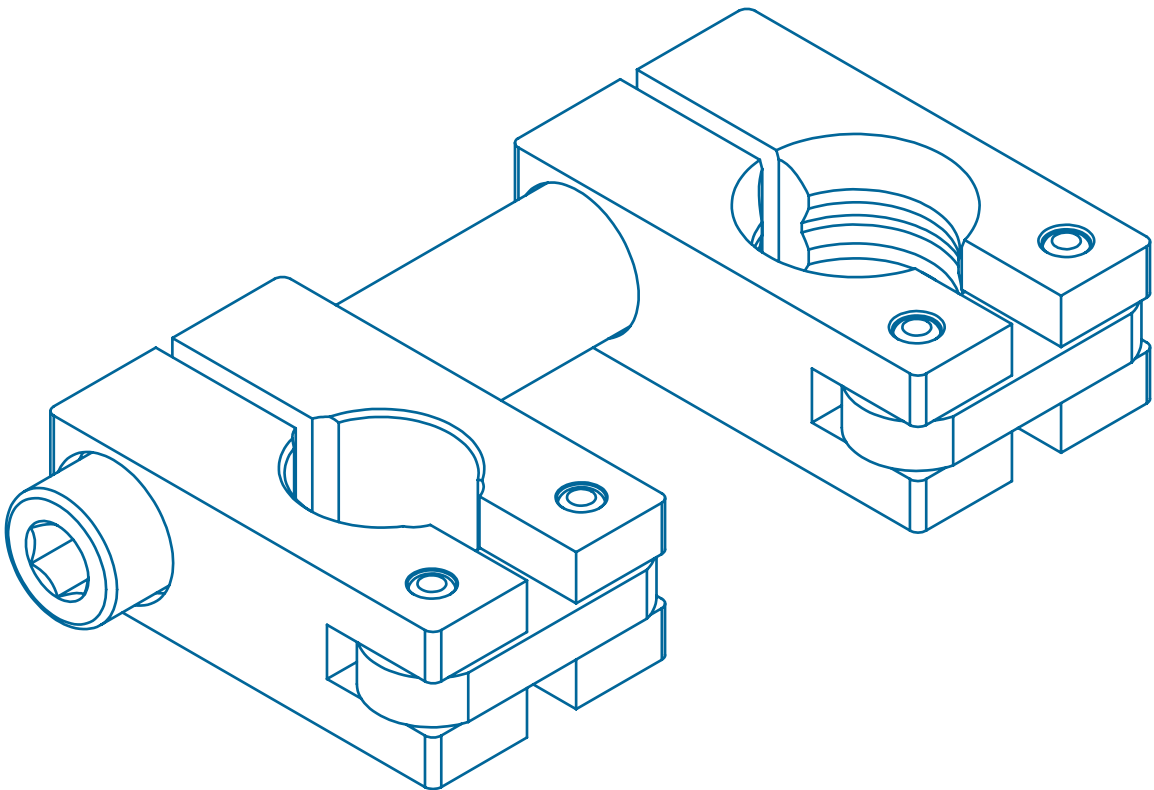
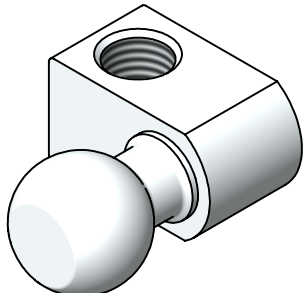


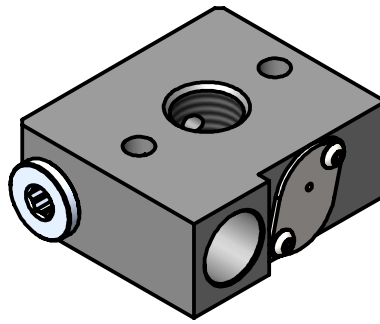
# End of Arm Tooling (EOAT)

## Section 16

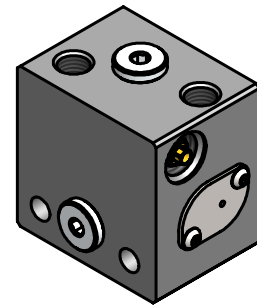




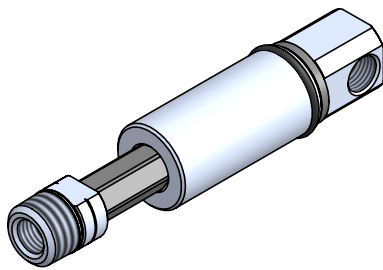
**Vacuum Connections**



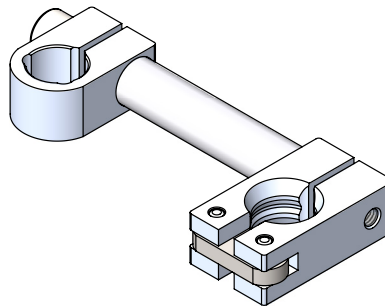
**Low-Profile Vacuum Connections & Pumps**



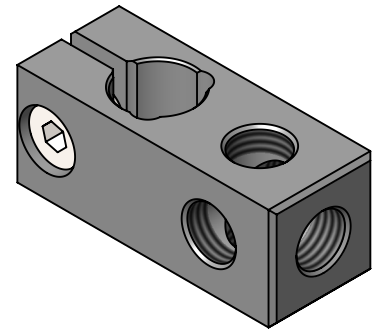
**VacLoc**



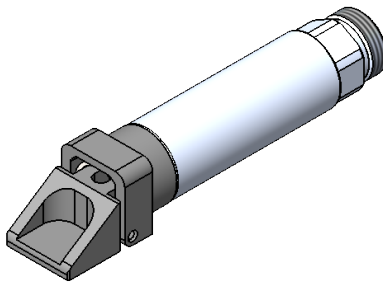
**EMAT Level Compensators**



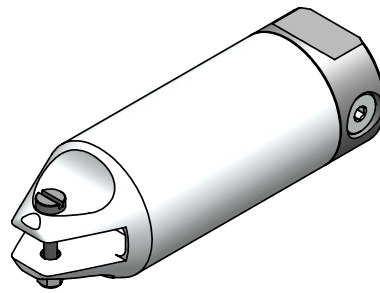
**EMAT Arms**



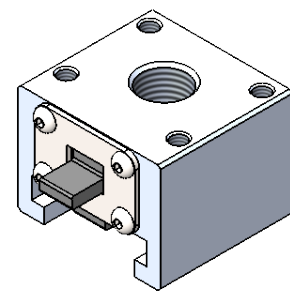
**Clamps & Mounts**



**Gripper Fingers**

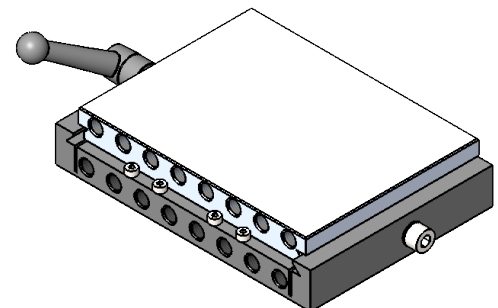


**Nipper Bodies**



**T-Slot Receivers**

Information	3
Vacuum Connection	6
Low-Profile Vacuum Connections & Pumps	7
VacLoc	9
Level Compensators (EMAT Style)	14
EMAT Arms	18
Clamps & Mounts	22
Gripper Fingers	39
Nipper Bodies	43
T-Slot Receiver w/ Vacuum Connection	47
Robotic Quick Changers	50



**Robotic Quick Changers**

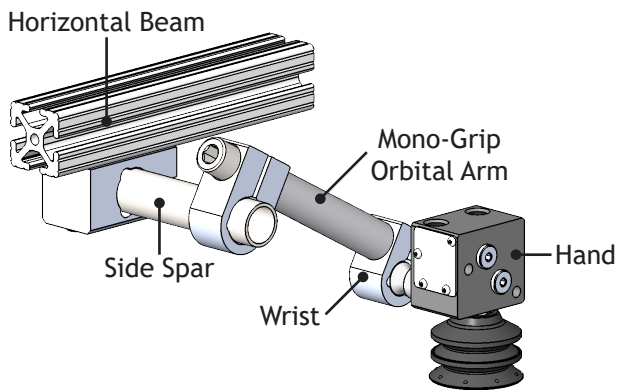
## Modular Automation Tooling

Modular automation tooling (EMAT) provides an efficient way to construct automation or robotic tools with minimal design time. Rugged, lightweight anodized aluminum components adjust easily to conform to the work piece then are securely tightened with standard hand tools.

Typically, a tool is constructed with a horizontal beam of round tubing or t-slot, structural extrusion and several side spars for attaching mono-grip, orbital arms, wrists, and hands with appropriately selected options that provide virtually unlimited design freedom.

EMAT systems may be set up using a large, centralized vacuum pump to supply several vacuum cups, but much greater system reliability can be achieved via the redundancy of a discrete system. A discrete system with small, independent, compressed air powered vacuum pumps at each vacuum cup is the preferred method. With a discrete system, a poor seal at one vacuum cup can't affect the vacuum level at other vacuum cups. A discrete system also allows splitting the system into several, independently controlled zones allowing for a wider variety of part sizes and shapes to be efficiently handled.

Modular automation tooling with EDCO USA products provides simplicity, adjustability, rigidity, serviceability, energy conservation, and cost-effectiveness in readily available components.



Energy conservation is provided by efficient high-flow coaxial ejector technology which is also capable of passing more debris than competitive designs without clogging. In addition, there is no flap valve to stick and affect performance.

High-efficiency sequence valve remains fully open during blow-off so chattering, humming, and squealing noises are eliminated. Compressed air consumption is reduced significantly by using lower air pressure during the blow-off mode.

An internal orifice balances air flow so that several VacLoc blow-off ports may be supplied and controlled by one solenoid valve.

EMAT tooling is easily reconfigurable to meet changing application requirements.

Fast and simple single-bolt arm adjustment (mono-clamp) and tri-arc grip provides superior positional security via higher clamping forces.

Modular construction allows swapping hands, changing arm lengths, changing suction cups or duty-attachments and repositioning or adding slide-on or clamp-on orbital arms to reconfigure the tool whenever necessary.

Unlimited multi-axis arm positioning - configure wrists with either an orbital apple-core pin or a ball swivel for greater mobility to conform to part contours.

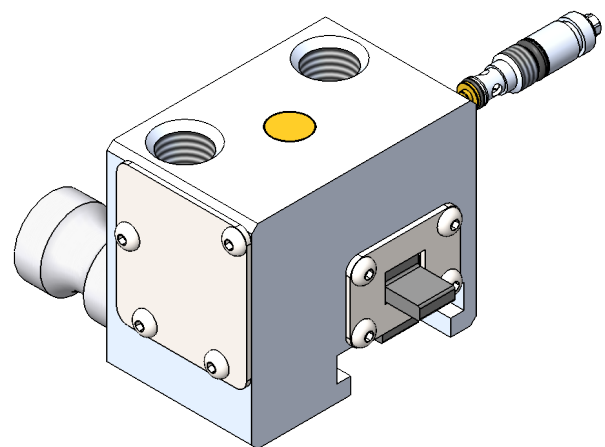
### VacLoc

Fail-safe operation is provided by integral VacLoc valves in leak-free systems. If the vacuum source is lost, or is purposely interrupted as in an Energy-Saving system, the VacLoc will trap vacuum for an indefinite time period so the load can be lowered to a safe position.

Modular VacLoc vacuum check valve and sequence blow valve are installed in a cartridge body for perfect alignment and valve seats are electroless-nickel plated for long life. A one-piece work-attachment body eliminates secondary vacuum leak paths and the potential for loosening or separation during operation.

### Coaxial Venturi Technology

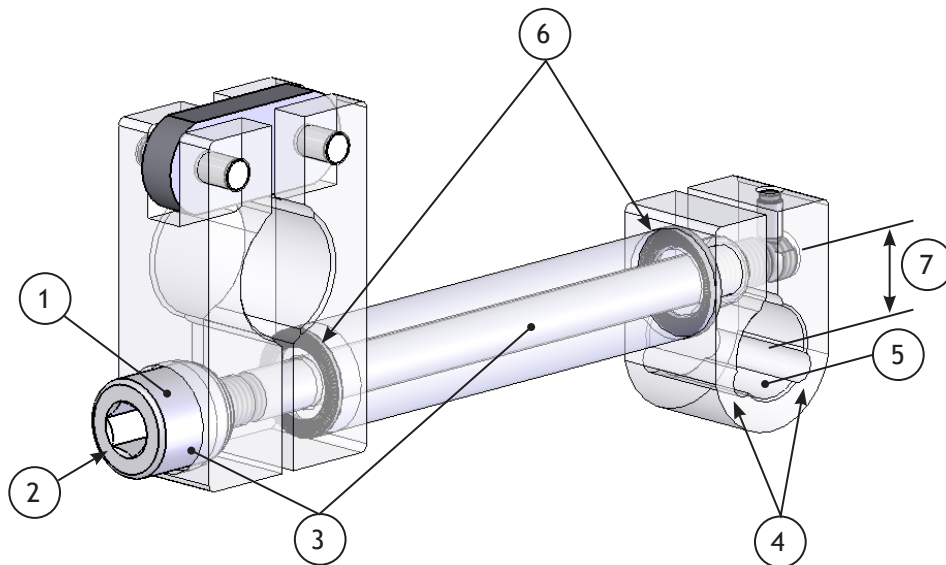
Proprietary EMAT coaxial ejector vacuum pumps are optimized to provide high vacuum flow and reduce compressed air consumption. There are no flap-valves to swell up or stick due to ingesting die lubricants and the simplified design is tolerant of debris.



## EMAT Arm Features

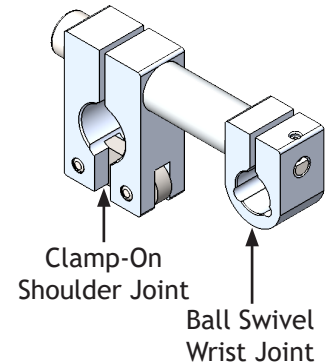
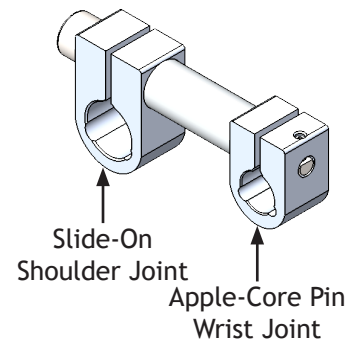
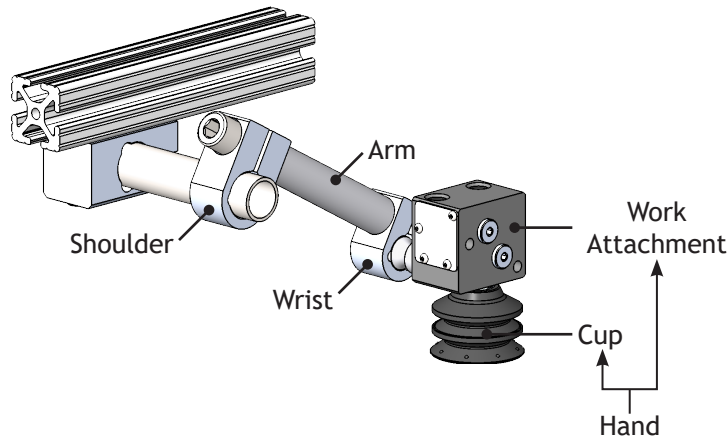
Improved technology provides greater arm positional security.

- 1.) A spherical nut nests into a spherical pocket to eliminate misalignment and resultant stress concentration that can cause joints to loosen.
- 2.) A larger hex wrench socket allows greater torque to be applied.
- 3.) A nut and stud configuration more efficiently translates tightening torque into stud tension than a long cap and screw do where much of the torque is absorbed by twisting off the long screw shank.
- 4.) Clamp jaws are relieved to form flexible hinges to greatly reduce the spring-back effect, significantly increasing the available clamp force.
- 5.) Segmented clamp jaws provide a secure tri-arc grip superior to the weaker grip produced by the two-point-contact grip of competitive units.
- 6.) Hardened spacers having raised radial micro-teeth are installed at both ends of the arm extension rod to mechanically interlock the arm components, providing rotational resistance and positional security.
- 7.) A larger pin retainer diameter positions the stud farther from the clamp centerline and the increased leverage produces a higher clamping force.



