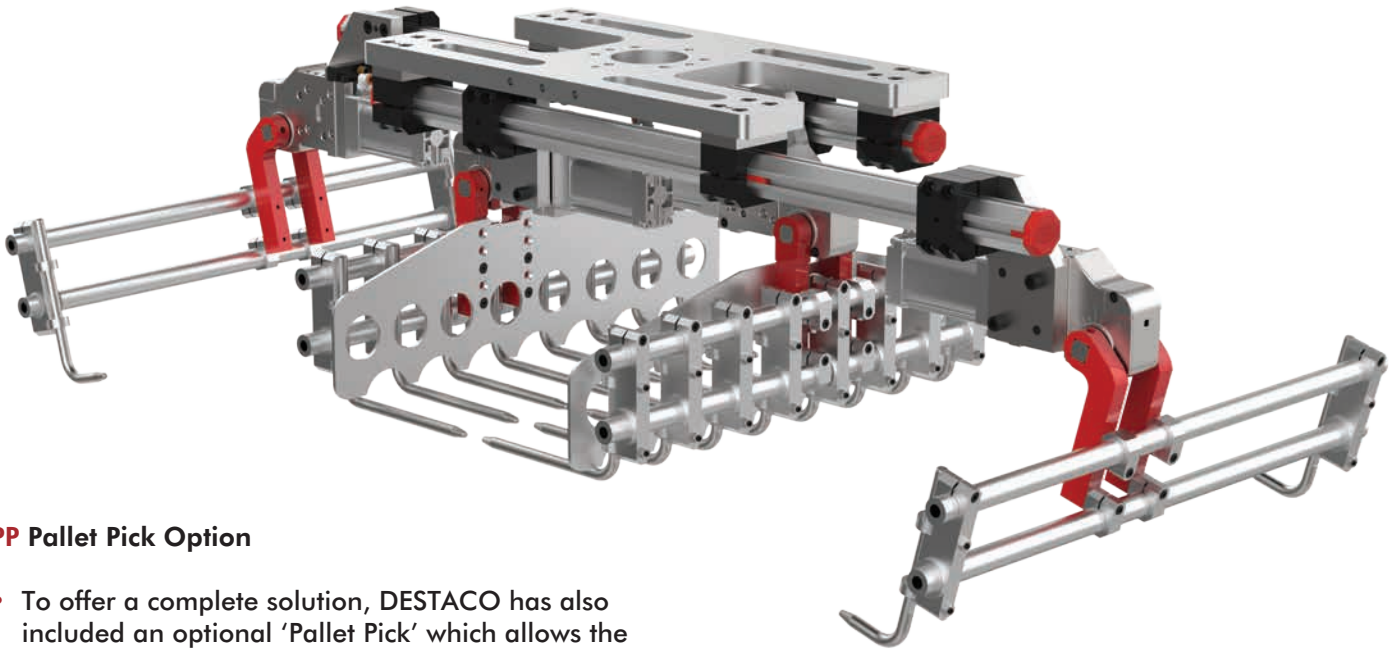
PU(x)-BU Pneumatic Back-Up Option

- The pneumatic compensator is extended to contact the product for additional stability and control while in motion.
- 4" Stroke for DBG50-2 (PU4-BU)
(Add option weight of 3.6kg [8 lbs] to base model)
- 6" Stroke for DBG100-2 (PU6-BU)
(Add option weight of 9kg [20 lbs] to base model)



SU(x) Spring Back-Up Option

- Simple, cost-effective solution.
- Compression springs keep a constant pressure on the product.
- Low cost solution maintains control of the product while in transport.
- Spring Back-Up Option for DBG50-2 (SU2)
(Add option weight of 2.9kg (6.4 lbs) to base model)
- Spring Back-Up Option for DBG100-2 (SU3)
(Add option weight of 5.6kg (12.4 lbs) to base model)

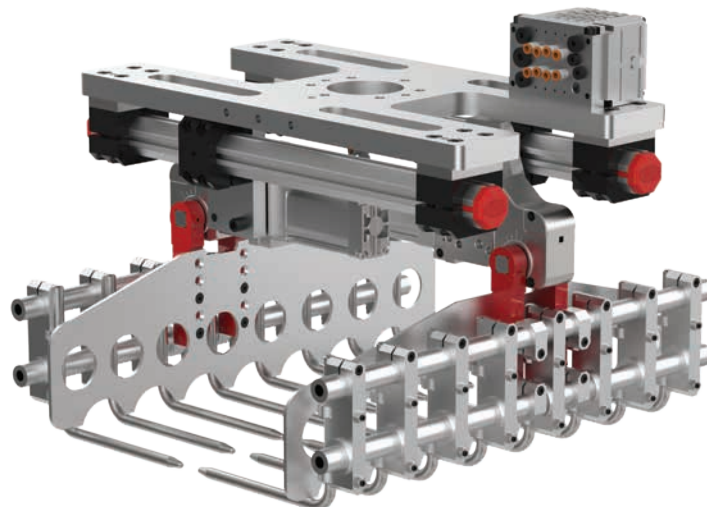


PP Pallet Pick Option

- To offer a complete solution, DESTACO has also included an optional 'Pallet Pick' which allows the customer to pick-up and move the empty pallet.
- Pallet Pick Option for DBG50-2
(Add option weight of 13kg [29 lbs] to base model)
- Pallet Pick Option for DBG100-2
(Add option weight of 22kg [48 lbs] to base model)

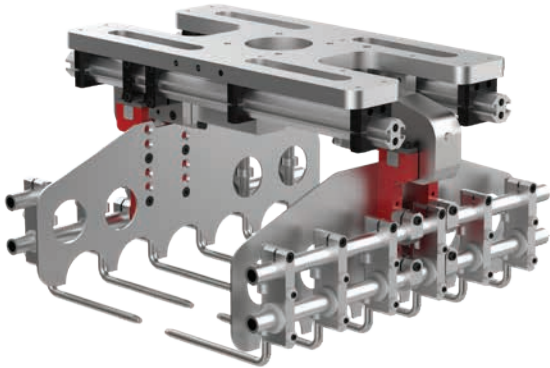
CP Controls Option

- Controls Options are configured based on the different bag gripper options ordered.
(Add option weight of 2.3kg [5 lbs] to base model)

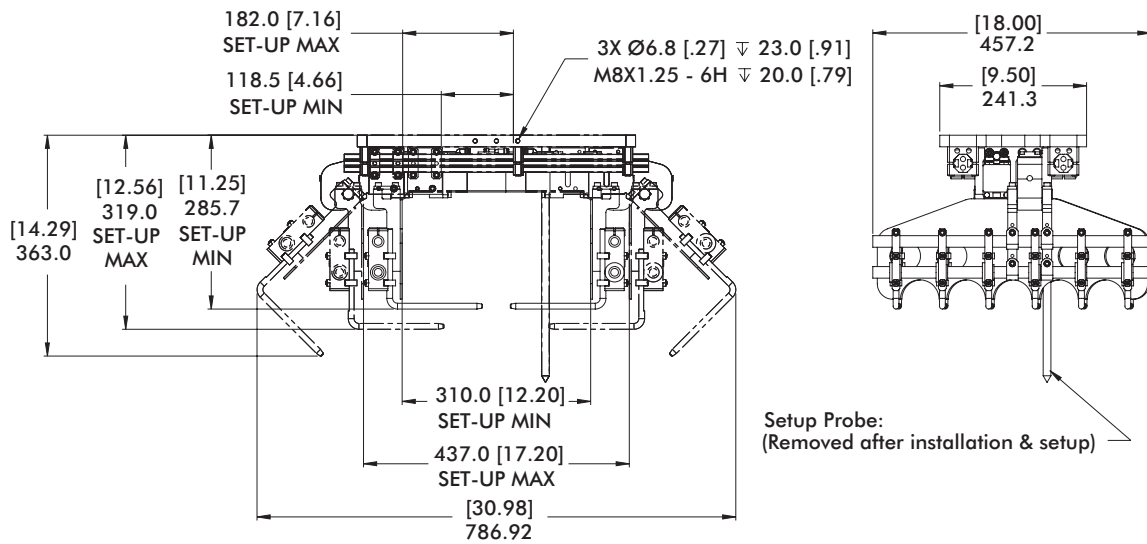
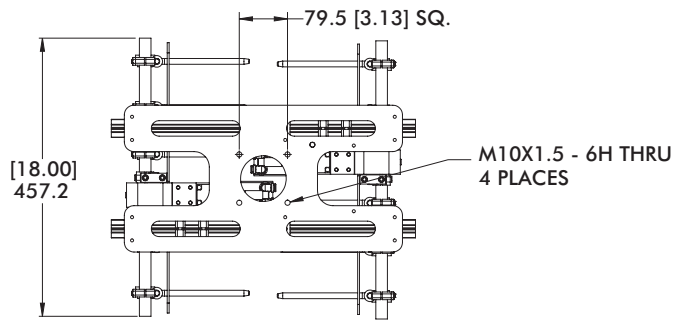