## EMAT System Explanation

An EMAT arm is analogous to a human arm. The shoulder joint is either a slide-on or clamp-on orbital connection to a round structural tube. The arm extends from the shoulder to a wrist which can provide either an orbital (apple-core pin) or a swivel (ball) connection to the hand. The hand consists of a suction cup plus a work-attachment that can be configured to perform several functions such as admitting or producing vacuum, additional compliance (level compensator) or greater control via VacLoc or energy-saving controls.



### Selection Guide

Begin at work-piece and select components in sequence back to the main beam.

- 1.) Select a vacuum cup style and size based on the weight of the work-piece, area available, and work-piece surface. For cup style, refer to the cup selection guide.
- 2.) Select a work-attachment based on your system requirements for function and control.
- 3.) Select either an orbital apple-core pin wrist (A) or a swivel ball wrist (B).
- 4.) Select the arm length based on how far the vacuum cup will be positioned away from the mounting spar.
- 5.) Select a shoulder joint to attach to the spar. The slide-on style costs less but isn't as convenient for reconfiguring the tool. The hinged, clamp-on style can be mounted or added anywhere along the spar length without disturbing other arms.

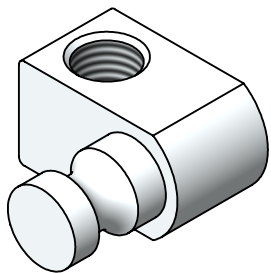
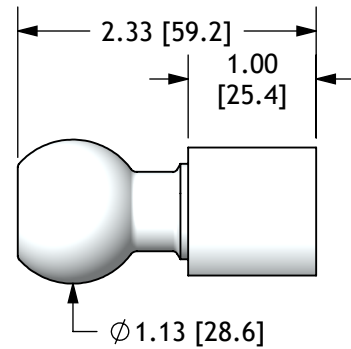
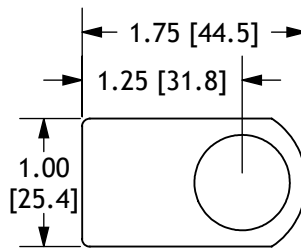
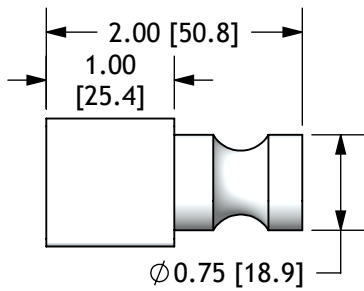
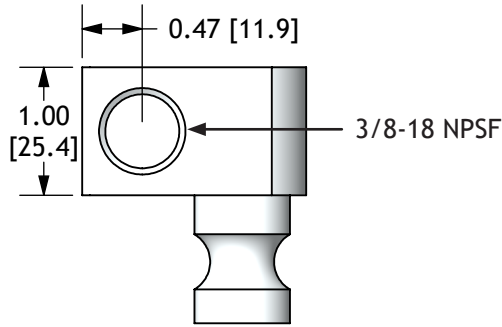
Components selected in steps 1 through 5 can be coded into a single, convenient part number. See "How To Order" for instructions.

- 6.) Select spar tubing diameter and lengths based on where vacuum cups must be positioned in the tool layout.
- 7.) Select appropriate structural adapters to connect spars to the main beam.

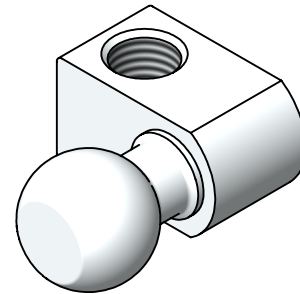
### Vacuum Connection w/ Mount

Our vacuum connections provide a low-profile solution for connecting a vacuum source to your work piece while also being compatible with our EMAT line of arms and tooling.

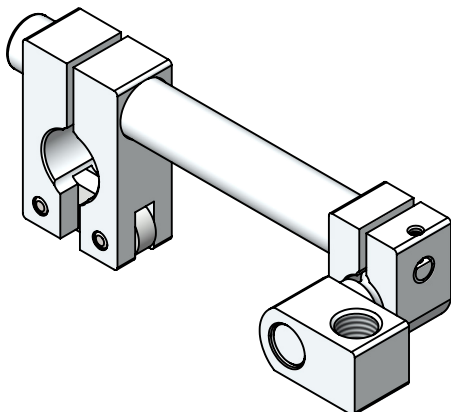
Mount	
V-38F-	A
A	Apple Core Pin
B	Ball Swivel



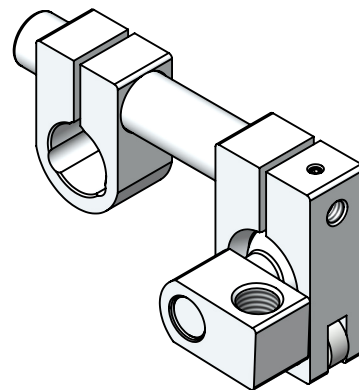
Apple Core Pin  
Weight: 0.17 lb [77.1 g]



Ball Swivel  
Weight: 0.22 lb [99.2 g]



Example: V38F-A w/ C10X2A

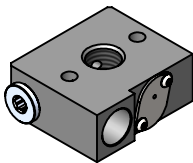
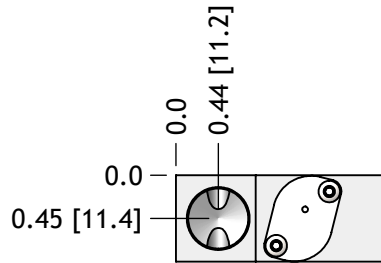
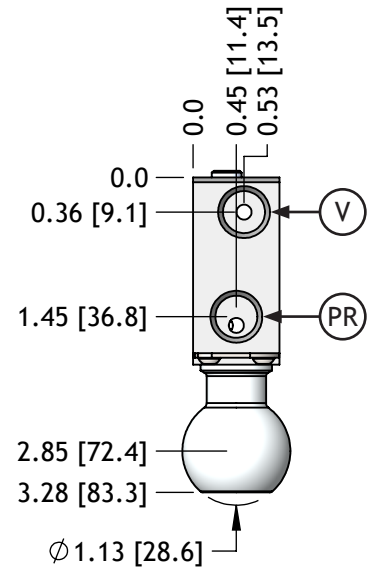
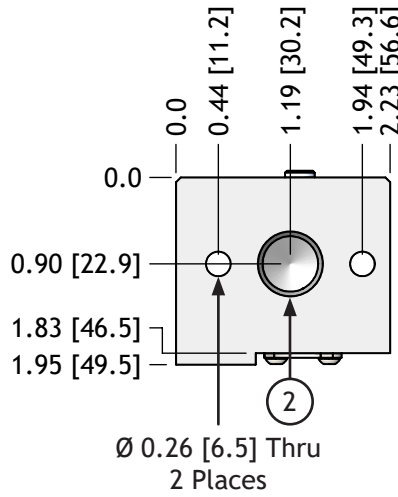
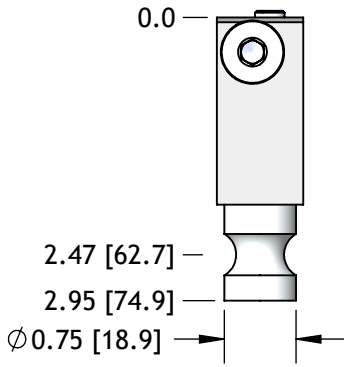
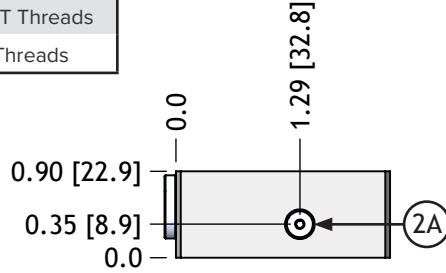


Example: V38F-B w/ S10X1B

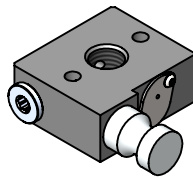
### Low-Profile Vacuum Connection w/ Release

Includes a release (blow-off) sequence valve, provides for mounting a vacuum cup and for connecting a vacuum source. Can be configured with or without a vacuum pump. When used with the direct mount (standard) option, the 3/8 Vacuum Port works great for mounting to our EMAT Level Compensators.

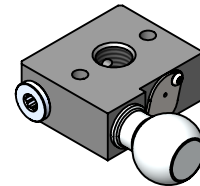
Mount		Ports	
LVB-38F -A			
(Blank)	Direct Mount	(Blank)	NPT Threads
-A	Apple Core Pin	-G	G Threads
-B	Ball Swivel		



Level Compensator Mount  
Weight: 0.28 lb [127.7 g]

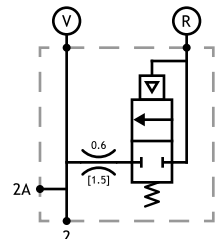


Apple Core Pin Mount  
Weight: 0.34 lb [156.4 g]



Ball Swivel Mount  
Weight: 0.39 lb [178.5 g]

Code	Function	NPT	G
V	Vacuum Source	1/4 NPTF	G 1/4
2	Vacuum	1/4 NPTF	G 1/4
2A	Vacuum - Auxiliary	3/8 NPSF	G 3/8
PR	Pilot Signal - Release	M5X0.8 (10-32 UNF)	

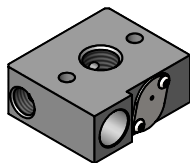
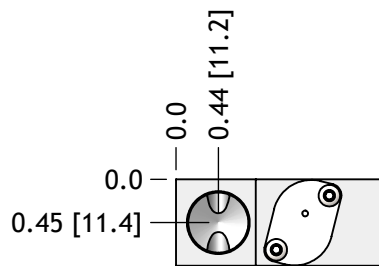
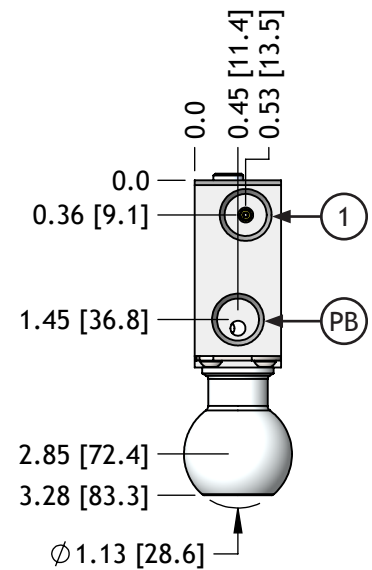
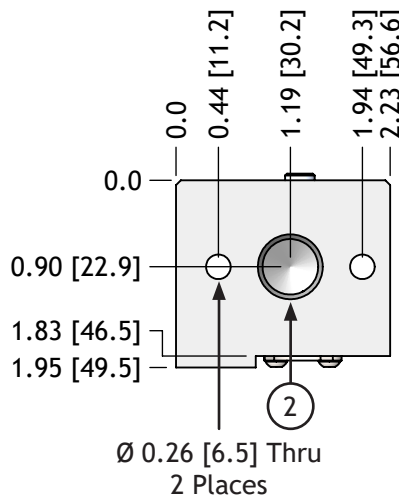
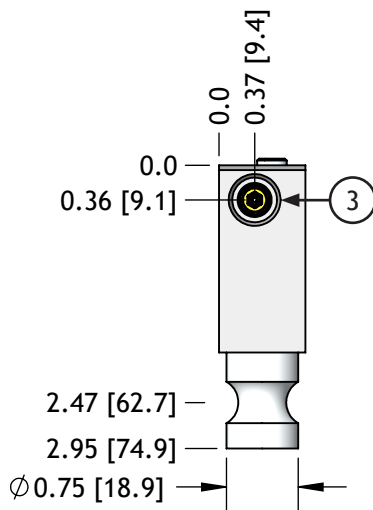
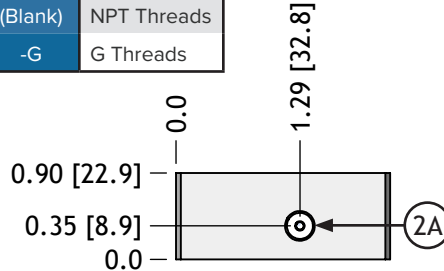


### Low-Profile Vacuum Pump w/ Release

Includes a vacuum pump with release (blow-off) sequence valve, provides for mounting a vacuum cup. When used with the direct mount (standard) option, the 3/8 Vacuum Port works great for mounting to our EMAT Level Compensators.

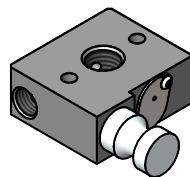
See ER Series Vacuum Pumps section for performance data.

Venturi	Mount	Ports
LPB 10L -38F		
07	(Blank) None	(Blank) NPT Threads
09	-A Apple Core Pin	-G G Threads
10	-B Ball Swivel	
08L		
10L		



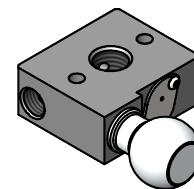
**Basic**

Weight: 0.29 lb [132.7 g]



**Apple Core Pin Mount**

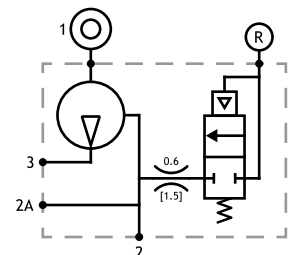
Weight: 0.36 lb [161.3 g]



**Ball Swivel Mount**

Weight: 0.40 lb [183.5 g]

Code	Function	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum	1/4 NPTF	G 1/4
2A	Vacuum - Auxiliary	3/8 NPSF	G 3/8
3	Exhaust	G 1/4	
PB	Pilot Signal - Blow-Off	M5X0.8 (10-32 UNF)	





## VacLoc

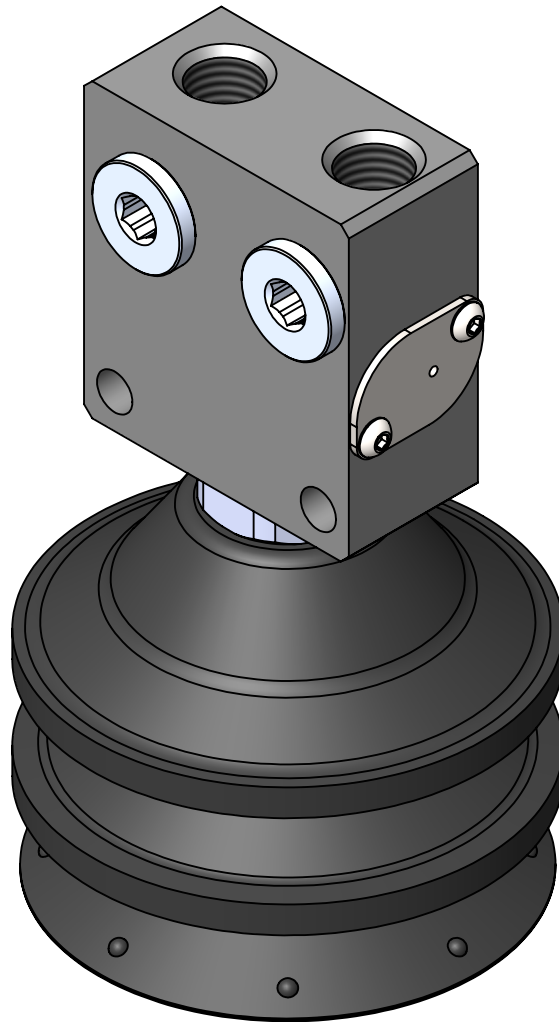
Vacloc valves provide fail-safe operation in leak-free systems. If the vacuum source is lost, or is purposefully interrupted, the Vacloc will trap vacuum for an indefinite time period so the load can be lowered to a safe position.

Modular Vacloc valves include a vacuum check valve and a sequence release valve installed in a cartridge body for perfect alignment. Valve seats are electroless-nickel plated to allow for long life. A one-piece work-attachment body eliminates secondary vacuum leak paths and the potential for loosening or separation during operation.