DBG50 SERIES

Bag Gripping and Palletizing Solutions | Dimensions



Model Number	Weight
DBG50-2	[38 lb] 17 kg

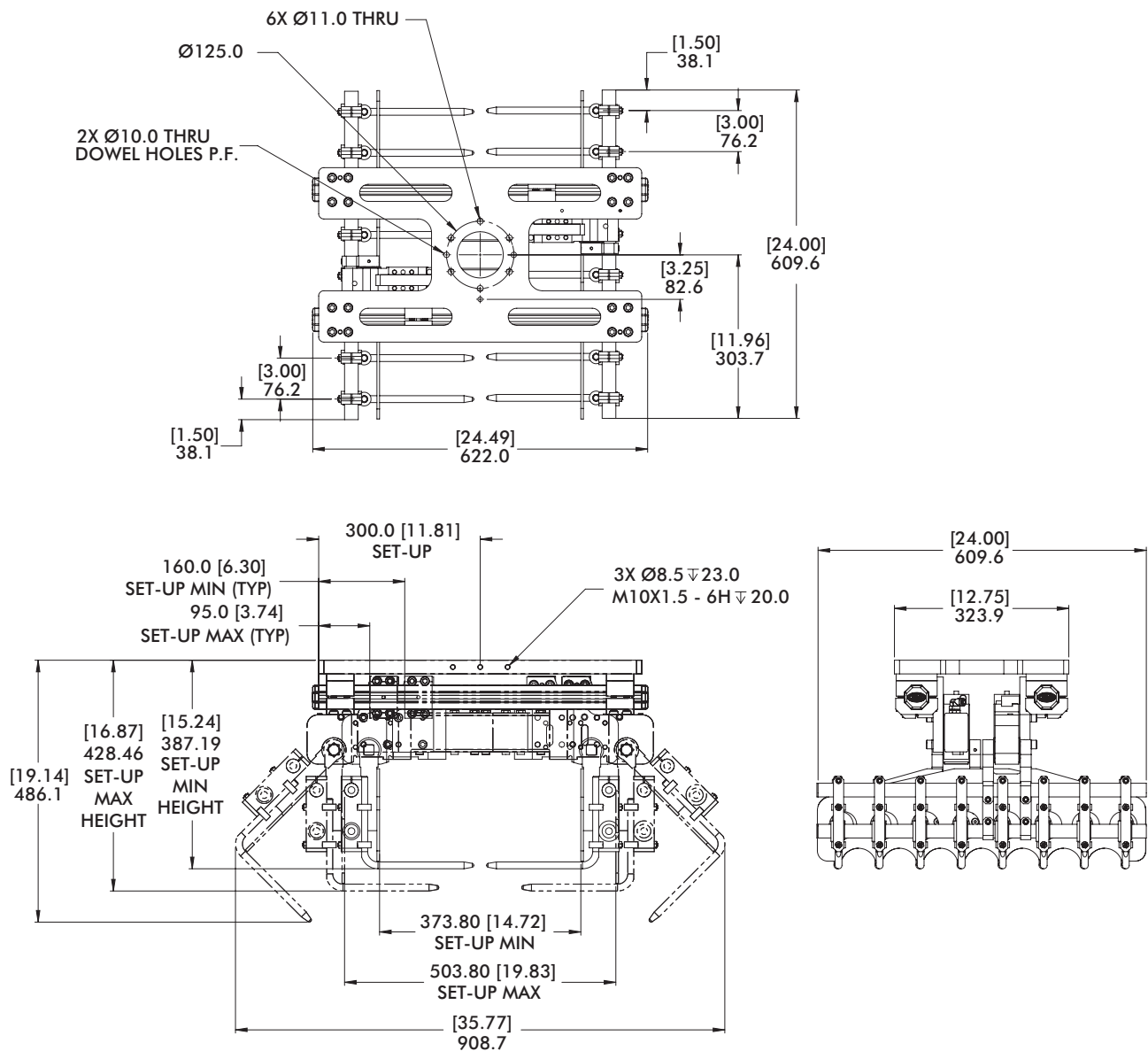
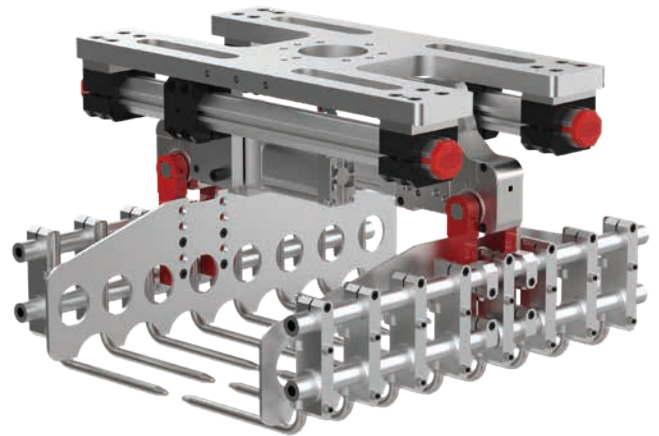


Note: mm/[Inches]

DBG100 SERIES

Bag Gripping and Palletizing Solutions | Dimensions

Model Number	Weight
DBG100-2	[95 lb] 43 kg

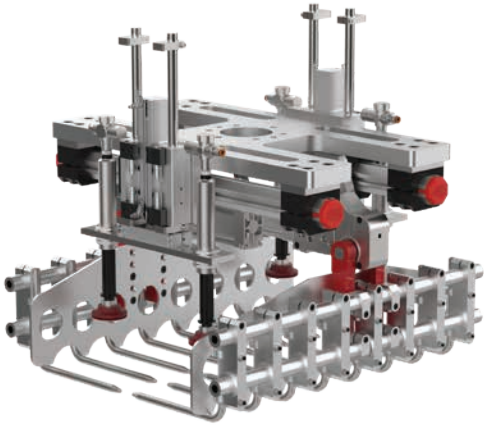


Note: mm/[Inches]

SLIP SHEET PICK AND PLACE OPTION

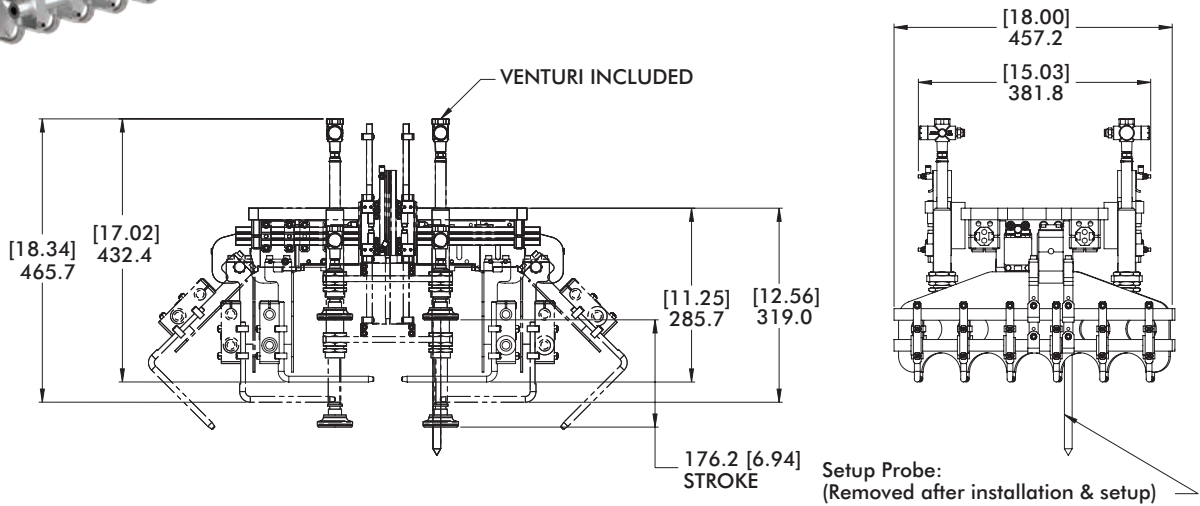
Bag Gripping and Palletizing Solutions | Dimensions

4.00" [101.6mm]



Model Number	Weight
DBG50-2-PU4-SP	[11 lb] 5 kg

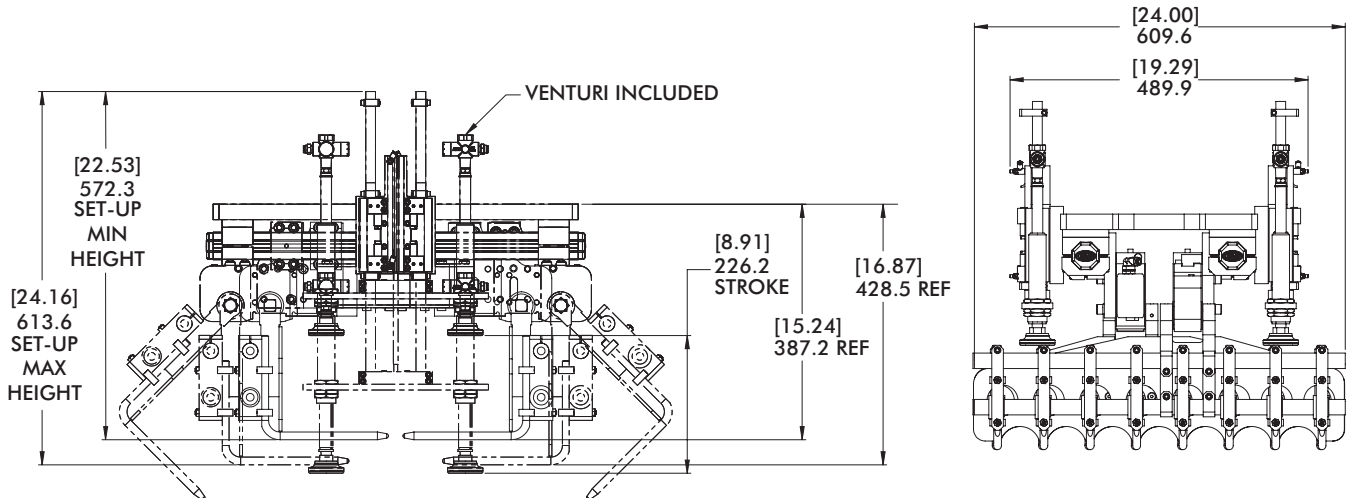
Add to base model weight



6.00" [152.4mm]

Model Number	Weight
DBG100-2-PU6-SP	[23 lb] 10 kg

Add to base model weight



Note: mm/[Inches]

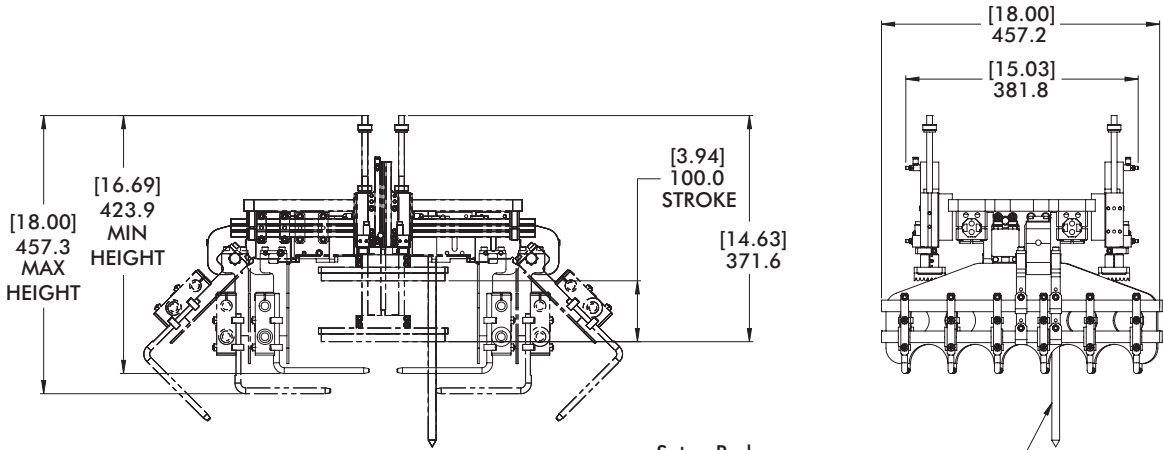
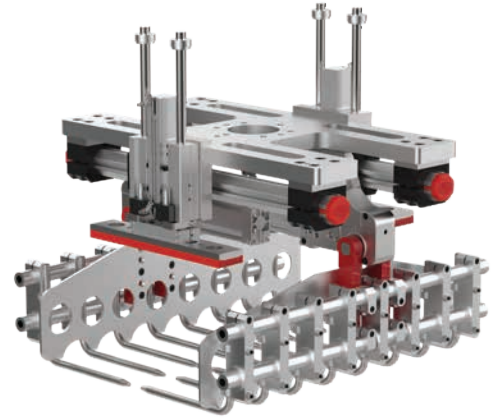
PNEUMATIC BACK-UP OPTION

Bag Gripping and Palletizing Solutions | Dimensions

4.00" [101.6mm]

Model Number	Weight
DBG50-2-PU4-BU	[8 lb] 3.6 kg

Add to base model weight

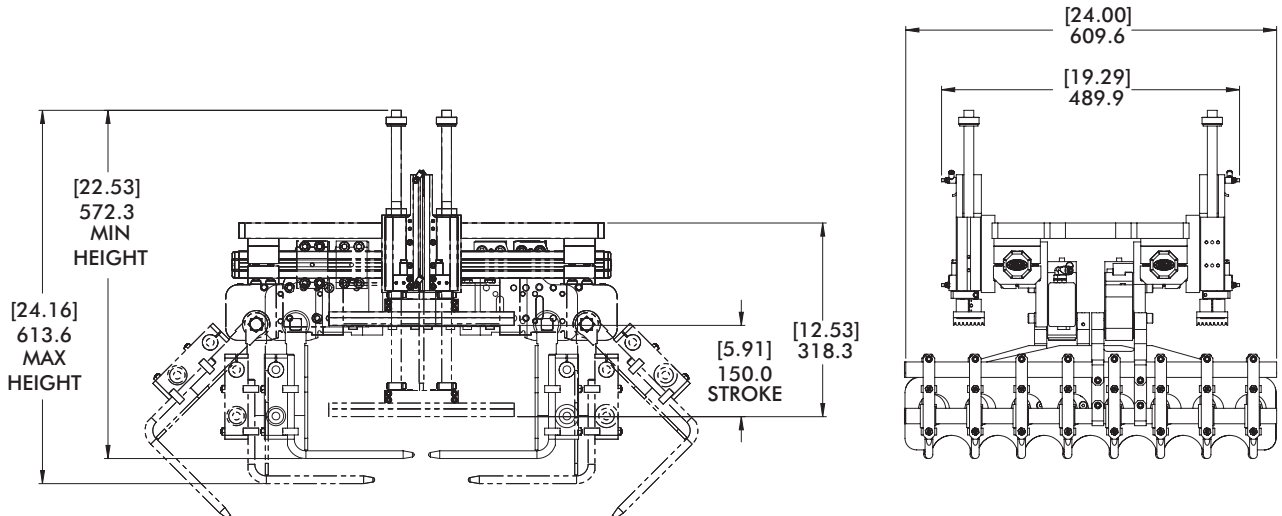


Setup Probe:
(Removed after installation & setup)

6.00" [152.4mm]

Model Number	Weight
DBG100-2-PU6-BU	[20 lb] 9 kg

Add to base model weight

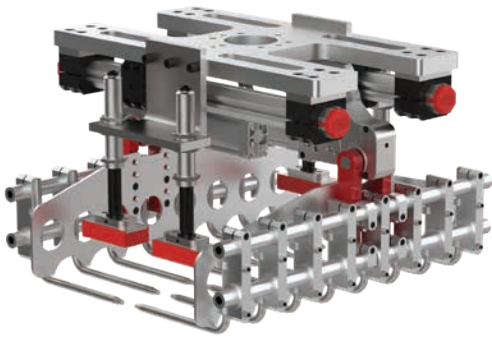


Note: mm/[Inches]

TRAVEL SPRING BACK-UP OPTION

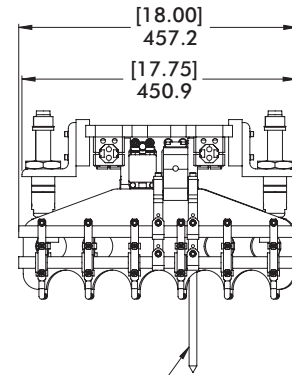
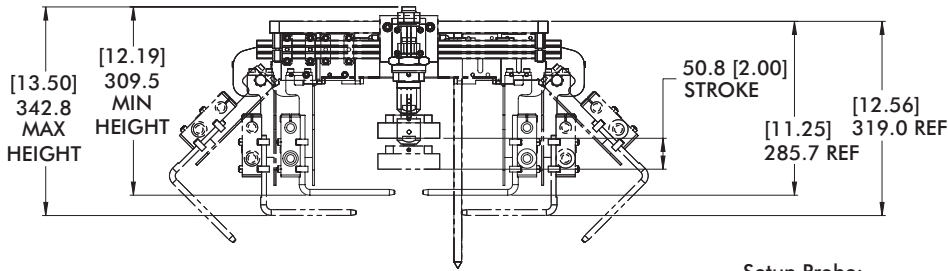
Bag Gripping and Palletizing Solutions | Dimensions

2.00" [50.8mm]



Model Number	Weight
DBG50-2-SU2	[6.4 lb] 2.9 kg

Add to base model weight

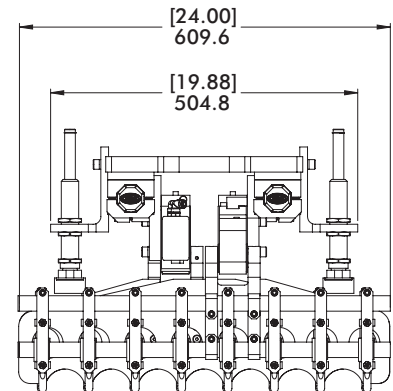
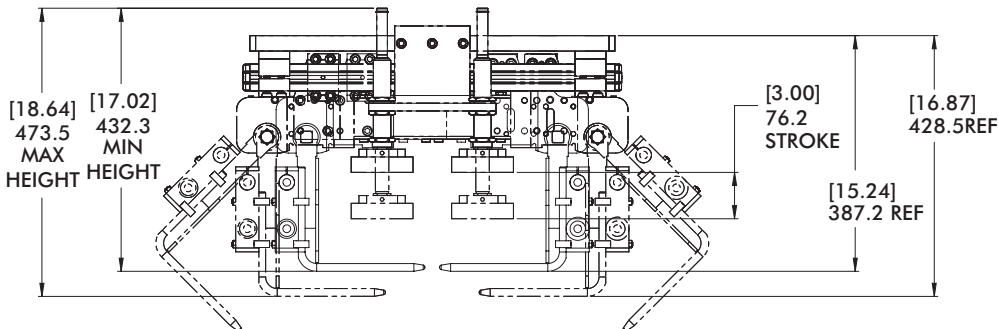


Setup Probe:
(Removed after installation & setup)

3.00" [76.2mm]

Model Number	Weight
DBG100-2-SU3	[12.4 lb] 5.6 kg

Add to base model weight



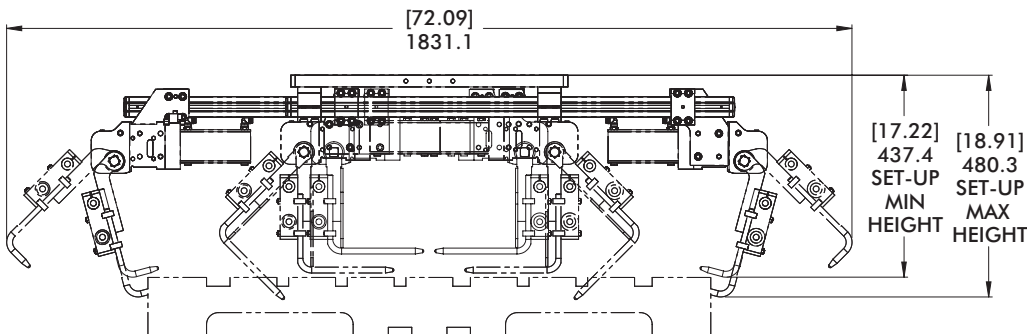
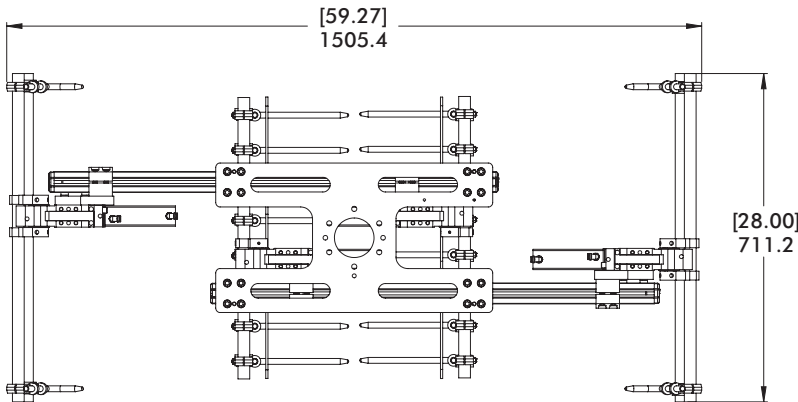
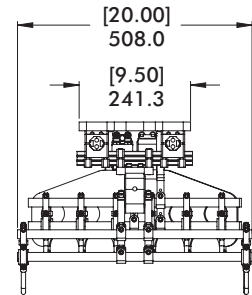
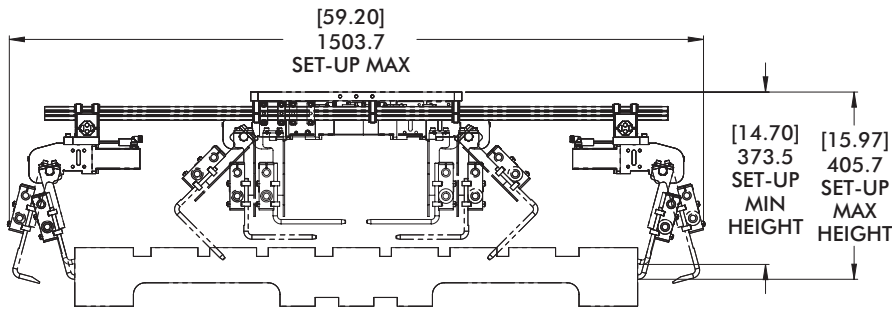
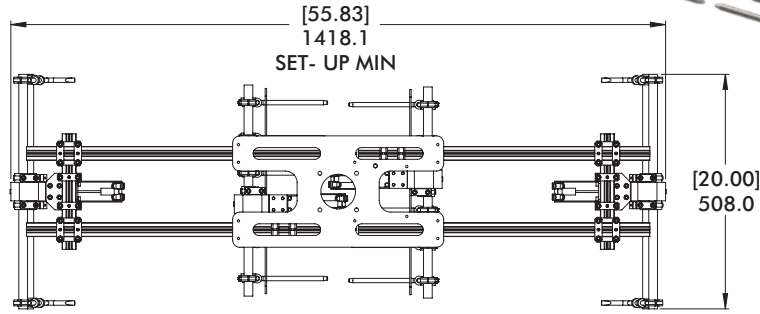
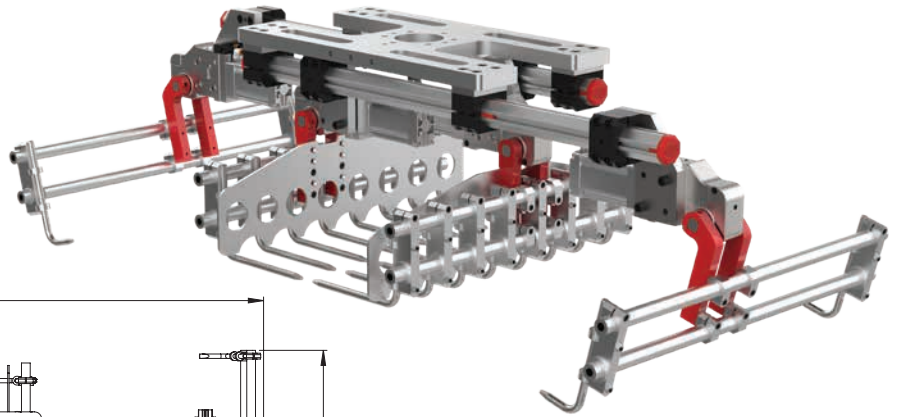
Note: mm/[Inches]