A high-efficiency sequence valve remains fully open during blow-off so chattering, humming, and squealing noises are eliminated. Compressed air consumption is reduced significantly by using lower air-pressure during the blow-off mode. An internal orifice balances air-flow so that several Vacloc blow-off ports may be supplied and controlled by one solenoid valve.

Vaclocs can also be ordered with or without an integrated ER Series venturi.

*See ER Series Vacuum Pumps section for performance data.*



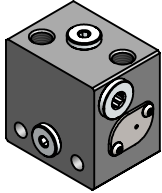
With the addition of the PQR option, our VacLoc models and part numbers have changed. Please confirm that your part number is accurate before placing an order.

### VacLoc

The VacLoc is a combination modular vacuum check valve and a sequence blow valve incorporated in a perfectly aligned, one-piece cartridge body featuring electroless-nickel plated valve seats for long life. An internal orifice provides balanced blow-off air flow so that several unites can be supplied and controlled by one solenoid valve.

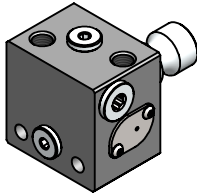
Quick Release Option		Mount		Ports	
VL-38F		-A			
(Blank)	None	(Blank)	Standard	(Blank)	NPT Threads
-PQR	Piloted Quick Release	-A	Apple Core Pin	-G	G Threads
		-B	Ball Swivel		

#### Standard



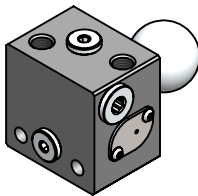
Weight: 0.47 lbs [215.1 g]

#### Apple Core Pin

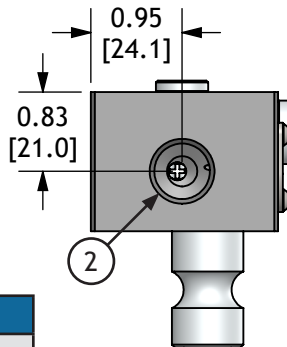
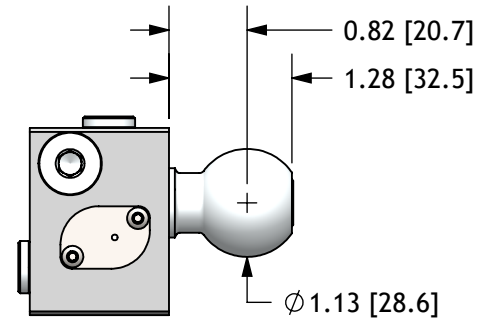
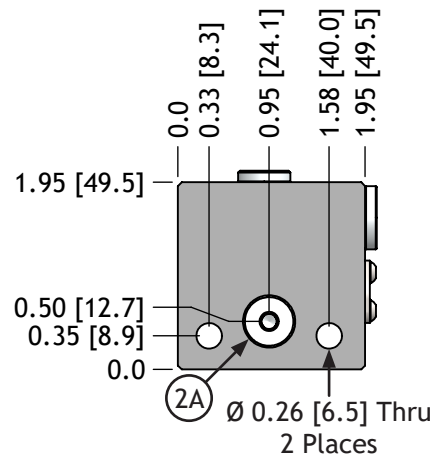
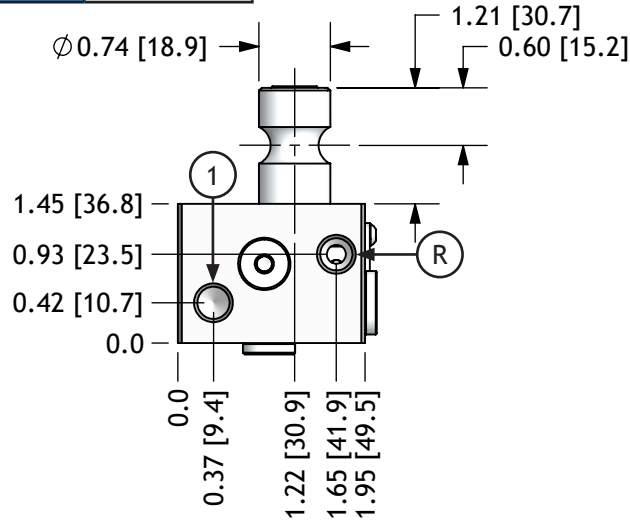


Weight: 0.56 lbs [253.9 g]

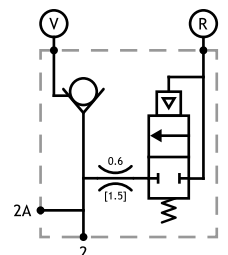
#### Ball Swivel



Weight: 0.60 lbs [270.7 g]



Code	Function	NPT	G
V	Vacuum Source	1/8 NPTF	
R	Release Source	1/8 NPTF	
2	Vacuum	3/8 NPSF	G 3/8
2A	Vacuum - Auxiliary	G 1/8 NPSF	



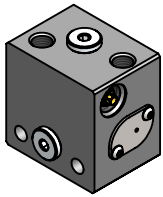
### VacLoc w/ Integral Vacuum Pump

The VLP includes all the VacLoc features plus a coaxial ejector vacuum pump cartridge that is integrated into a compact single-piece body. Response time is greatly improved by minimizing flow paths and system volume. Reliability is improved by eliminating external plumbing and potential leak points.

See ER Series Vacuum Pumps section for performance data.

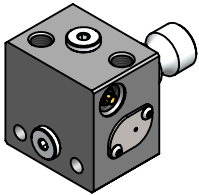
VLP	Venturi	Quick Release Option		Mount		Ports	
10L	10L	-38F		-A		(Blank)	NPT Threads
07		(Blank)	None	(Blank)	Standard	(Blank)	NPT Threads
09		-PQR	Piloted Quick Release	-A	Apple Core Pin	-G	G Threads
10				-B	Ball Swivel		
08L							
10L							

**Standard**



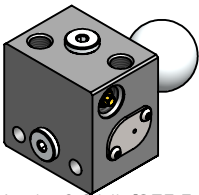
Weight: 0.49 lb [219.9 g]

**Apple Core Pin Mount**

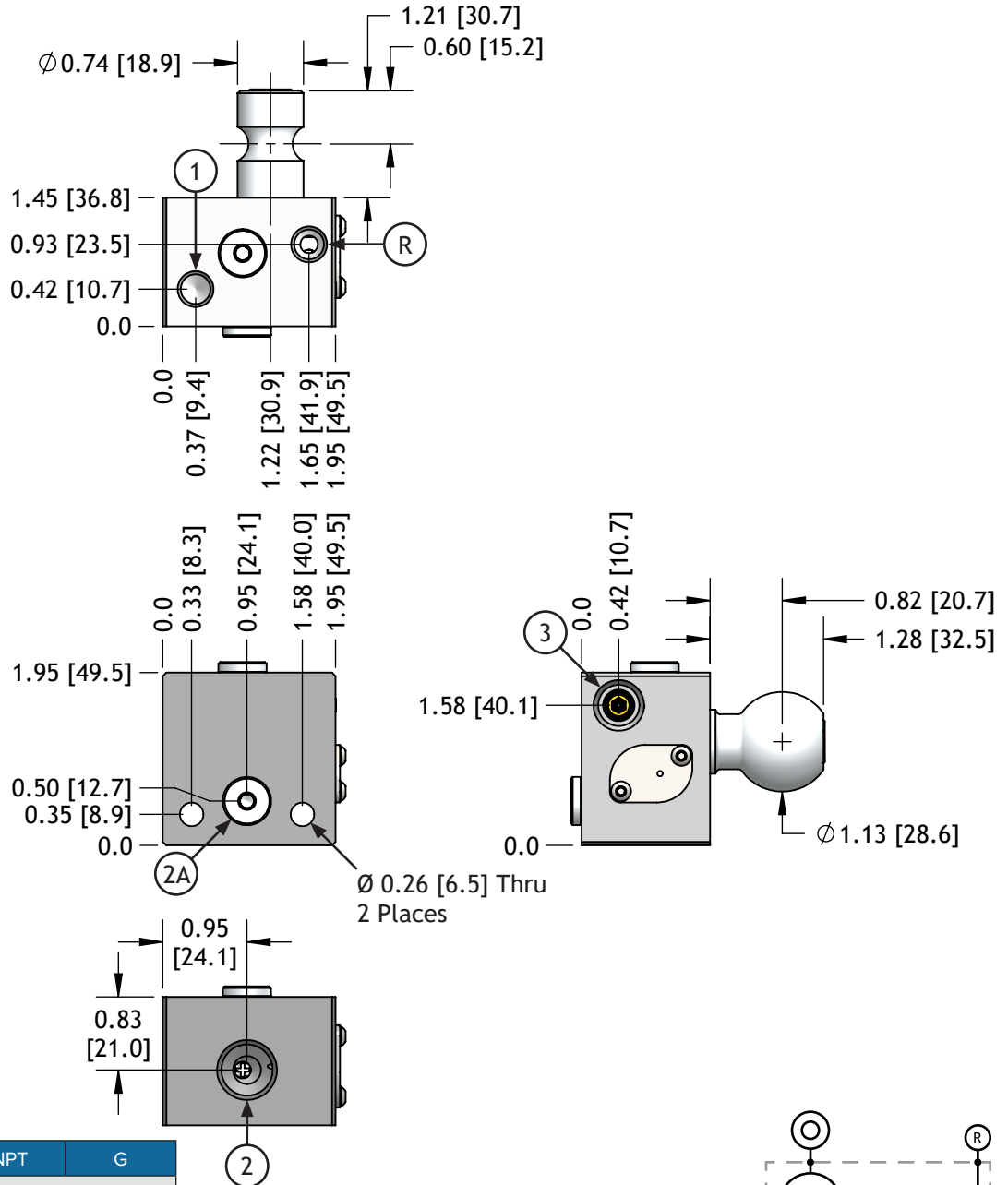


Weight: 0.57 lb [258.8 g]

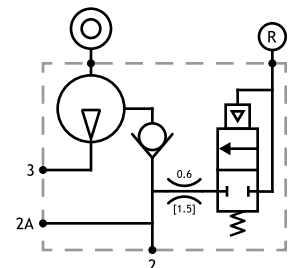
**Ball Swivel Mount**



Weight: 0.61 lb [275.5 g]



Code	Function	NPT	G
1	Air-Supply	1/8 NPTF	
2	Vacuum	3/8 NPSF	G 3/8
2A	Vacuum - Auxiliary	G 1/8 NPSF	
3	Exhaust	G 1/4	
R	Release Source	1/8 NPTF	

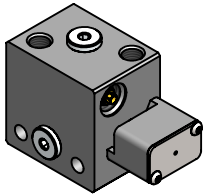


## VacLoc Pilot Controlled Quick Release (PQR) Option

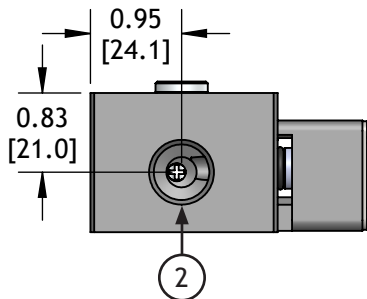
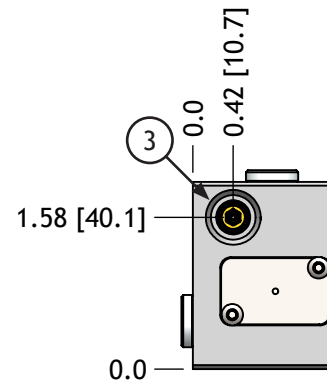
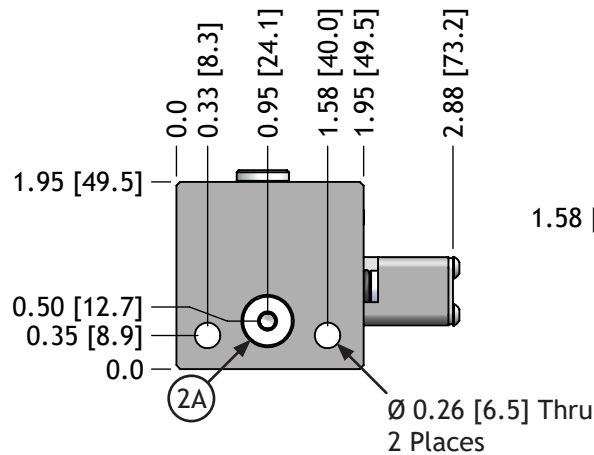
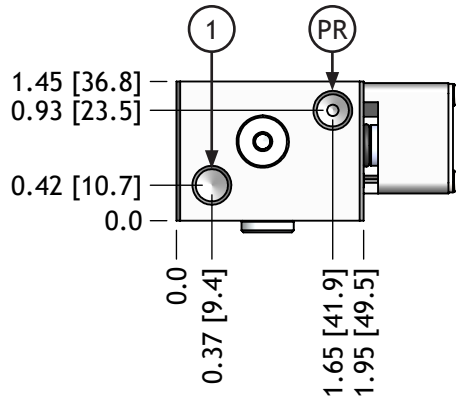
The pilot controlled quick release option for VacLocs work the same as the normal models except compressed-air is not used to release the work object. Using compressed air to release the work object increases air consumption by quite a bit compared to the amount used to generate vacuum. The PQR option uses a valve which is actuated by a compressed air signal that can be connected to all PQR valves in a system without concern for balancing pilot lines. The only compressed air flow is a small amount to pressurize the pilot lines to all PQR valves. The pilot signal shifts the PQR valve which opens a large passage from the vacuum port to atmosphere to immediately dissipate vacuum and release the work object.

The PQR option is available for VacLoc's with or without an integral pump.

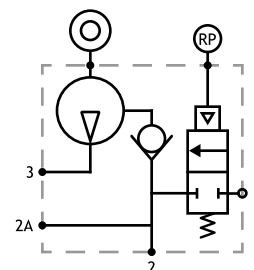
See pages 16:10 and 16:11 for How To Order chart and additional details.  
See ER Series Vacuum Pumps section for performance data.



Additional Weight: 0.06 lb [28.0 g]



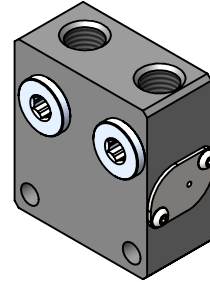
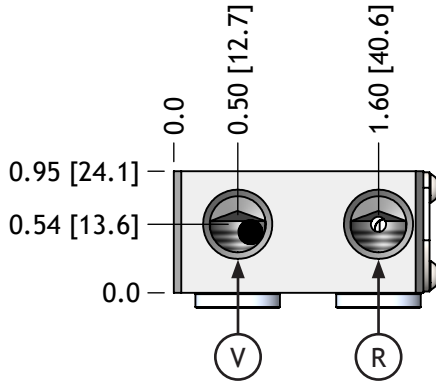
Code	Function	NPT	G
1	Air-Supply	1/8 NPTF	
2	Vacuum	3/8 NPSF	G 3/8
2A	Vacuum - Auxiliary	G 1/8 NPSF	
3	Exhaust	G 1/4	
PR	Pilot Signal, Release	1/8 NPTF	



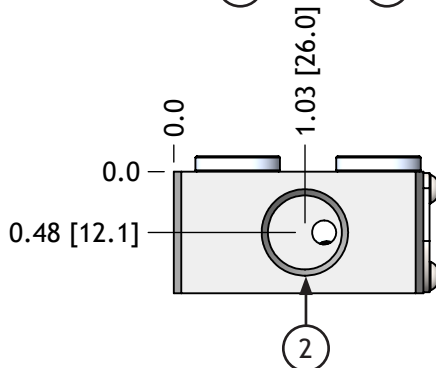
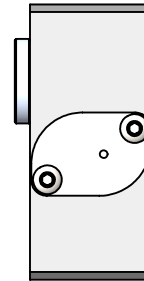
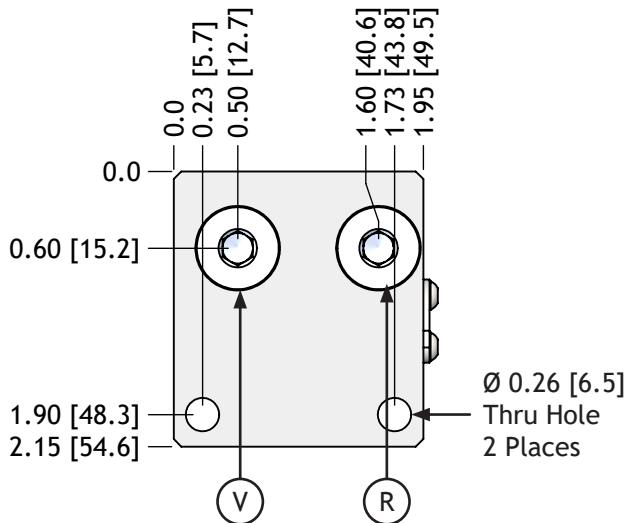
### VacLoc, Slim Body

The slim body VacLoc operates in the exact same manner as the normal VacLoc. The only differences between the two are size and available options.