PALLET PICK AND PLACE OPTION

Bag Gripping and Palletizing Solutions | Dimensions

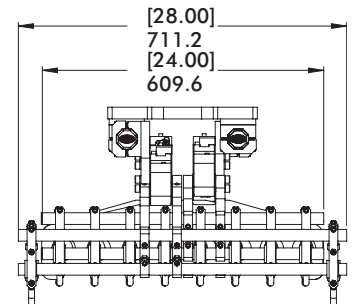
Model Number	Weight
DBG50-2-PP	[29 lb] 13 kg

Add to base model weight



Model Number	Weight
DBG100-2-PP	[48 lb] 22 kg

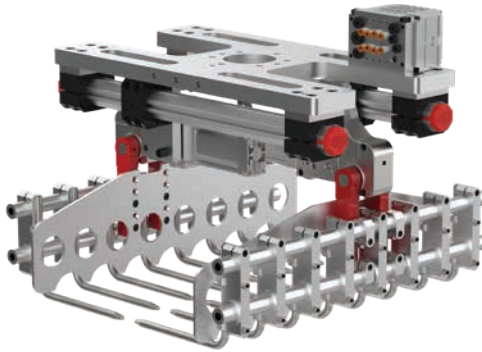
Add to base model weight



Note: mm/[Inches]

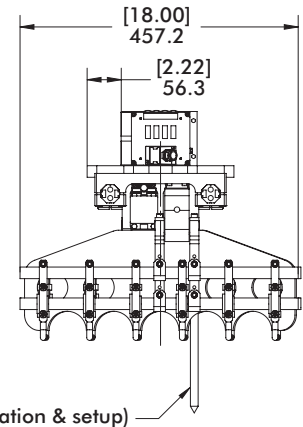
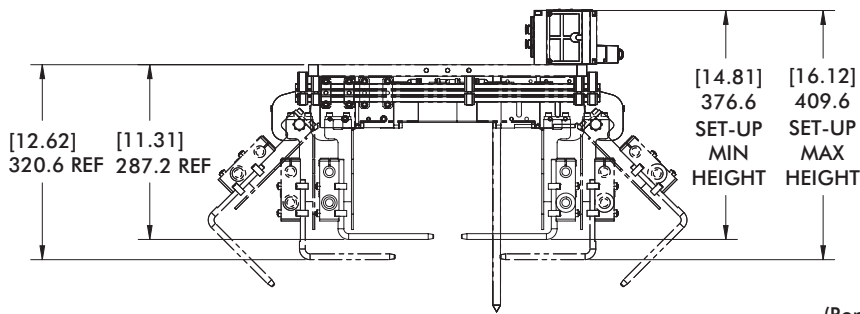
CONTROLS AND VALVE PACKAGE OPTION

Bag Gripping and Palletizing Solutions | Dimensions



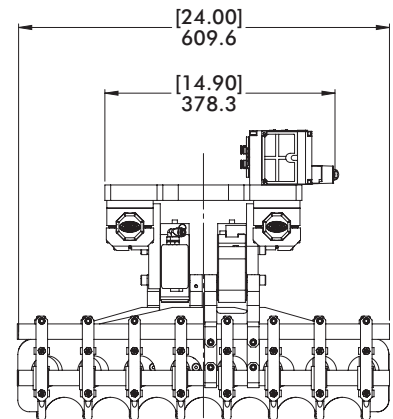
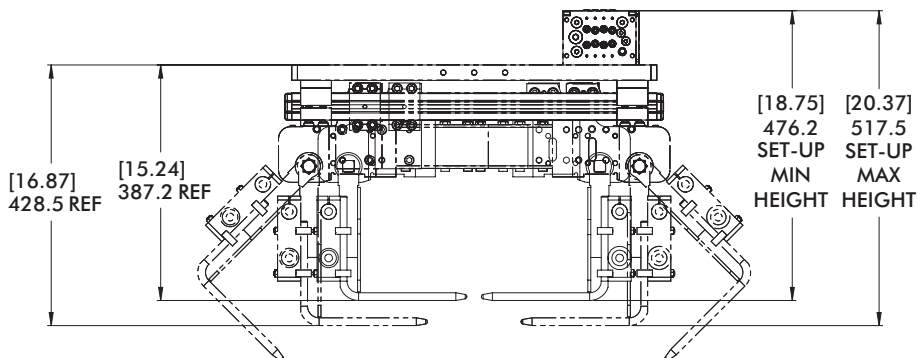
Model Number	Weight
DBG50-2-CP	[5 lb] 2.3 kg

Add to base model weight



Model Number	Weight
DBG100-2-CP	[5 lb] 2.3 kg

Add to base model weight

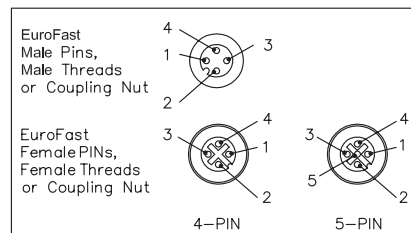
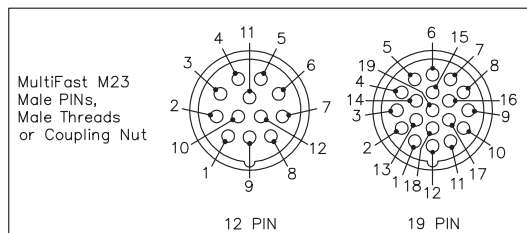
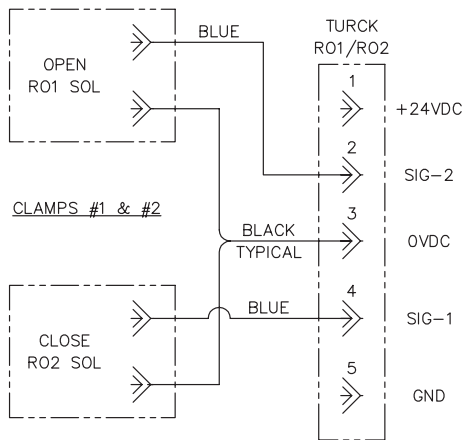
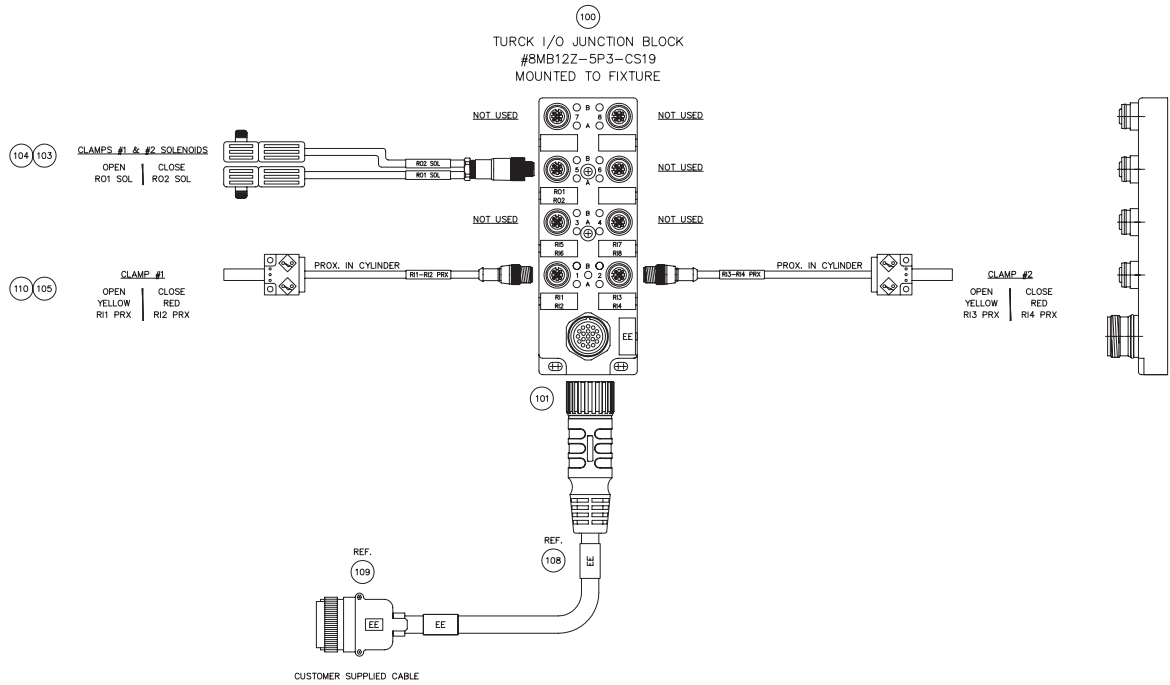


Note: mm/[Inches]

DBG-2-CP-KIT CONTROLS PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

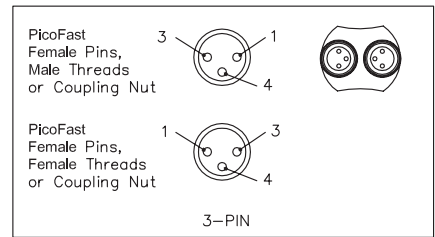
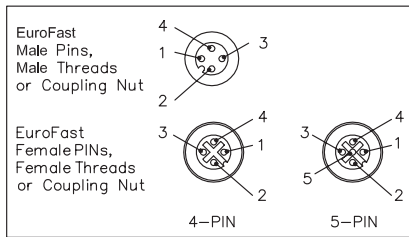
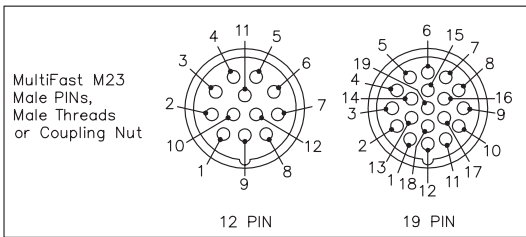
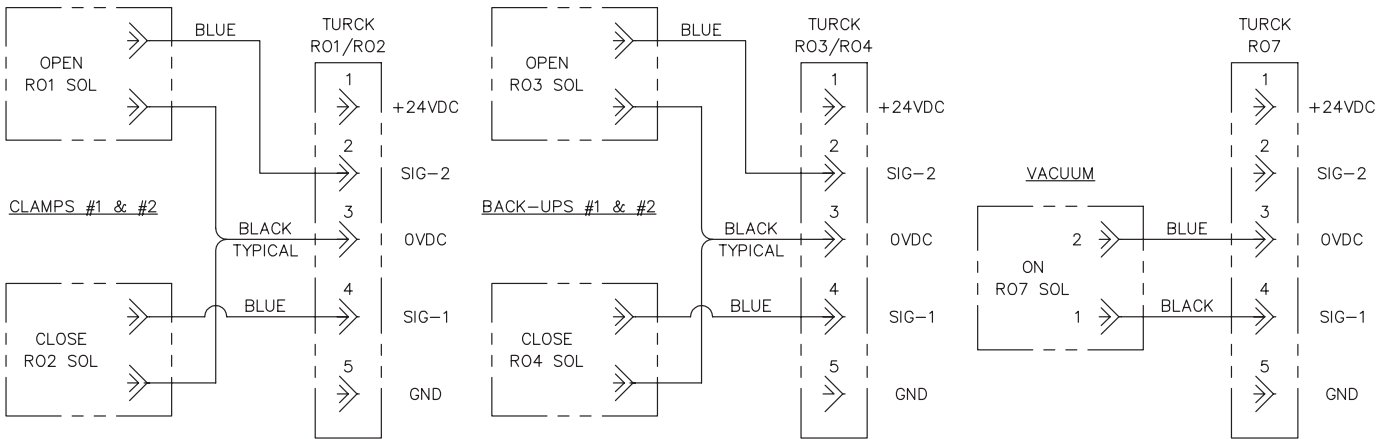
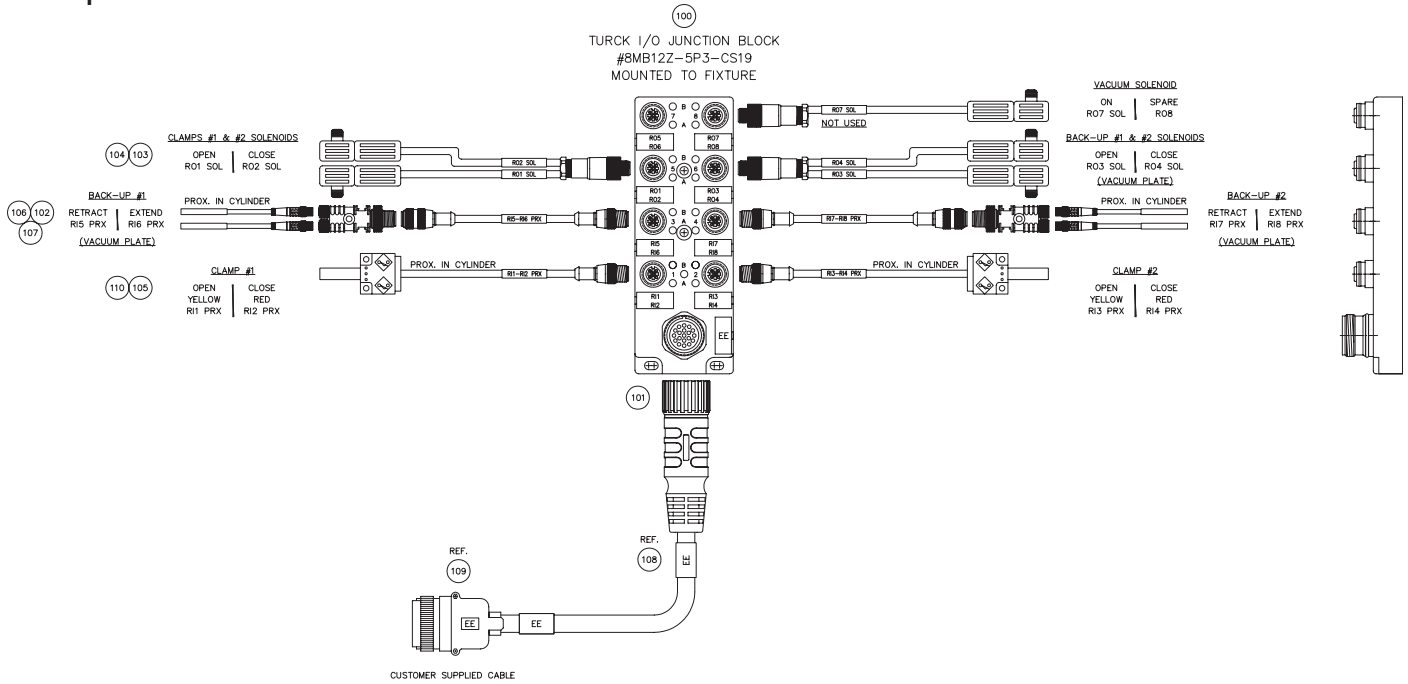
For Base Model



DBG-2-CP-PU-SP-KIT CONTROL PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

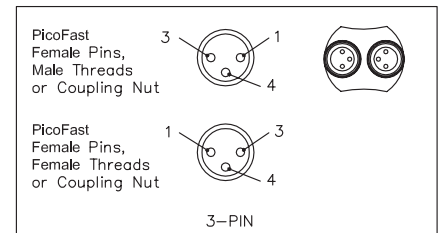
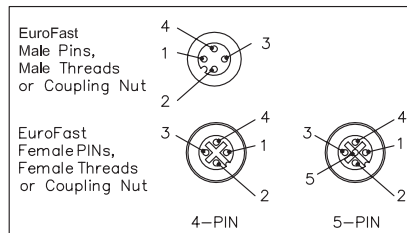
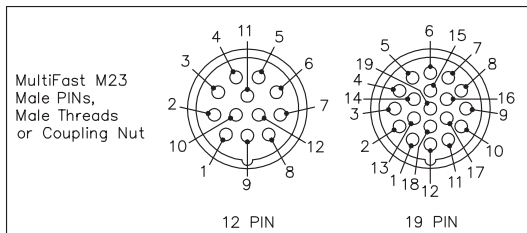
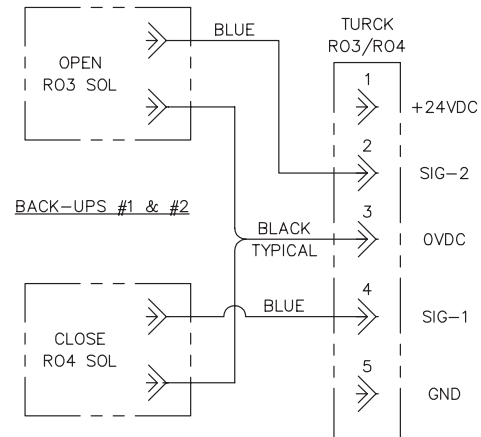
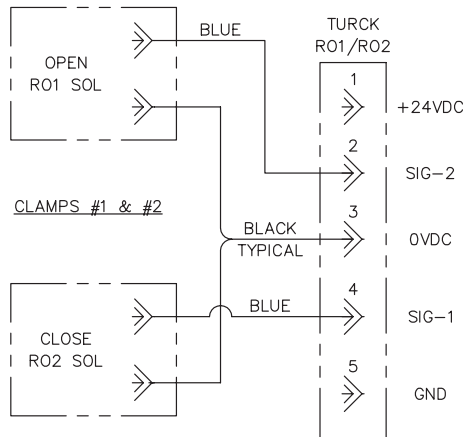
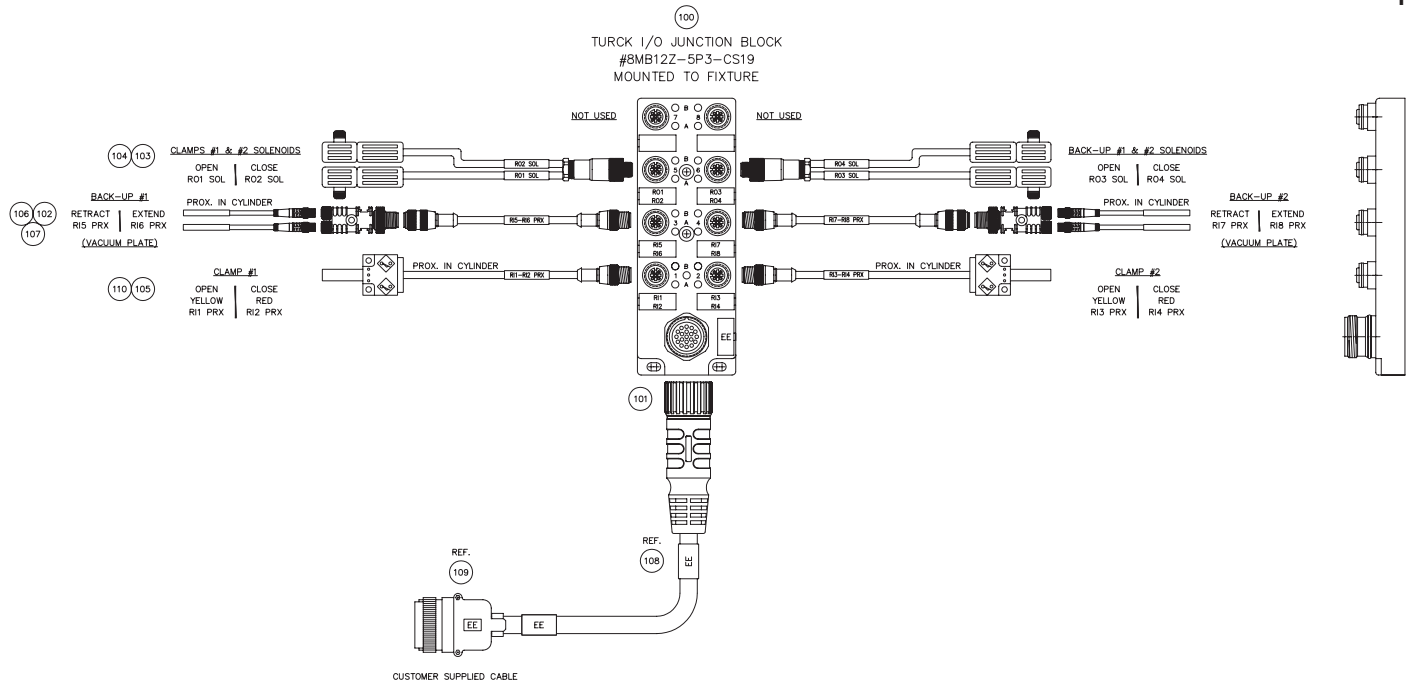
For Slip Sheet Pick and Place



DBG-2-CP-PU-BU-KIT CONTROLS PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