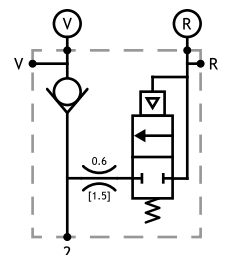
Ports	
VLS-38F	
(Blank)	NPT Threads
-G	G Threads



Weight: 0.33 lb [151.6 g]



Code	Function	NPT	G
V	Vacuum Source	1/4 NPTF	G 1/4
R	Release Source	1/4 NPTF	G 1/4
2	Vacuum	3/8 NPSF	G 3/8

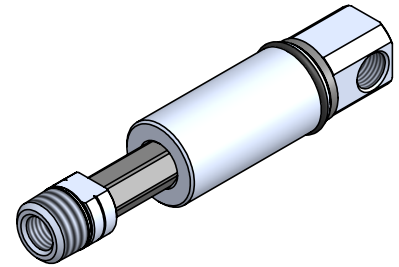


## Level Compensators, EMAT Style

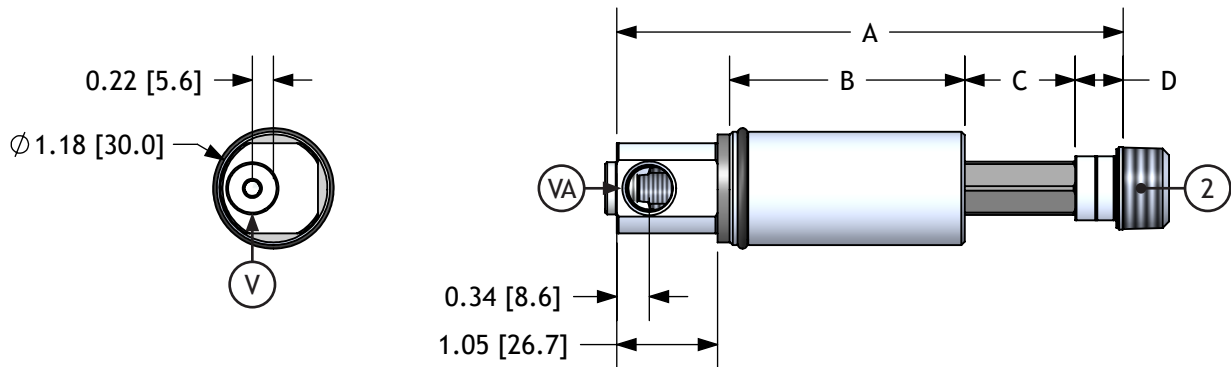
A level compensator is a spring-loaded shaft that can be adjusted to compensate for differences in height between work-piece features. The spring action also provides a soft-touch feature to eliminate shocks and make exact pick positions less critical.

When properly installed, all level compensators will be fully extended when lifting and supporting the work-piece. If a level compensator is not fully extended, it is not supporting any of the workload. The 30 mm diameter sleeve body provides a long adjustment length for this purpose. A retaining o-ring is used to prevent slipping through the mount.

To mount any vacuum connection, vacuum pump, or VacLoc directly to an EMAT level compensator using the 3/8" vacuum port, use two wrenches to gently remove the elbow connection at the top of the level compensator exposing a 3/8" male connection.



	Stroke	Cup End Thread	
LC	25	38M	
25	25 mm	38M	3/8 NPT
50	50 mm	38M-G	G 3/8
		12M	1/2 NPT
		12M-G	G 1/2



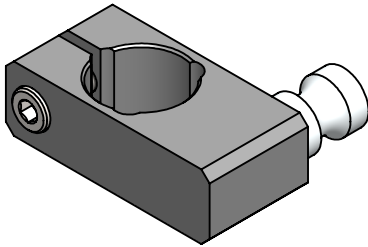
Code	Function	38M	12M	38M-G	12M-G
V	Vacuum Supply	1/4 NPTF			
VA	Vacuum Supply - Alternate	1/8 NPSF			
2	Vacuum	3/8 NPT	1/2 NPT	G 3/8	G 1/2

Part Number	A Length in [mm]	B Sleeve Length in [mm]	C Stroke in [mm]	D Coupler in [mm]	Weight lb [g]
LC2538M	5.13 [130.0]	2.45 [62.2]	1.00 [25.0]	0.50 [12.7]	0.42 [189.0]
LC2512M	5.13 [130.0]	2.45 [62.2]	1.00 [25.0]	0.50 [12.7]	0.42 [189.0]
LC5038M	7.88 [200.0]	4.20 [107.0]	2.00 [50.0]	0.50 [12.7]	0.60 [274.0]
LC5012M	7.88 [200.0]	4.20 [107.0]	2.00 [50.0]	0.50 [12.7]	0.60 [274.0]

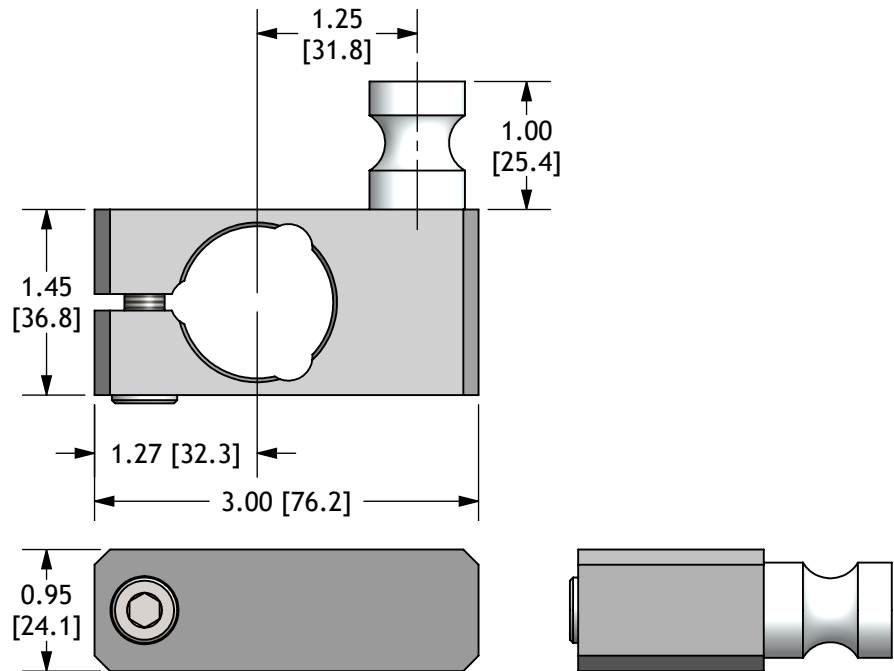
## Level Compensator Mounts

We offer four types of EMAT level compensator mounts. Each mount features an anodized aluminum mount with stainless steel fasteners. With a variety of mounting options and a very simple installation, our level compensator mounts work perfectly and easily with our EMAT style level compensators.

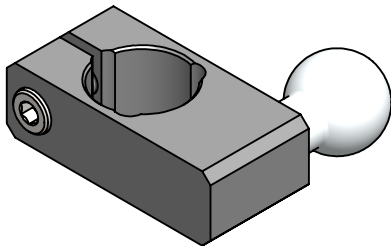
### LCM30A: Level Compensator Apple Core Pin Mount



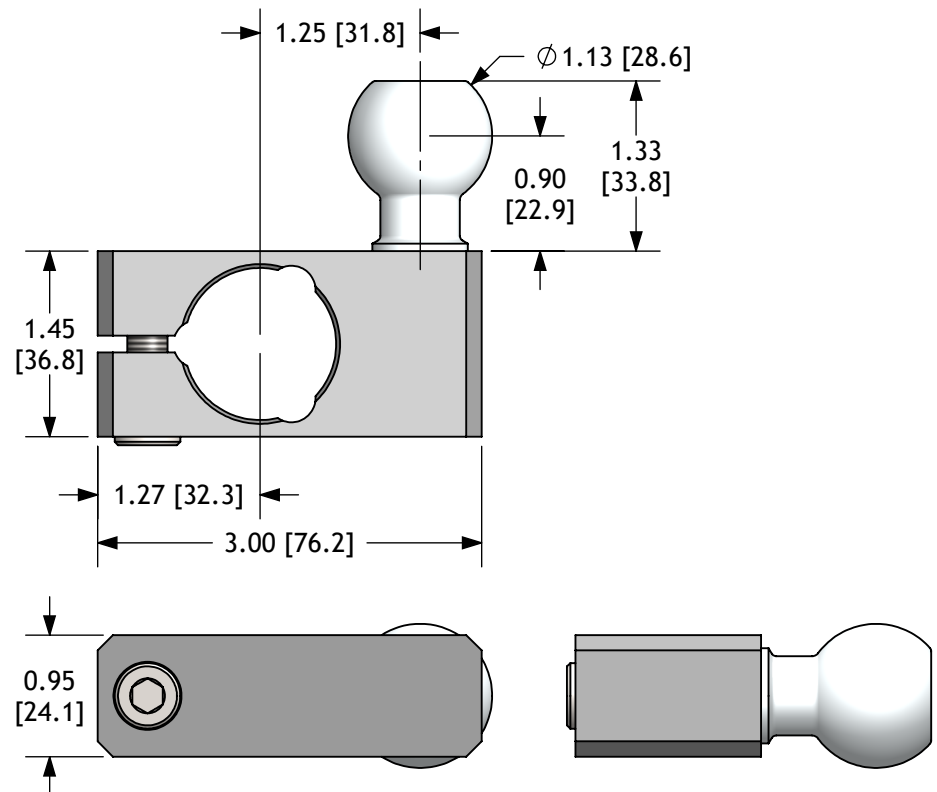
Weight: 5.45 oz [154.4 g]



### LCM30B: Level Compensator Ball Swivel Mount

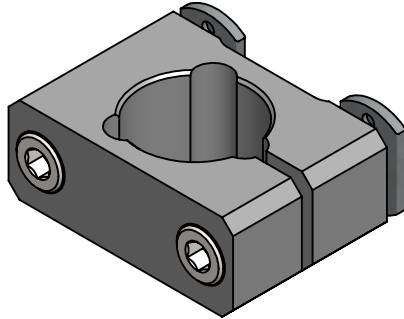


Weight: 6.23 oz [176.5 g]

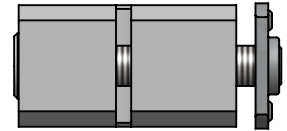
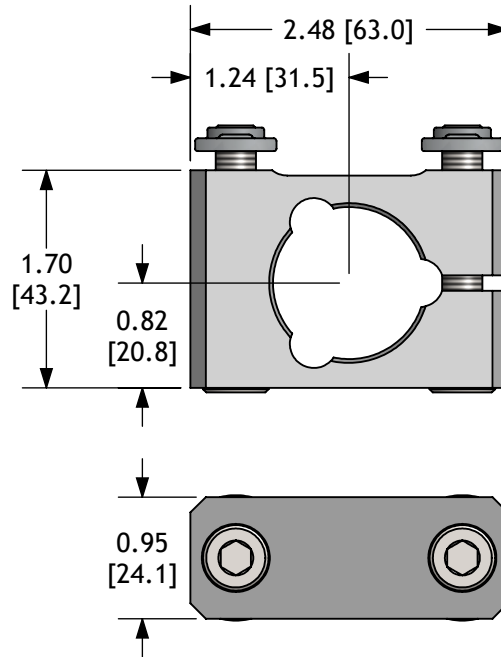


## Level Compensator Mounts

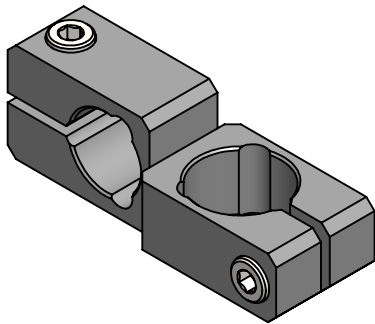
### LCM30E: Level Compensator Extrusion Mount



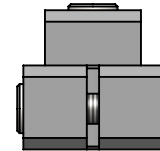
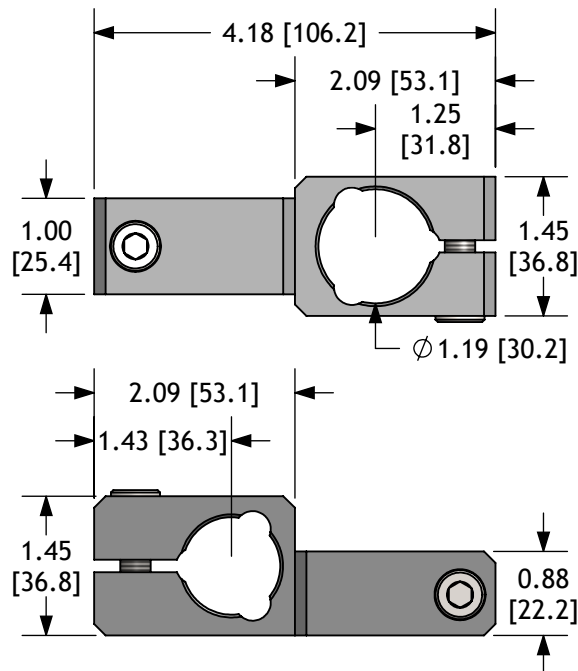
Weight: 5.96 oz [169.1 g]



### LCM30S10: Level Compensator 1.0" Slide-On Mount



Weight: 6.47 oz [183.5 g]

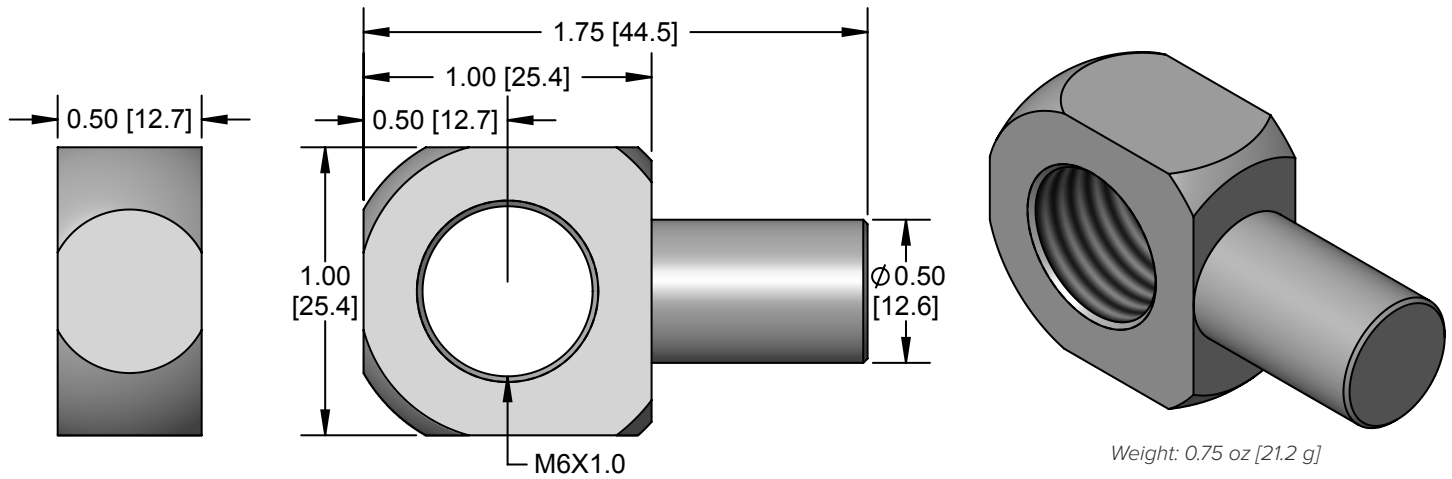




## Level Compensator Mounts

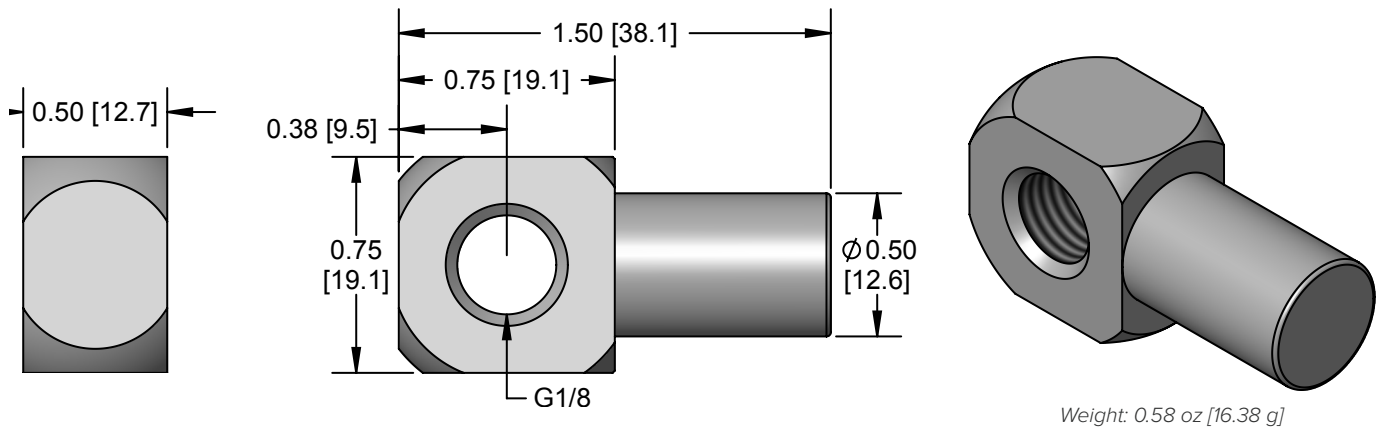
### LCM18: Level Compensator Mount, M16x1.0

Level compensator mounts make it easy to mount level compensators to clamp blocks.



### LCM10: Level Compensator Mount, G 1/8

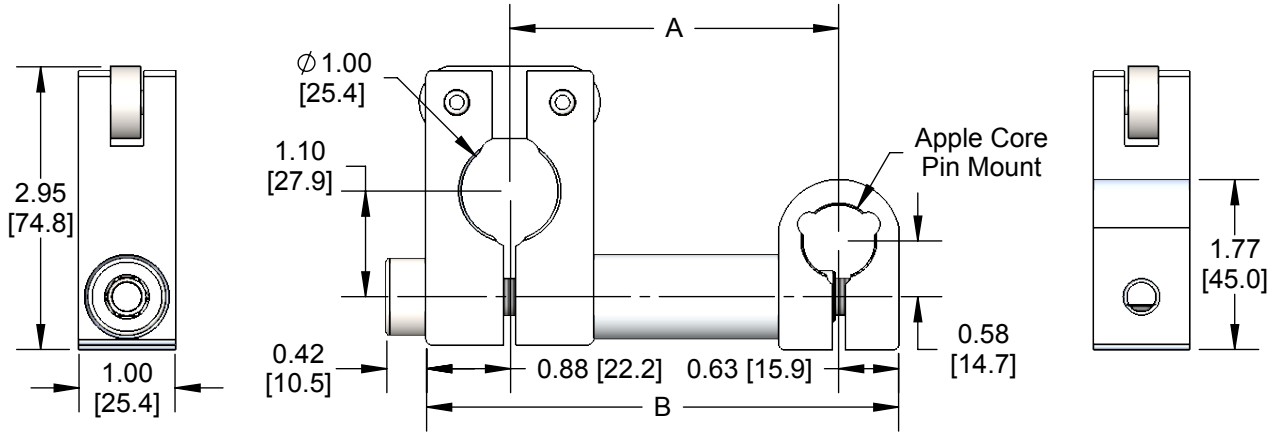
Level compensator mounts make it easy to mount level compensators to clamp blocks.



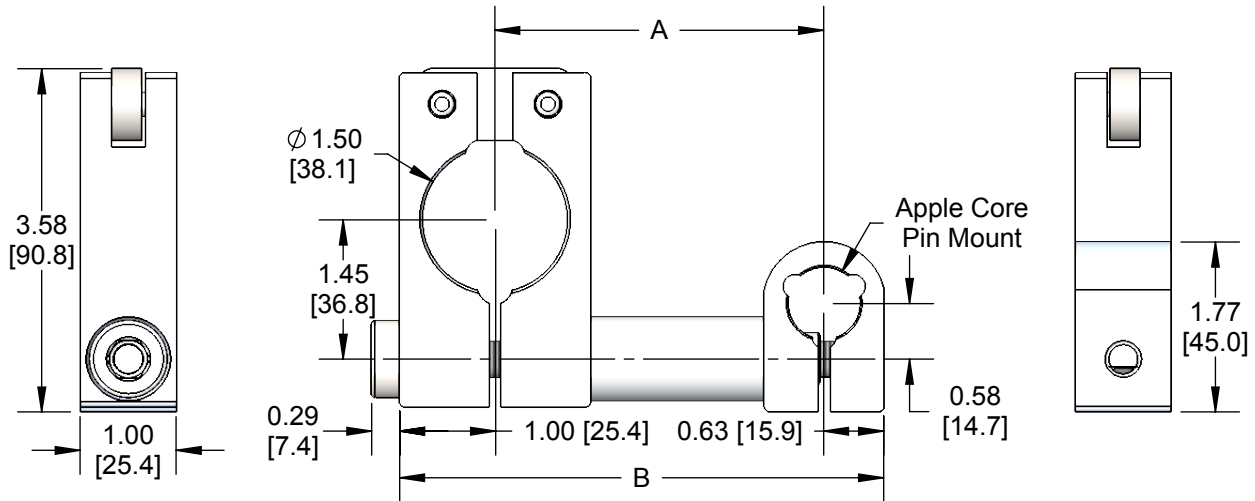
### Clamp-On Arm w/ Apple Core Pin Receiver

Tube Size		Length		
C	10	X	2	A
10	1 in	1	1 in	
15	1.5 in	2	2 in	
		4	4 in	
		6	6 in	

#### 1 in Tube



#### 1.5 in Tube

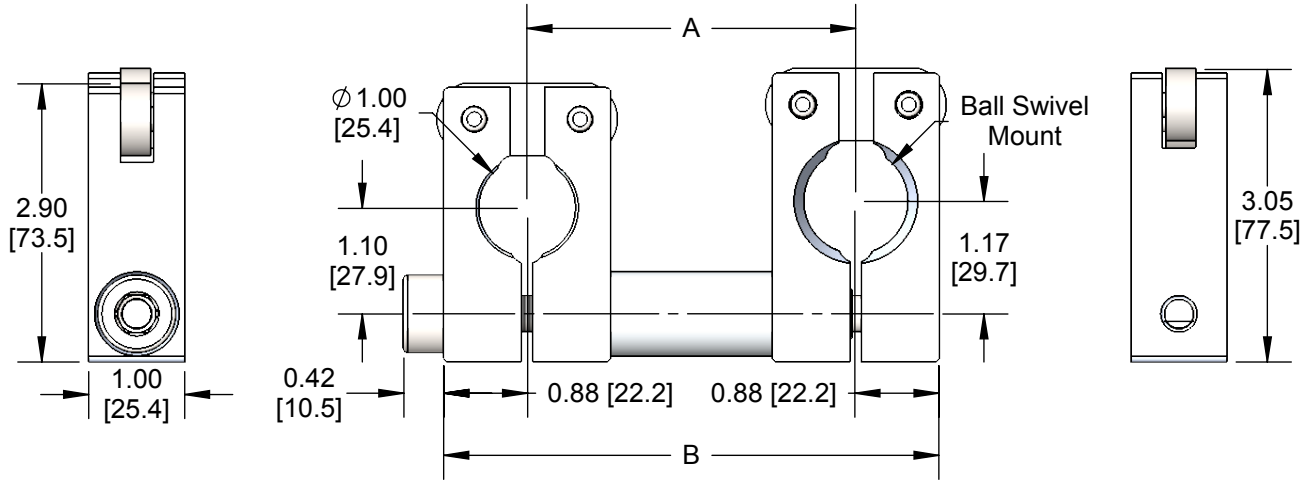


	C10X1A	C10X2A	C10X4A	C10X6A	C15X1A	C15X2A	C15X4A	C15X6A
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	3.84 [97.5]	4.84 [123.0]	6.84 [174.0]	8.84 [225.0]	3.97 [101.0]	4.97 [126.0]	6.97 [177.0]	8.97 [228.0]
Weight: lb [g]	0.74 [336.0]	0.82 [370.0]	1.02 [463.0]	1.22 [555.0]	0.78 [354.0]	0.85 [387.0]	1.06 [480.0]	1.26 [572.0]

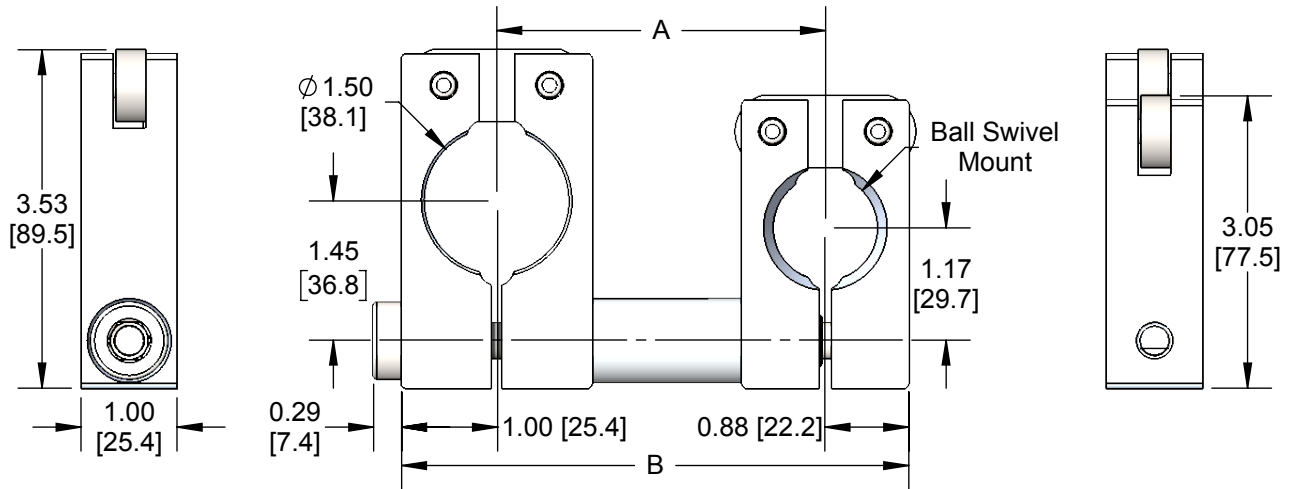
### Clamp-On Arm w/ Ball Swivel Receiver

Tube Size		Length		
C	10	X	2	B
10	1 in	1	1 in	
15	1.5 in	2	2 in	
		4	4 in	
		6	6 in	

#### 1 in Tube



#### 1.5 in Tube

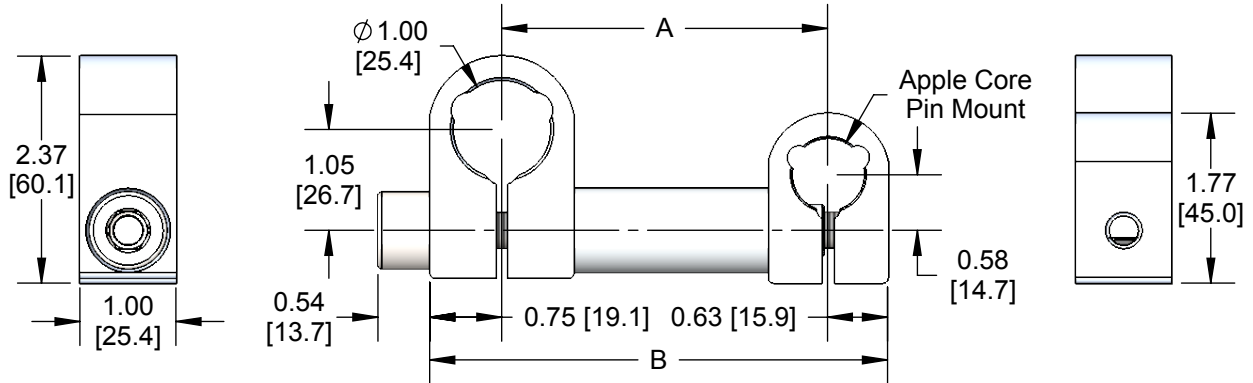


	C10X1B	C10X2B	C10X4B	C10X6B	C15X1B	C15X2B	C15X4B	C15X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	4.09 [104.0]	5.09 [129.0]	7.09 [180.0]	9.09 [231.0]	4.21 [107.0]	5.21 [132.0]	7.21 [183.0]	9.21 [234.0]
Weight: lb [g]	1.03 [469.0]	1.11 [503.0]	1.31 [595.0]	1.52 [687.0]	1.07 [487.0]	1.15 [522.0]	1.35 [613.0]	1.56 [705.0]

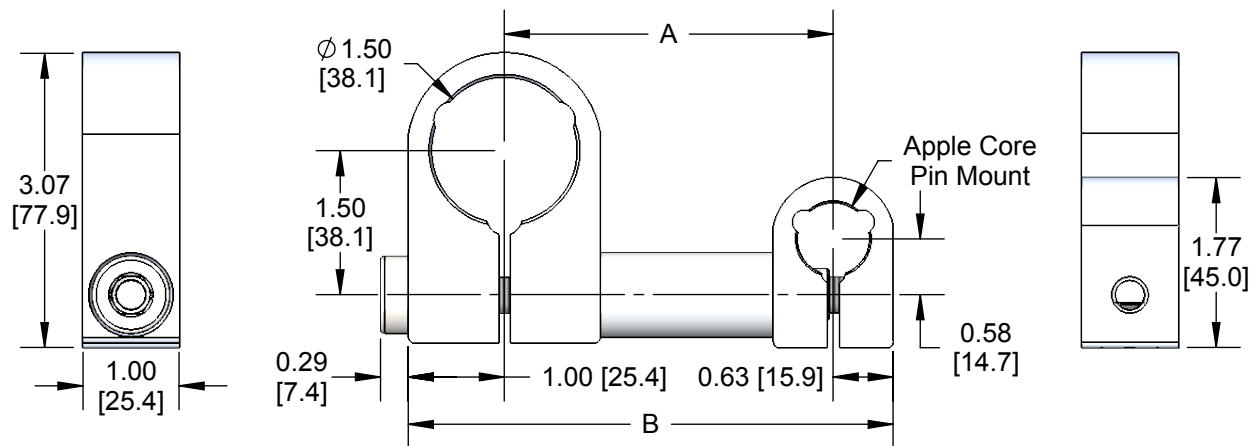
### Slide-On Arm w/ Apple Core Pin Receiver

Tube Size		Length	
S	10	X	2
	A		
10	1 in	1	1 in
15	1.5 in	2	2 in
		4	4 in
		6	6 in