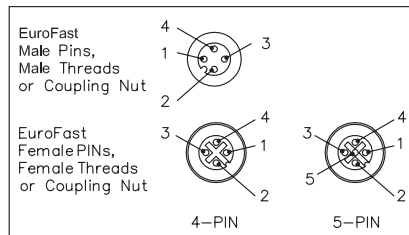
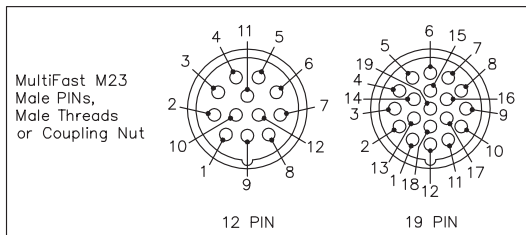
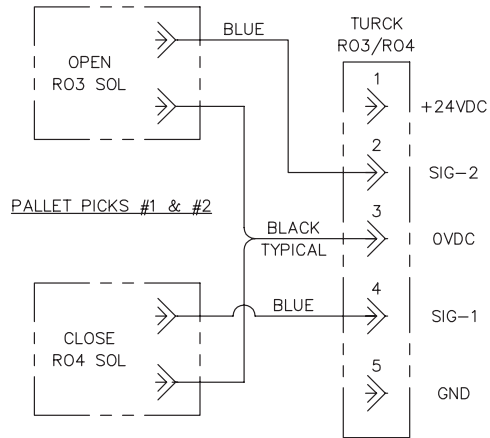
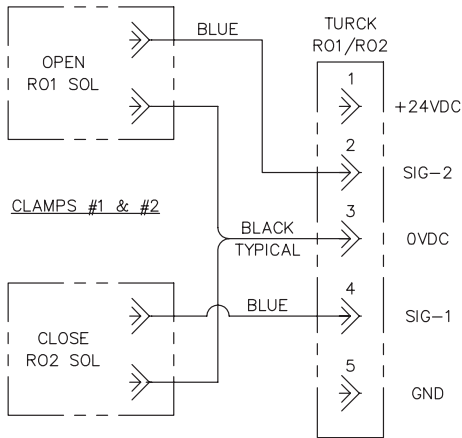
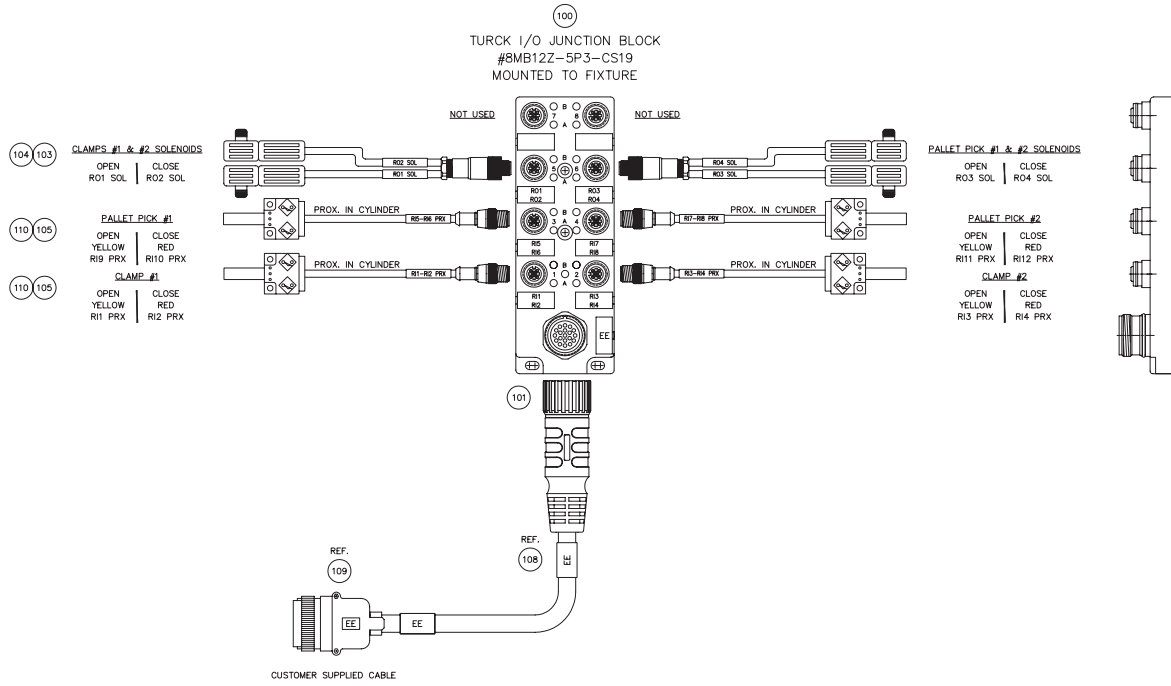
For Pneumatic Back-up



DBG-2-CP-PP-KIT CONTROLS PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

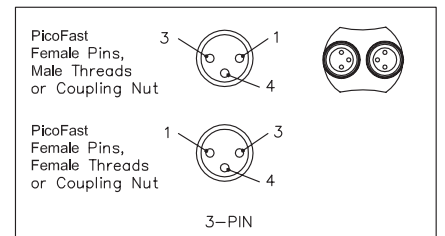
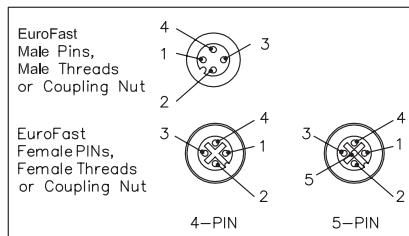
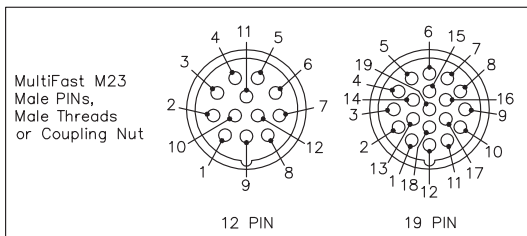
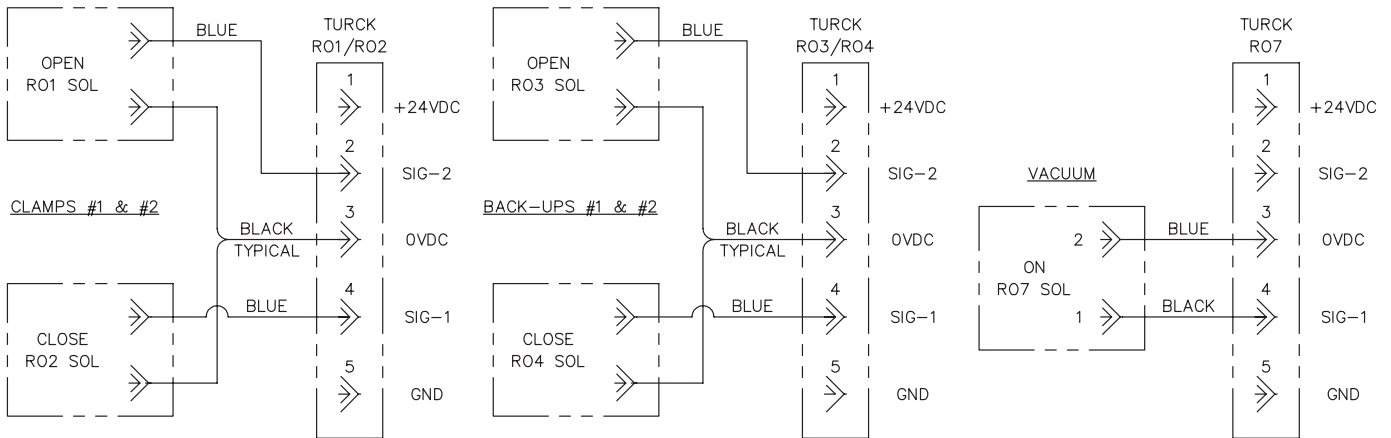
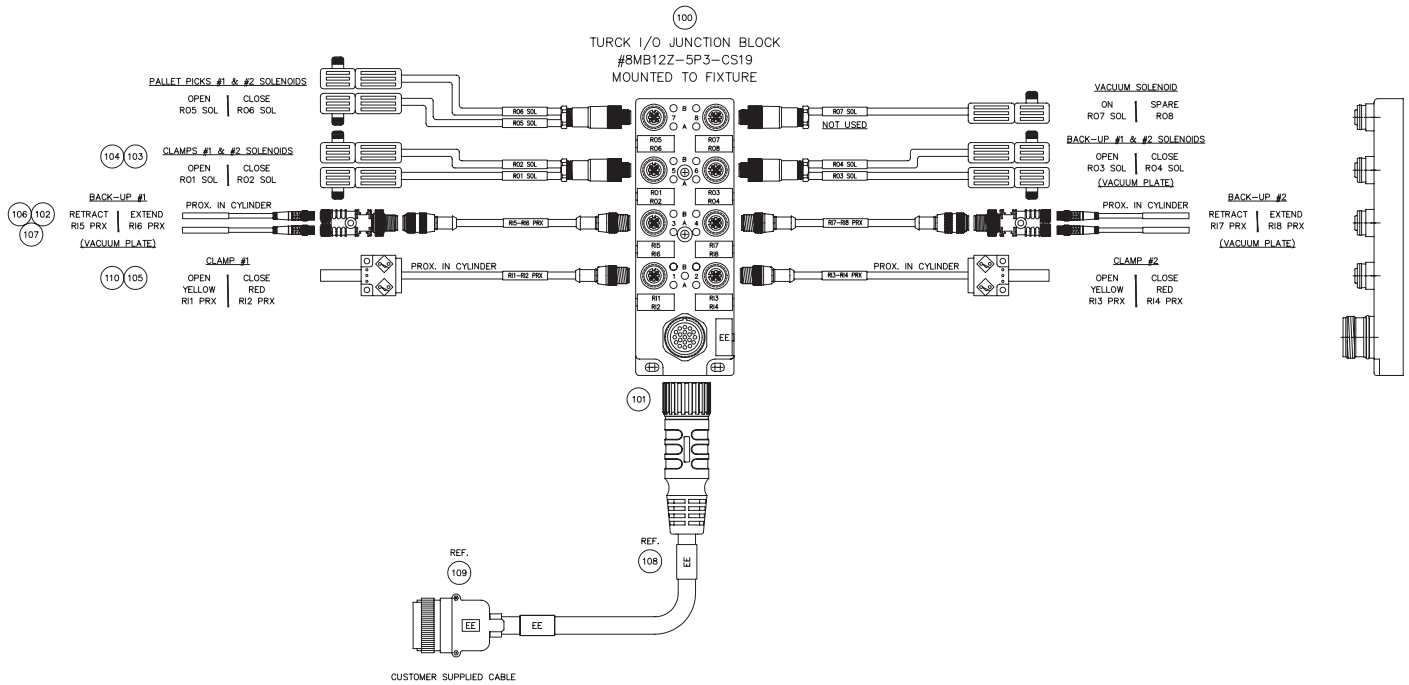
For Pallet Pick and Place



DBG-CP-PU-SP-PP-KIT CONTROLS PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