#### 1 in Tube



#### 1.5 in Tube

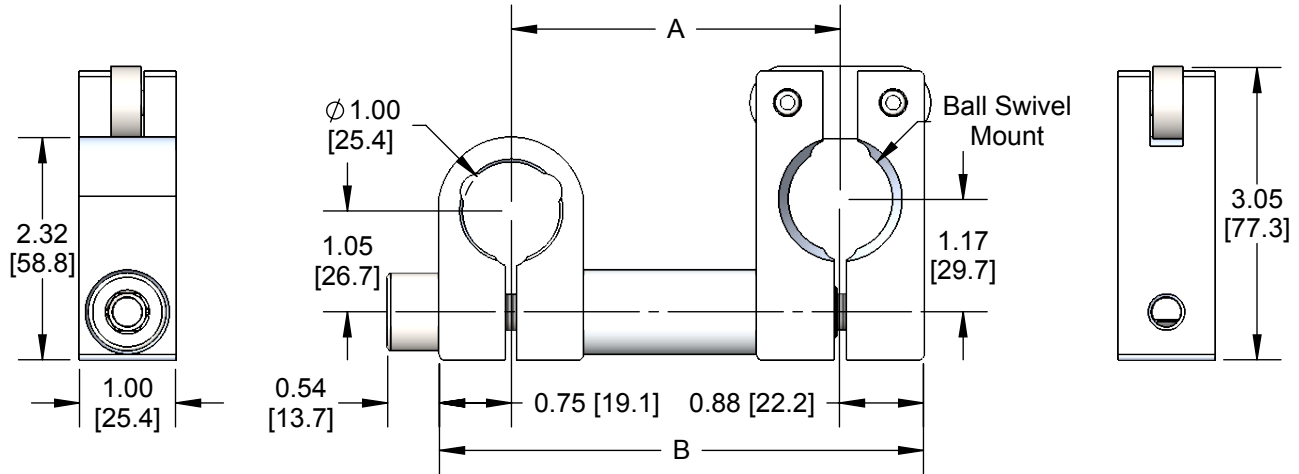


	C10X1B	C10X2B	C10X4B	C10X6B	C15X1B	C15X2B	C15X4B	C15X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	3.73 [94.7]	4.73 [120.0]	6.73 [171.0]	8.73 [222.0]	3.98 [101.0]	4.98 [126.0]	6.98 [177.0]	8.98 [228.0]
Weight: lb [g]	0.52 [235.0]	0.60 [270.0]	0.80 [362.0]	1.00 [454.0]	0.62 [281.0]	0.70 [317.0]	0.90 [408.0]	1.10 [499.0]

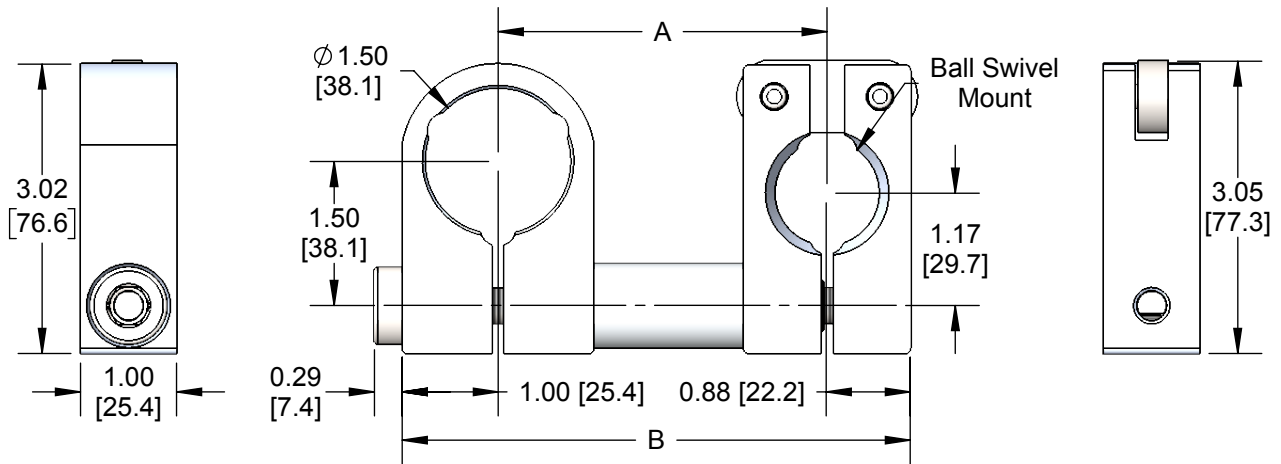
### Slide-On Arm w/ Ball Swivel Receiver

Tube Size		Length	
S	10	X	2
	B		
10	1 in	1	1 in
15	1.5 in	2	2 in
		4	4 in
		6	6 in

#### 1 in Tube



#### 1.5 in Tube



	C10X1B	C10X2B	C10X4B	C10X6B	C15X1B	C15X2B	C15X4B	C15X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	3.97 [101.0]	4.97 [126.0]	6.97 [177.0]	8.97 [228.0]	4.22 [107.0]	5.22 [133.0]	7.22 [183.0]	9.22 [234.0]
Weight: lb [g]	0.81 [368.0]	0.89 [403.0]	1.09 [495.0]	1.29 [587.0]	0.84 [379.0]	0.91 [414.0]	1.12 [506.0]	1.32 [599.0]

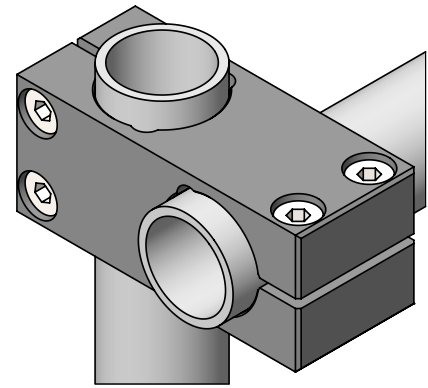
## Cross Clamp Blocks

EDCO USA Cross Clamp Blocks are provided in a number of sizes to easily help you to construct the needed structure for your system. The multiple sizes allow for many different configurations of tubing of varying sizes.

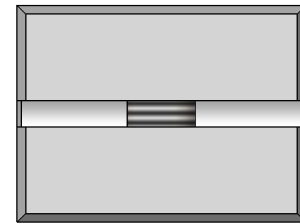
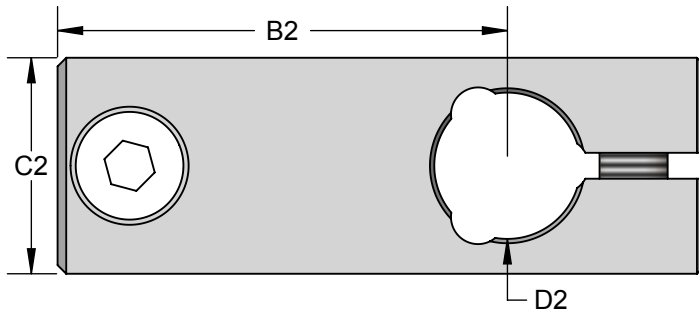
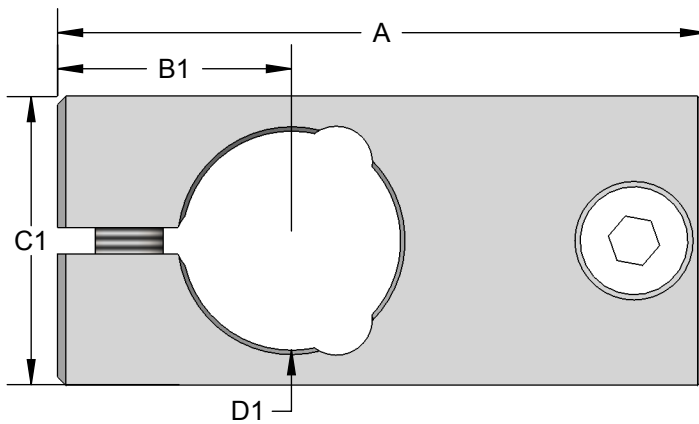
When building part numbers, Tube Ø 1 will always be the larger diameter.

Example: CLM7550, CLM1050, CLM1075

	Tube Ø 1	Tube Ø 2
CLM	75	50
50	1/2" Tube	50 1/2" Tube
75	3/4" Tube	75 3/4" Tube
10	1" Tube	10 1" Tube



Example: Tubing not for sale.

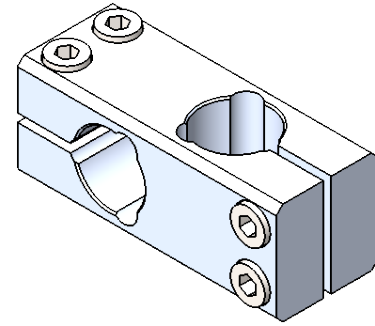
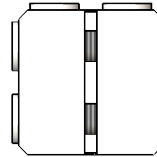
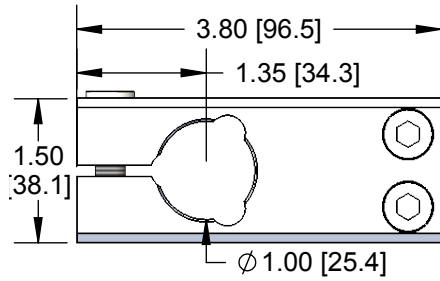
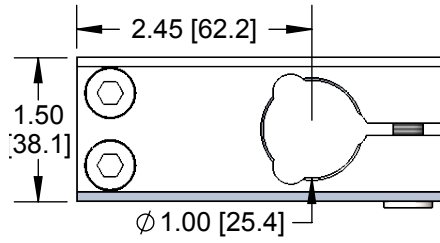


	A in [mm]	B1 in [mm]	C1 in [mm]	D1 in [mm]	B2 in [mm]	C2 in [mm]	D2 in [mm]	Weight oz [g]
CLM5050*	2.00 [50.8]	0.69 [17.5]	0.75 [19.1]	0.51 [12.9]	1.31 [33.4]	0.75 [19.1]	0.51 [12.9]	1.39 [39.5]
CLM7550	2.25 [57.2]	0.69 [17.5]	0.75 [19.1]	0.51 [12.9]	1.44 [36.5]	1.00 [25.4]	0.76 [19.3]	1.87 [53.1]
CLM7575	2.50 [63.5]	0.81 [20.7]	1.00 [25.4]	0.76 [19.3]	1.69 [42.9]	1.00 [25.4]	0.76 [19.3]	2.57 [72.9]
CLM1050	2.50 [63.5]	0.69 [17.5]	0.75 [19.1]	0.51 [12.9]	1.56 [39.7]	1.25 [31.8]	1.01 [25.6]	2.37 [67.2]
CLM1075	2.88 [73.0]	0.88 [22.2]	1.00 [25.4]	0.76 [19.3]	1.88 [47.6]	1.25 [31.8]	1.01 [25.6]	3.55 [100.6]
CLM1010	3.00 [76.2]	0.94 [23.8]	1.25 [31.8]	1.01 [25.6]	2.06 [52.4]	1.25 [31.8]	1.01 [25.6]	4.65 [131.7]

\*Screw heads protrude by approximately 0.07 in [1.8 mm].

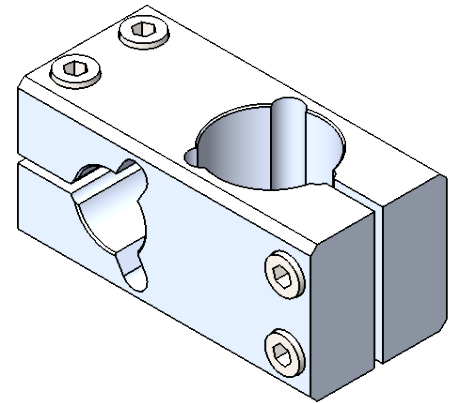
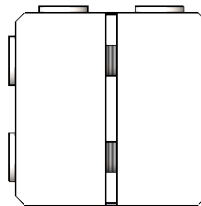
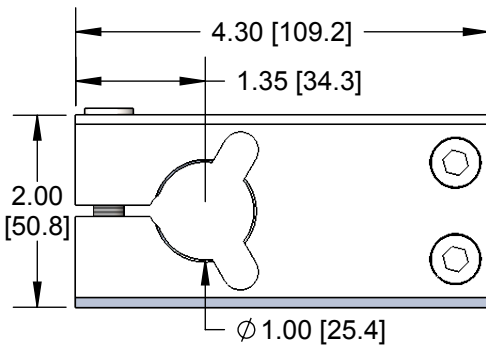
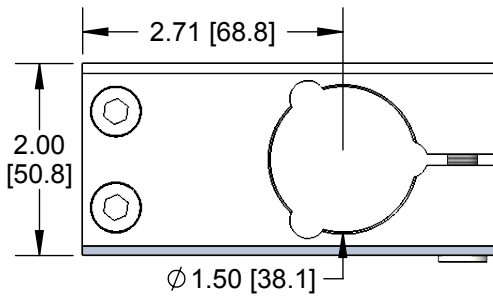
### Cross Clamp Blocks (OLD STYLE)

#### CB1010: Clamp Block for 1 in Tubes



Weight: 0.64 lb [291.0 g]

#### CB1515: Clamp Block for 1.5 in Tubes



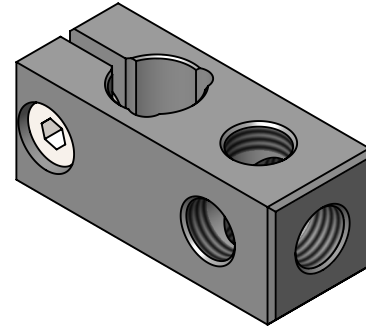
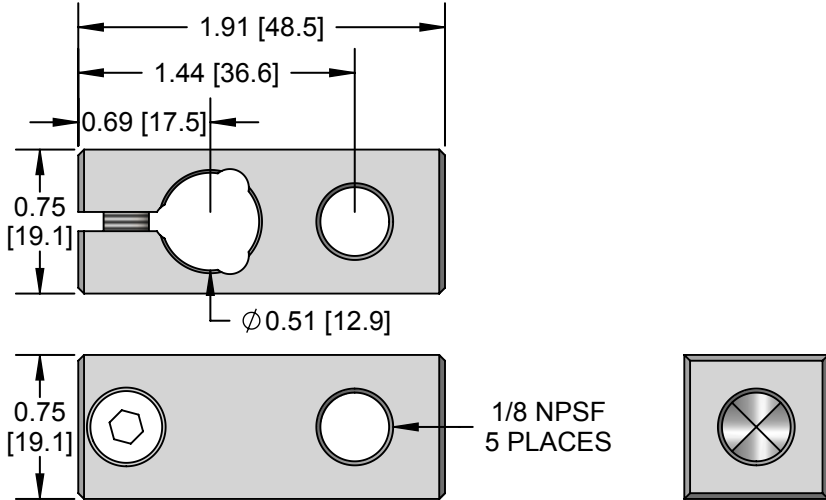
Weight: 1.12 lb [508.0 g]

## Clamp Mount Blocks

EDCO USA Clamp Mount Blocks come with a tubing clamp on one end and several 1/8" NPSF connections on the other.