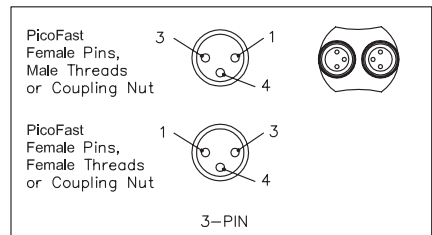
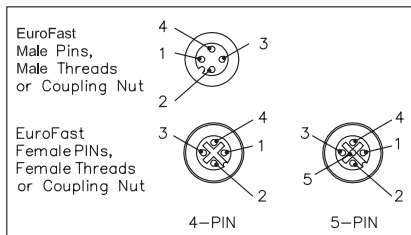
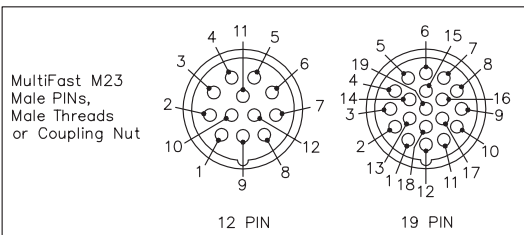
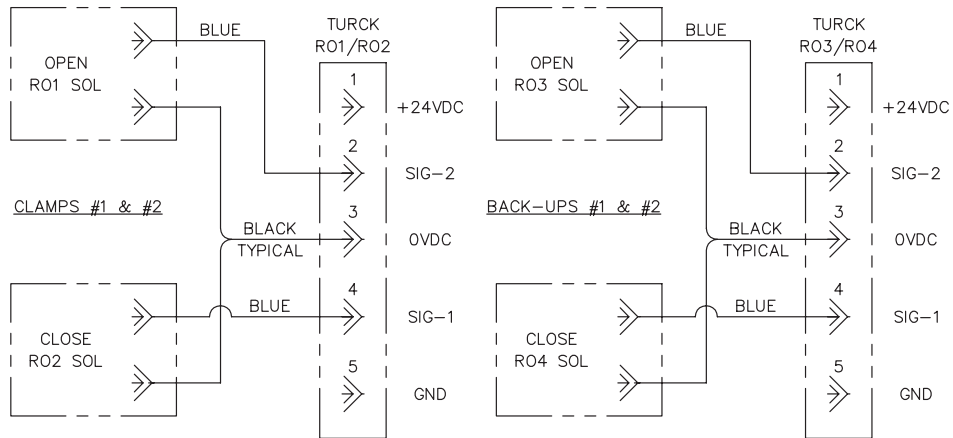
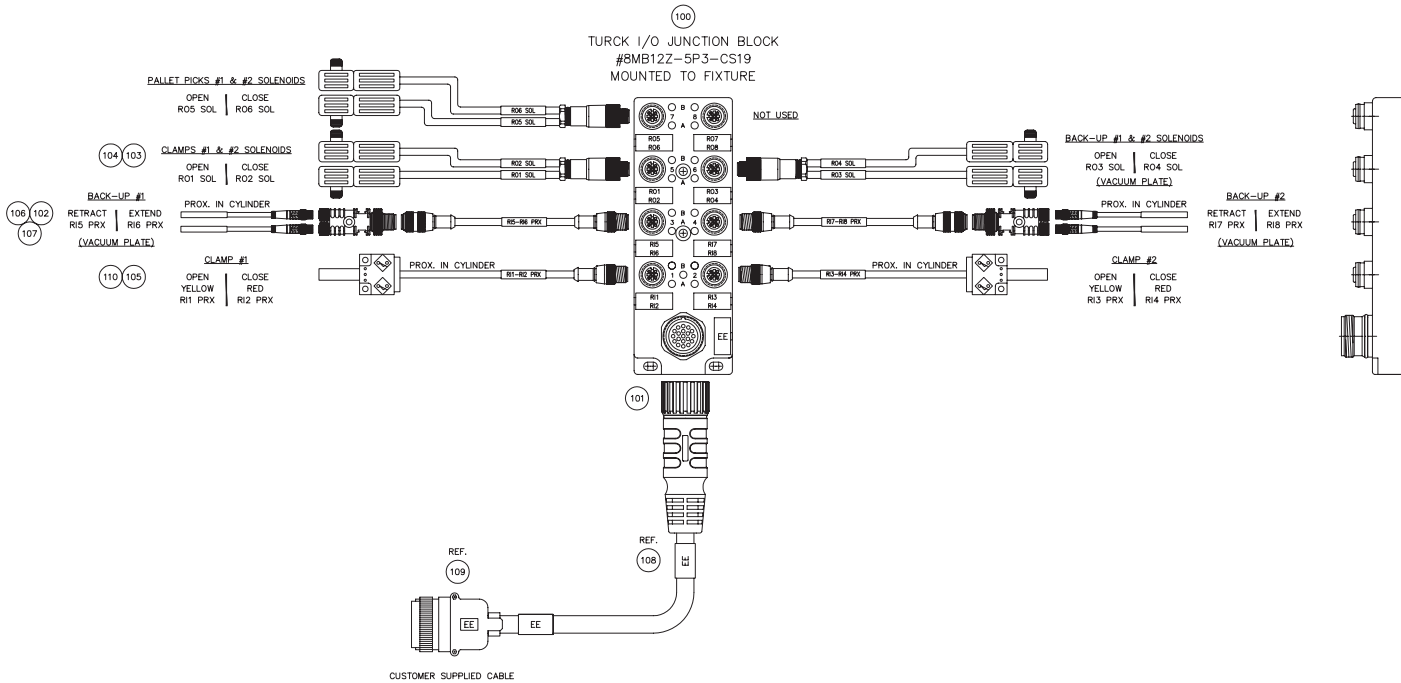
For Pallet Pick and Place/Slip Sheet Pick and Place



DBG-CP-PU-BU-PP-KIT CONTROLS PACKAGE

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications

For Pallet Pick and Place/Pneumatic Back-up



ROBOT STAND-OFF ADAPTOR

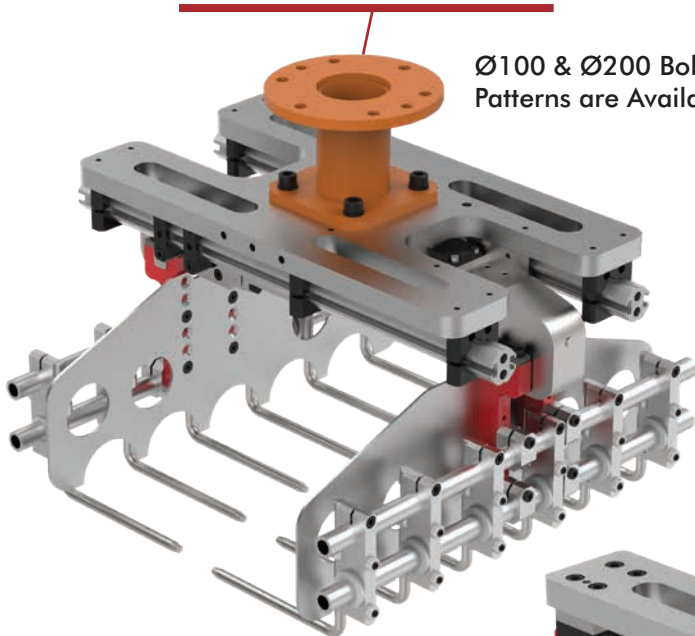
Bag Gripping and Palletizing Solutions | Product Overview

(Sold Separately)

- Aluminum welded construction
- Painted safety orange
- Available in 100, 125, 160 & 200mm bolt circles (Custom stand-offs available upon request)
- Bolts for mounting to bag gripper are included

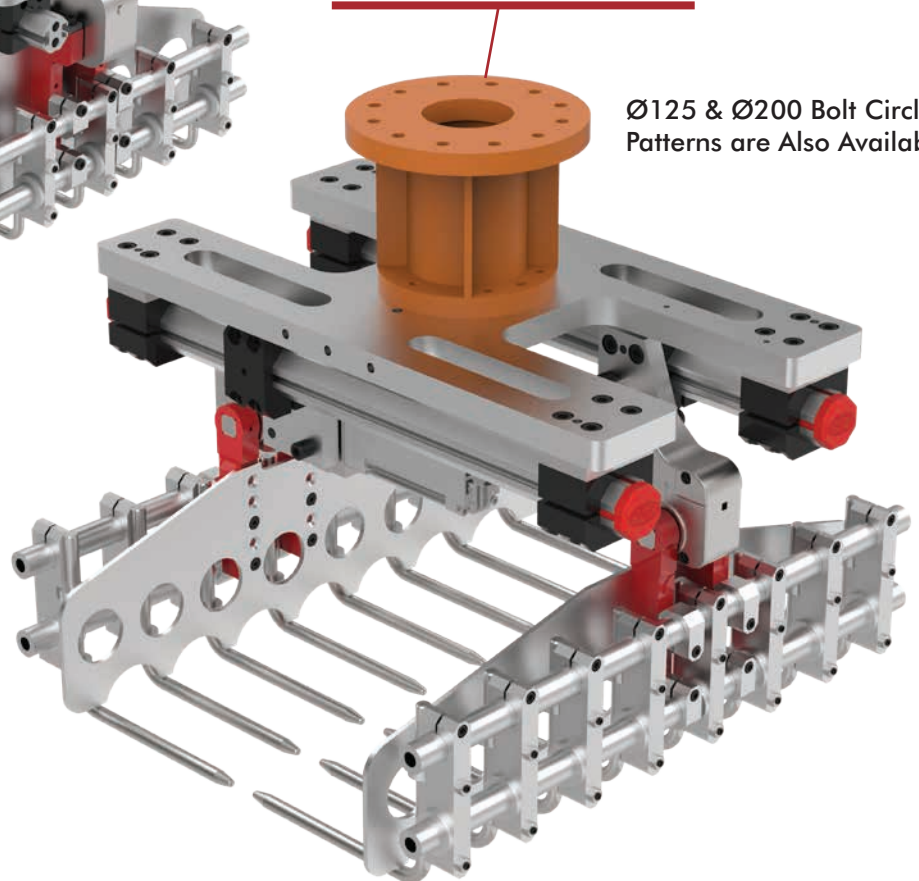
Robot Mount Stand-Off
with $\text{\O}125$ Bolt Circle Pattern
DBG50-2-S04-125BC-KIT

$\text{\O}100$ & $\text{\O}200$ Bolt Circle
Patterns are Available



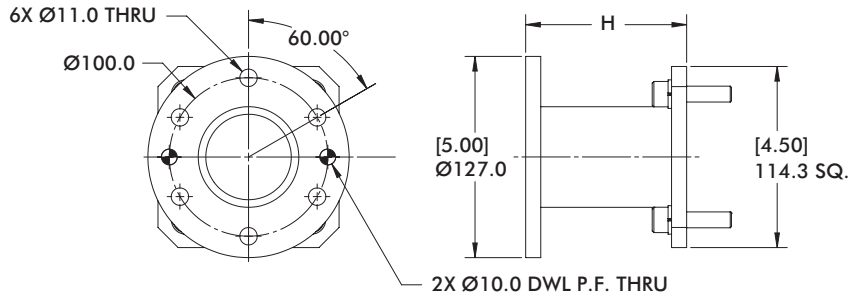
Robot Mount Stand-Off
with $\text{\O}160$ Bolt Circle Pattern
DBG100-2-S04-160BC-KIT

$\text{\O}125$ & $\text{\O}200$ Bolt Circle
Patterns are Also Available



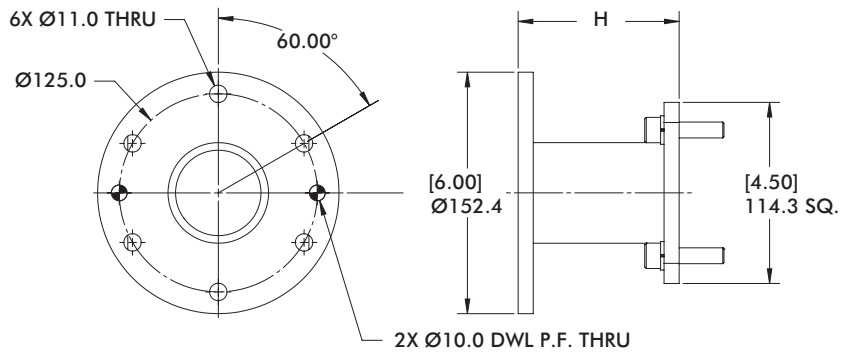
ROBOT STAND-OFF ADAPTOR

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications



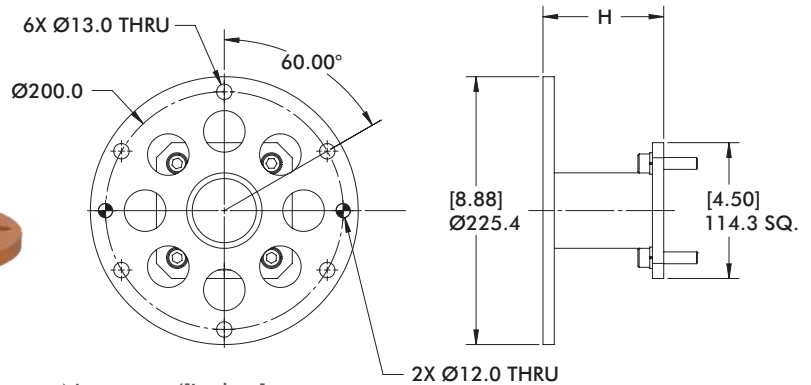
Material: Aluminum painted safety orange
(4) M10 SHCS & Lock washers included

Model Number	H [inch]/mm	Weight
DBG50-2-S04-100BC-KIT	[4.00] 101.6	[4.8 lb] 2.2 kg
DBG50-2-S06-100BC-KIT	[6.00] 152.4	[5.5 lb] 2.5 kg



Material: Aluminum painted safety orange
(4) M10 SHCS & Lock washers included

Model Number	H [inch]/mm	Weight
DBG50-2-S04-125BC-KIT	[4.00] 101.6	[5.7 lb] 2.6 kg
DBG50-2-S06-125BC-KIT	[6.00] 152.4	[6.5 lb] 2.9 kg



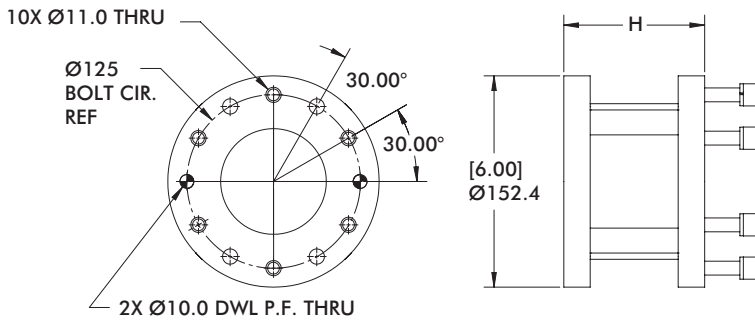
Note: mm/[Inches]

Material: Aluminum painted safety orange
(4) M10 SHCS & Lock washers included

Model Number	H [inch]/mm	Weight
DBG50-2-S04-200BC-KIT	[4.00] 101.6	[7.9 lb] 3.6 kg
DBG50-2-S06-200BC-KIT	[6.00] 152.4	[8.7 lb] 3.9 kg

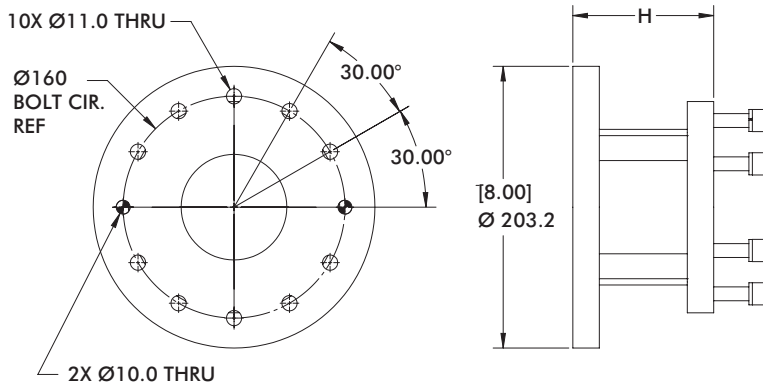
ROBOT STAND-OFF ADAPTOR

Bag Gripping and Palletizing Solutions | Dimensions | Technical Specifications



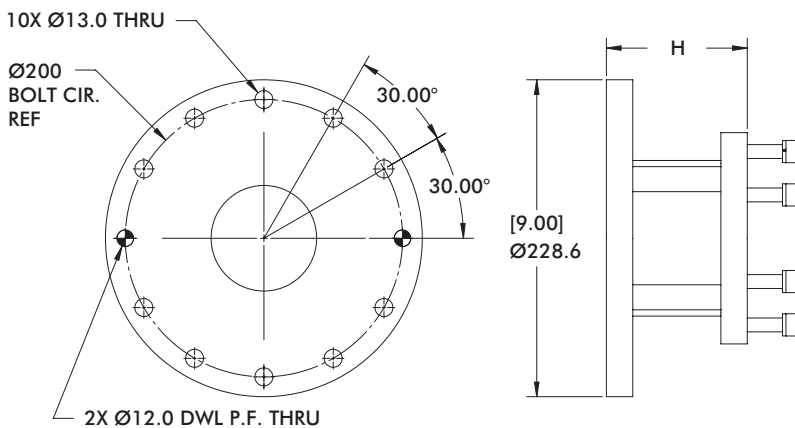
Model Number	H [inch]/mm	Weight
DBG100-2-S04-125BC-KIT	[4.00] 101.6	[4.4 lb] 2.0 kg
DBG100-2-S06-125BC-KIT	[6.00] 152.4	[5.2 lb] 2.4 kg

Material: Aluminum painted safety orange
(6) M10 SHCS & Lock washers included



Model Number	H [inch]/mm	Weight
DBG100-2-S04-160BC-KIT	[4.00] 101.6	[6.0 lb] 2.7 kg
DBG100-2-S06-160BC-KIT	[6.00] 152.4	[6.8 lb] 3.1 kg

Material: Aluminum painted safety orange
(6) M10 SHCS & Lock washers included



Note: mm/[Inches]

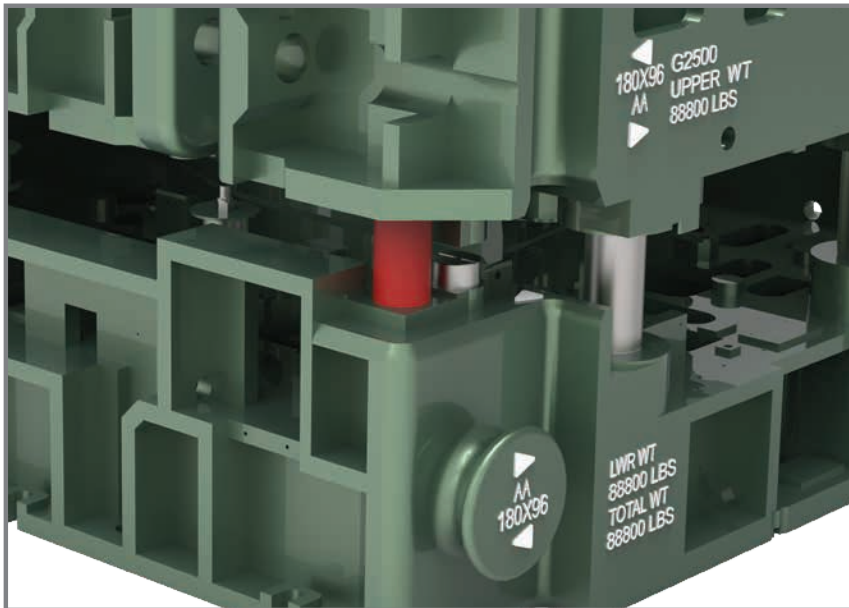
Model Number	H [inch]/mm	Weight
DBG100-2-S04-200BC-KIT	[4.00] 101.6	[6.9 lb] 3.1 kg
DBG100-2-S06-200BC-KIT	[6.00] 152.4	[7.7 lb] 3.5 kg

Material: Aluminum painted safety orange
(6) M10 SHCS & Lock washers included

DIE STORAGE BLOCKS AND ROLLERS

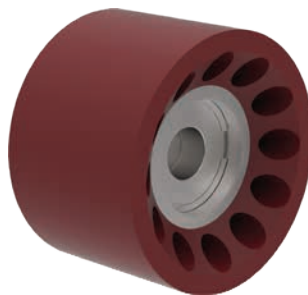
Die Components | Product Overview

DESTACO has developed special urethane compounds that have been incorporated into die storage blocks that were previously made using all steel construction. The use of DESTACO Urethane Die Storage Blocks greatly reduces scratching and damage to parts and die surfaces. Our Storage Blocks can mount directly to the die or, as an option, use our steel, double-hinge, swing-away bases.



Ball Bearing Cushion Rollers

DESTACO Rollers are designed to meet the high performance needs of the industrial market. Available in cushion design where maximum protection from shock loads is required and noise, scratch and dent free service is a necessity. Rollers are made of oil and cut resistant neoprene and nitrile material, molded in four color coded durometers and are offered with or without stud mounting. DESTACO rollers protect your products!



Standard
Roller

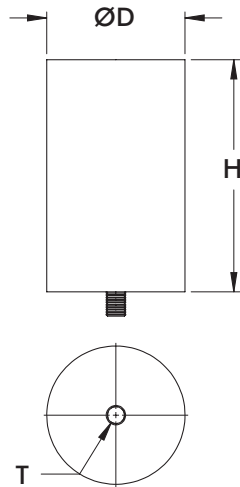
DIE STORAGE BLOCKS AND ROLLERS

Die Components | Dimensions | Technical Specifications

Die Storage Blocks

Features:

- Made of long-lasting 80 durometer red urethane
- Can remain in place when die is used
- Imperial and metric threads available

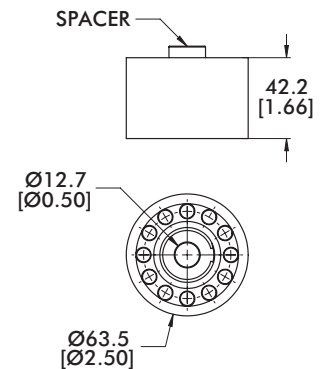
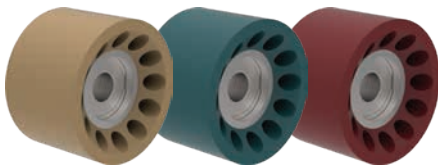


Model Number	D mm [in]	H mm [in]	T	Compressed Diameter mm [in]	Compressed Height mm [in]	Load Measured † [T]
CPI-M-1443	88.9 [3.50]	203.2 [8.00]	M16-2	Data Not Available	Data Not Available	Data Not Available

Ball Bearing Cushion Roller

Features:

- DESTACO Cushion Rollers are assembled with free rolling ball bearings so they can be mounted per customer application.
- The cushion design dissipates shock to avoid damaging fragile parts.
- One size with four color coded durometers are available for your applications.



Model Number	Durometer	Color	Material Hardness	Normal Kg [lb]	Maximum Kg [lb]	Material	Weight g [lb]
CA-250-15	15	Tan	Soft	2.3 [5]	4.5 [10]	Neoprene	136 [0.3]
CA-250-30	30	Green	↑	4.5 [10]	9.1 [20]	Nitrile	
CA-250-45	45	Red	↓	6.8 [15]	13.6 [30]		

GLOBAL SALES CONTACTS

CORPORATE HEADQUARTERS



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+1-248-836-6700
northamerica@destaco.com

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TH
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CZ
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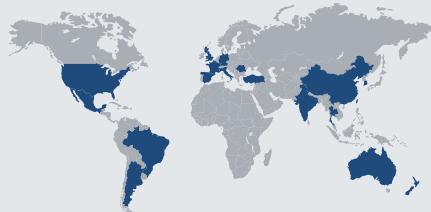
CA
canada@destaco.com



Click or Scan
to learn more
about Stabilus.



Industries



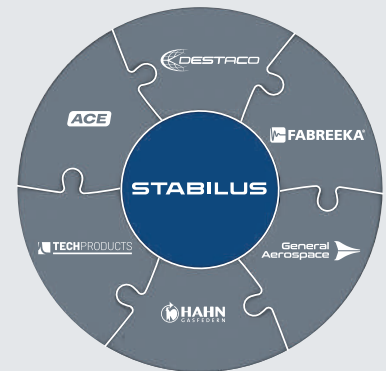
45 Locations in 19 Countries



8K Employees



2024 Revenues



Expert Brands