### CM505: Clamp Block Mount for 0.5 in Tubes

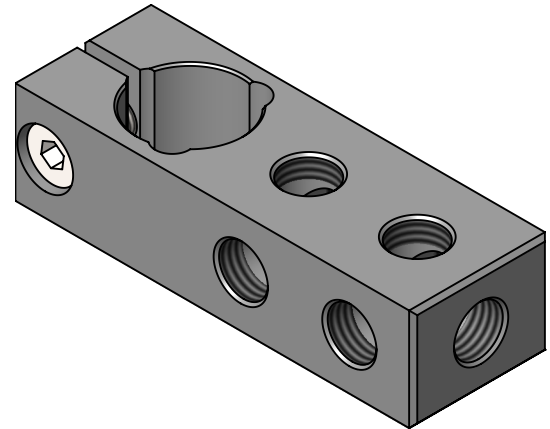
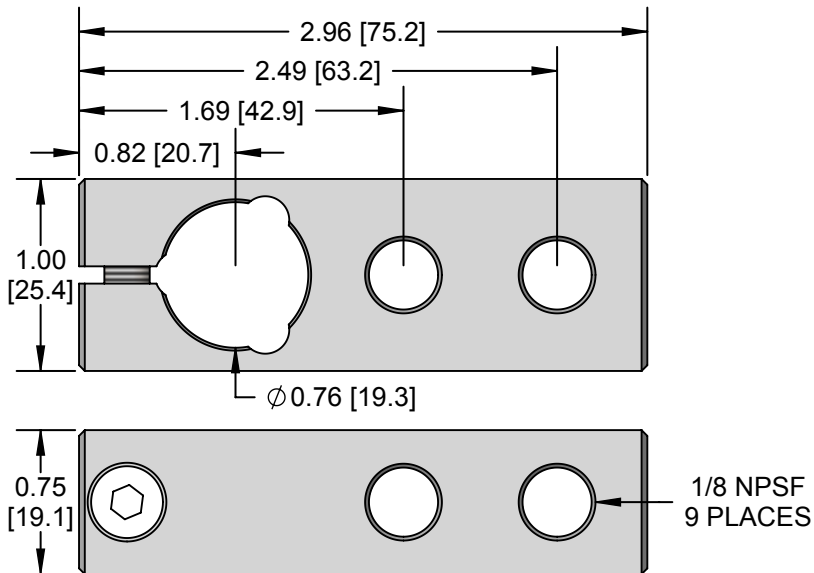
1/2" Tube Clamp with 1/8 NPSF Connections (Qty 5)



Weight: 1.23 oz [35.0 g]

### CM759: Clamp Block Mount for 0.75 in Tubes

3/4" Tube Clamp with 1/8 NPSF Connections (Qty 9)

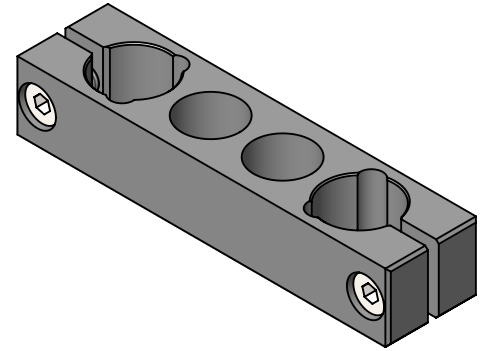


Weight: 2.48 oz [70.2 g]

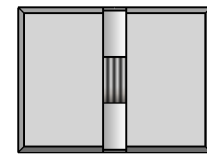
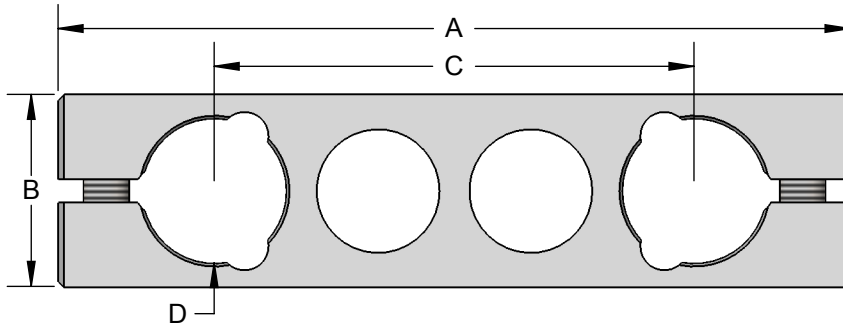


## Parallel Clamp Mounts

Parallel Clamp Mounts are the perfect solution when you need to mount two tubes in parallel.



Tube Size	
PCLM	5050
5050	Ø 1/2" Tube
7575	Ø 3/4" Tube
1010	Ø 1" Tube



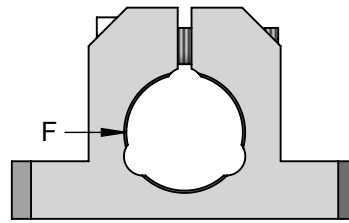
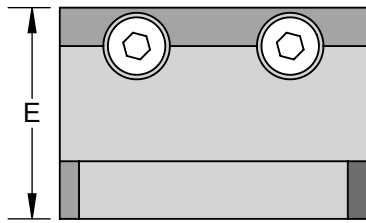
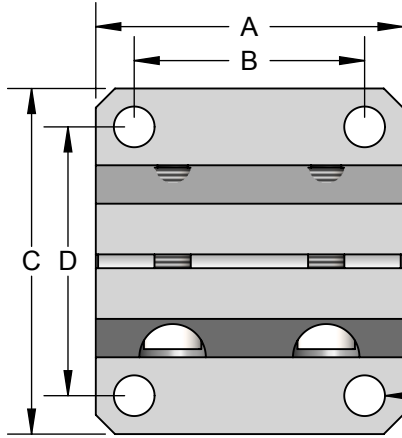
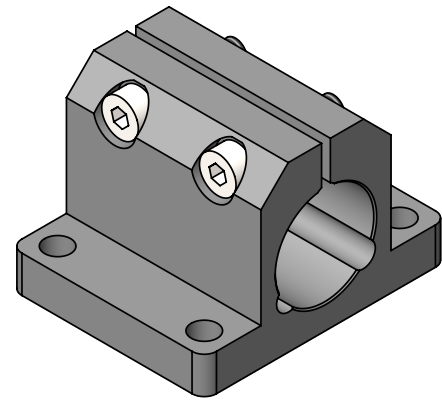
	A in [mm]	B in [mm]	C in [mm]	D in [mm]	E in [mm]	Weight oz [g]
PCLM5050*	2.63 [66.7]	0.75 [19.1]	1.25 [31.8]	0.50 [12.8]	0.75 [19.1]	1.79 [50.8]
PCLM7575	4.13 [104.8]	1.00 [25.4]	2.50 [63.5]	0.75 [19.1]	0.75 [19.1]	3.08 [87.4]
PCLM1010	4.63 [117.5]	1.25 [31.8]	2.75 [69.9]	1.00 [25.4]	0.75 [19.1]	4.20 [118.9]

\*PCLM5050 screw heads protrude by 0.07 [1.8].

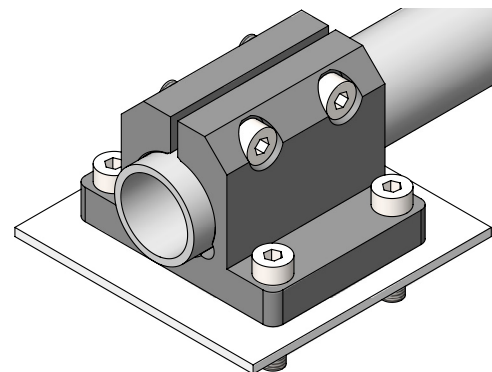
### Flanged Clamps (Horizontal)

Horizontal Flanged Clamps give the base needed to build your end of arm tooling.

Tube Ø	
FCH	100
75	3/4" Tube
75L	3/4" Tube
100	1" Tube



	A in [mm]	B in [mm]	C in [mm]	D in [mm]	E in [mm]	F in [mm]	Weight oz [g]
FCH75	2.00 [50.8]	1.50 [38.1]	2.25 [57.2]	1.75 [44.5]	1.38 [34.9]	0.76 [19.3]	4.95 [140.3]
FCH75L	2.25 [57.2]	1.75 [44.5]	2.25 [57.2]	1.75 [44.5]	1.38 [34.9]	0.76 [19.3]	5.50 [156.0]
FCH100	2.00 [50.8]	1.50 [38.1]	2.49 [63.2]	2.00 [50.8]	1.68 [42.7]	0.76 [19.3]	5.56 [157.6]

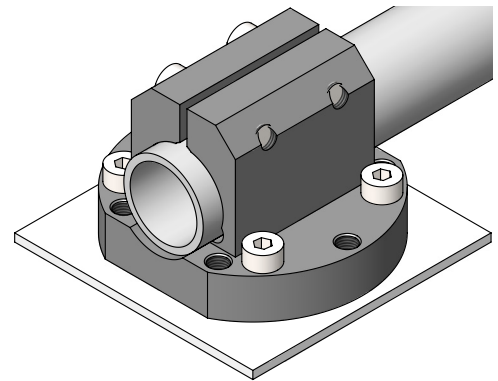


Example (Not For Sale)

### Flanged Clamps (Horizontal, Round)

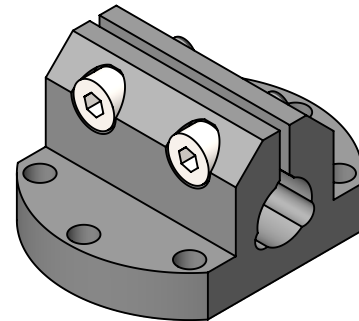
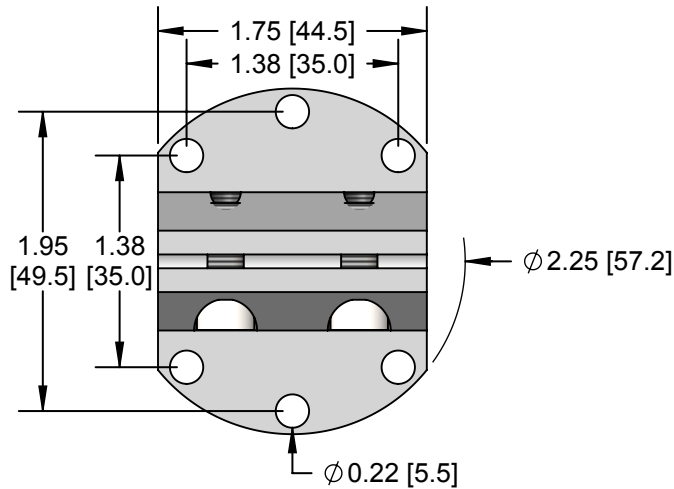
Horizontal Flanged Clamps give the base needed to build your end of arm tooling. The round clamps provide the same function with a rounded base.

Tube Ø		
FCH	50	R
50	1/2" Tube	
75	3/4" Tube	
100	1" Tube	

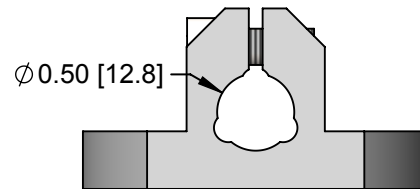
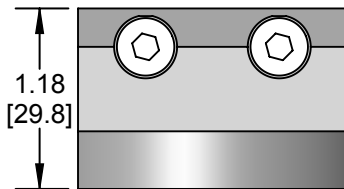


Example (Not For Sale)

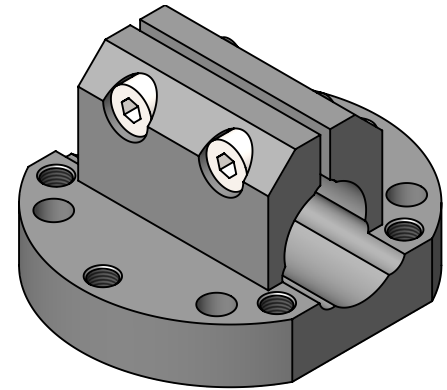
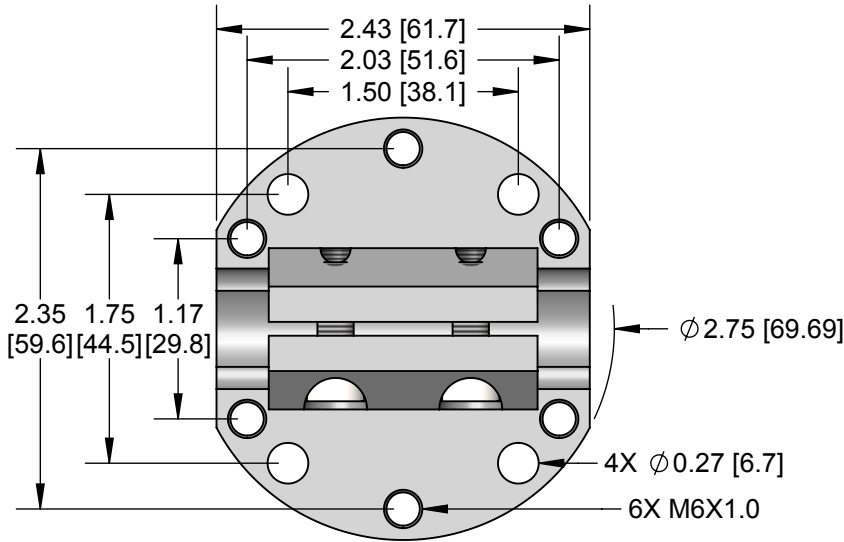
### FCH50R: Flanged Clamp (Horizontal, Round)



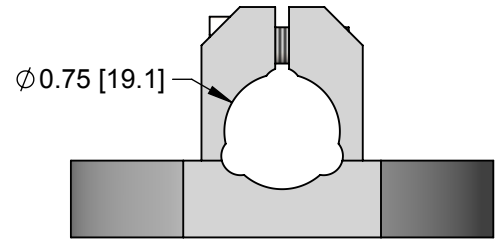
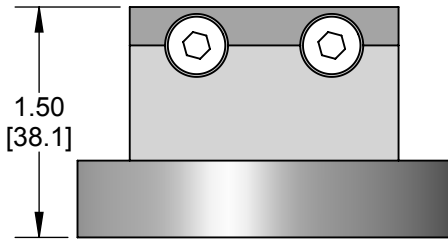
Weight: 3.31 oz [93.8 g]



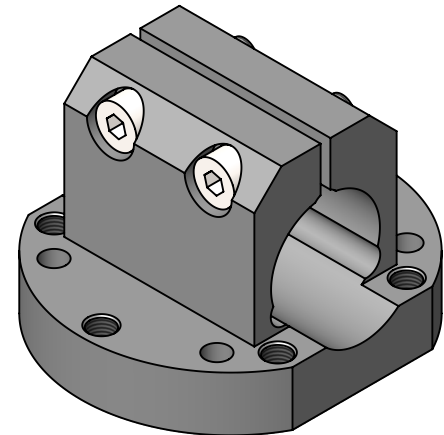
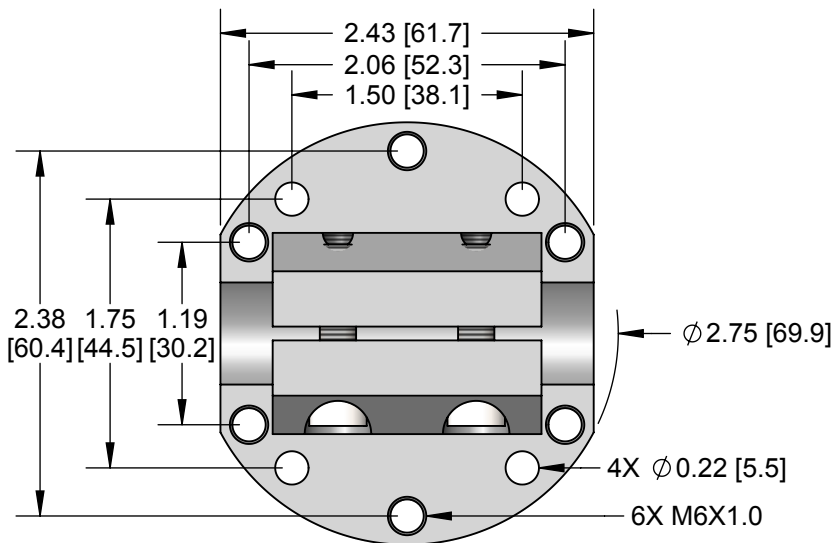
**FCH75R : Flanged Clamp (Horizontal, Round)**



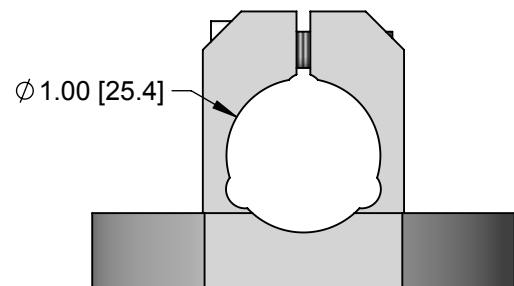
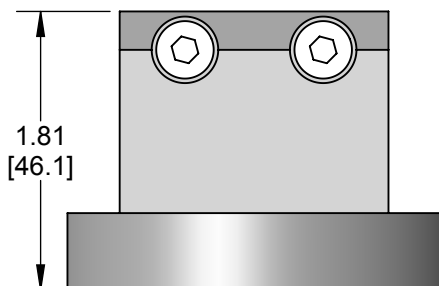
Weight: 5.56 oz [157.6 g]



**FCH100R : Flanged Clamp (Horizontal, Round)**

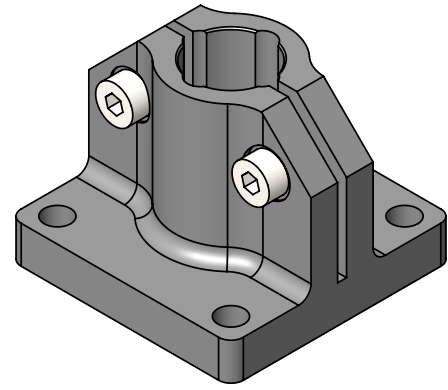


Weight: 6.56 oz [187.7 g]

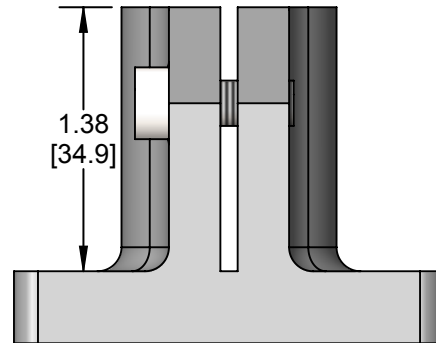
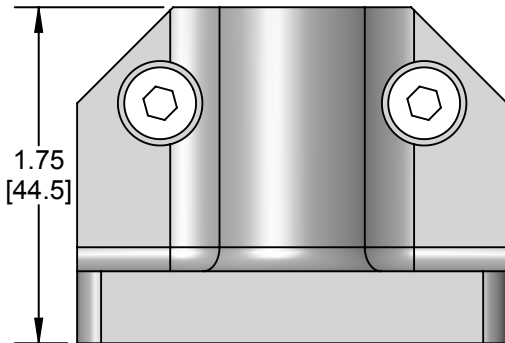
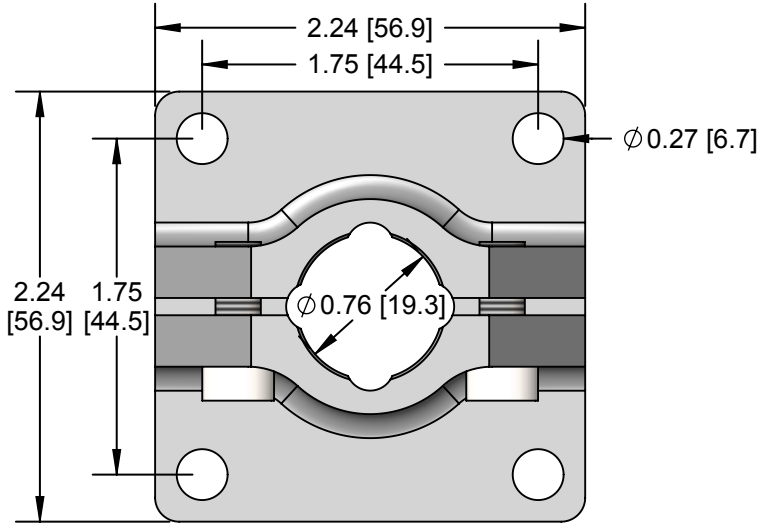


### FCV75: Flanged Clamps (Vertical)

EDCO USA Flanged Clamps give the base needed to build your end of arm tooling structure. Vertical Flanged Clamps offer the same quality and function as the Horizontal Flanged Clamps.

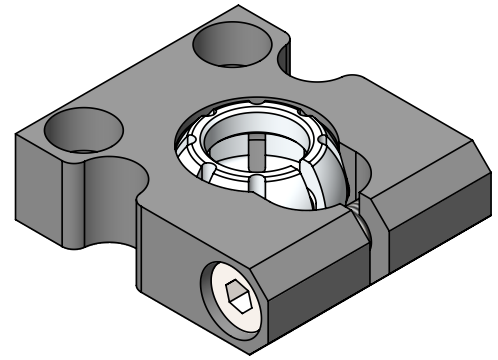


Weight: 5.08 oz [144.0 g]

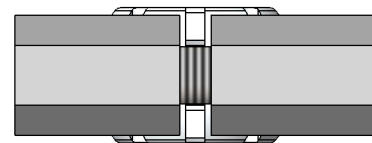
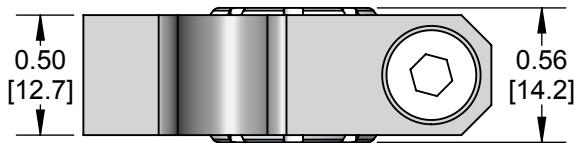
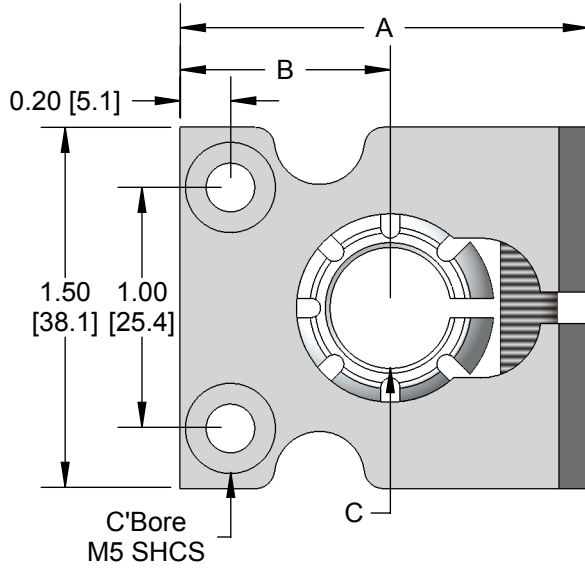


### Swivel-Ball Mounts

Swivel-Ball Mounts give a degree of movement when mounting tubing. One end has clearance for two M5 socket head cap screws while the other end is fitted with a machined aluminum swivel-ball for mounting tubing.



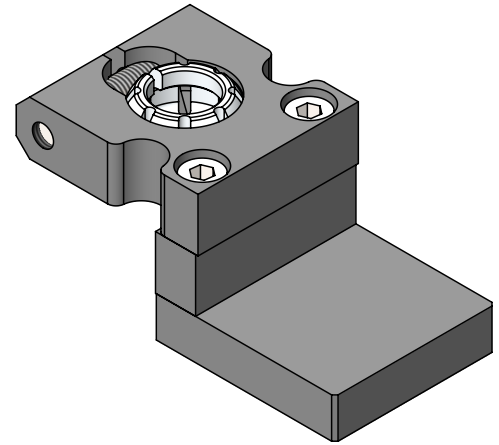
Tube Size	
SMB	75
50	Ø 1/2" Tube
75	Ø 3/4" Tube



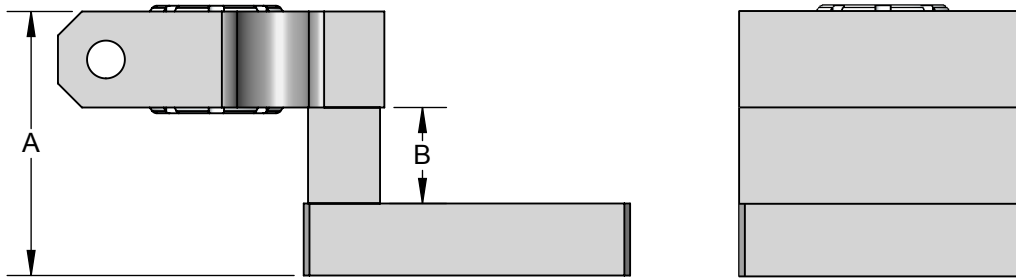
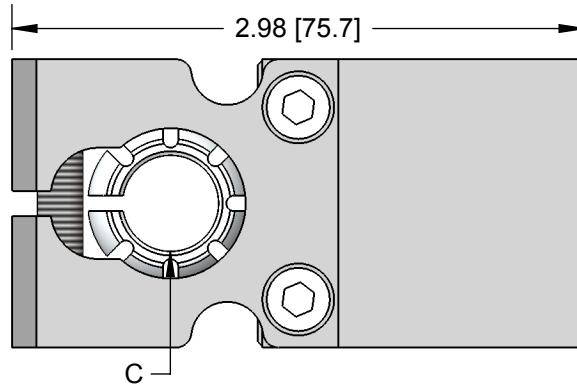
	A in [mm]	B in [mm]	C in [mm]	Weight oz [g]
SMB50	1.70 [43.2]	0.88 [22.2]	0.50 [12.8]	1.55 [43.9]
SMB75	1.95 [49.5]	0.98 [24.8]	0.75 [19.1]	1.70 [48.2]

## Swivel-Gripper Mounts

Swivel-Gripper Mounts combine the functionality of our Swivel-Ball Mounts and the flexibility of our Stand-Off Mounts with a Mount Plate for a complete assembly.



Tube Size		Stand-Off	
SGM	75	75	
50	Ø 1/2" Tube	(Blank)	None
75	Ø 3/4" Tube	-50	1/2" Stand-Off
		-125	1-1/4" Stand-Off

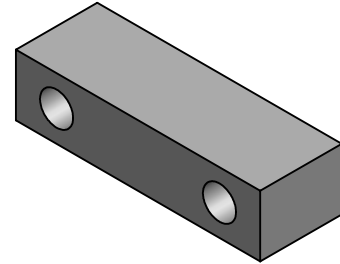
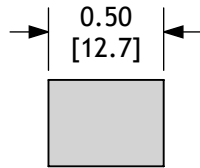
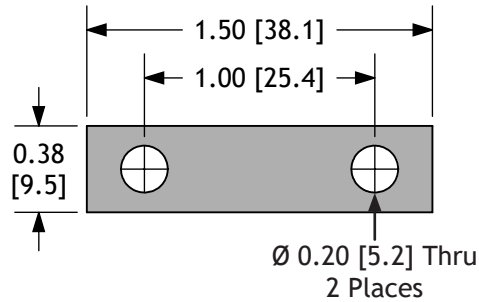


	A in [mm]	B in [mm]	C in [mm]	Weight oz [g]
SGM50	0.88 [22.2]	N/A	0.50 [12.8]	3.29 [93.2]
SGM50-50	1.38 [34.9]	0.50 [12.8]	0.50 [12.8]	3.79 [107.5]
SGM50-125	2.13 [54.0]	1.25 [31.8]	0.50 [12.8]	4.58 [130.0]
SGM75	0.88 [22.2]	N/A	0.75 [19.1]	3.44 [97.6]
SGM75-50	1.38 [34.9]	0.50 [12.8]	0.75 [19.1]	3.94 [111.8]
SGM75-125	4.74 [134.3]	1.25 [31.8]	0.75 [19.1]	4.74 [134.3]

## Stand-Off Mounts (Spacers)

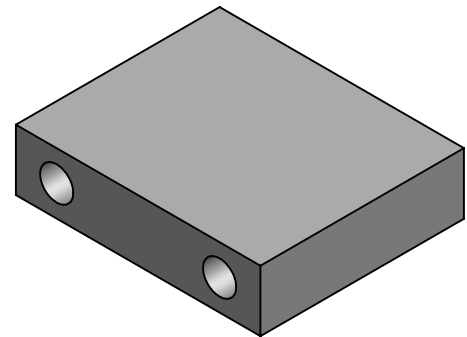
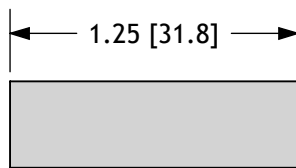
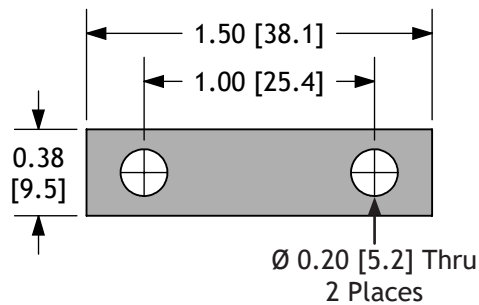
Stand-Off Mounts provide a great deal of flexibility when using multiple EOAT components together. We use our Stand-Off Mounts with Swivel-Ball Mounts and Nipper Mounts to give us a wide variety of mounting options.

### SP-50: Stand-Off Mount, 1/2" Height



Weight: 0.39 oz [11.0 g]

### SP-125: Stand-Off Mount, 1-3/4" Height

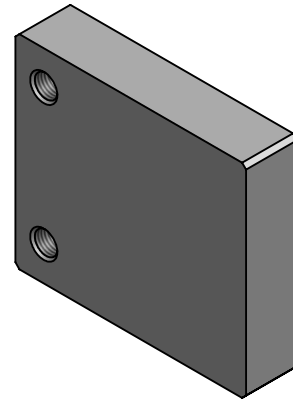


Weight: 0.97 oz [27.5 g]

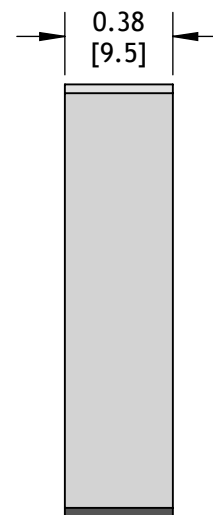
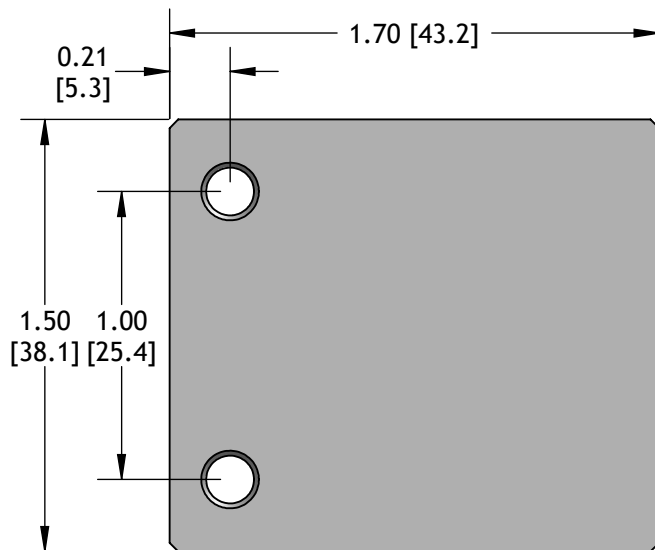


## SMB-GP: Mount Plate

Our mount plate is a simple anodized aluminum machine plate with two M5 thru holes for mounting other pieces of EOAT. We use these with our swivel mounts and spacers to create a versatile mount utilizing a few, simple pieces.



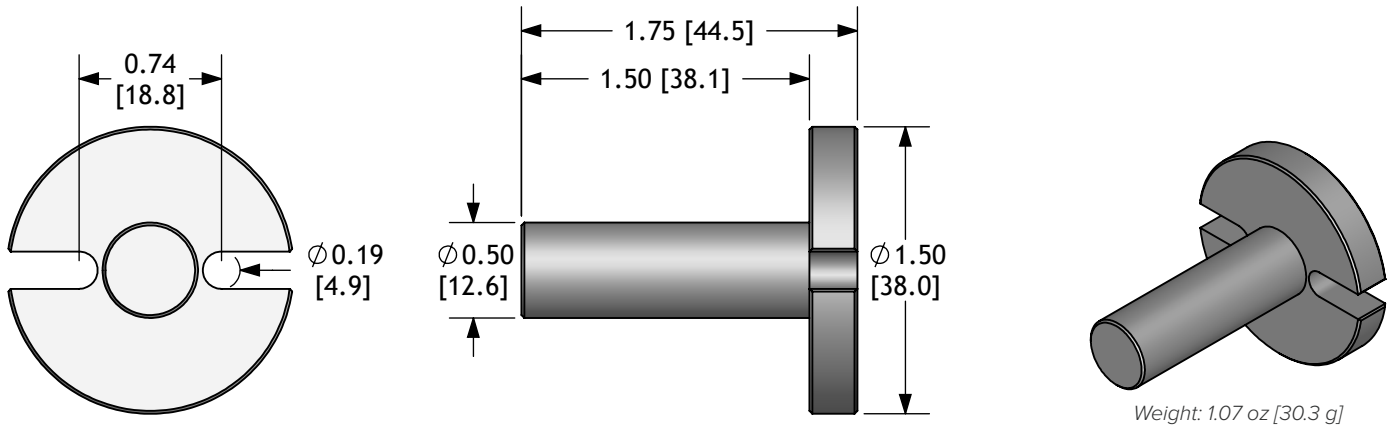
Weight: 1.47 oz [41.5 g]



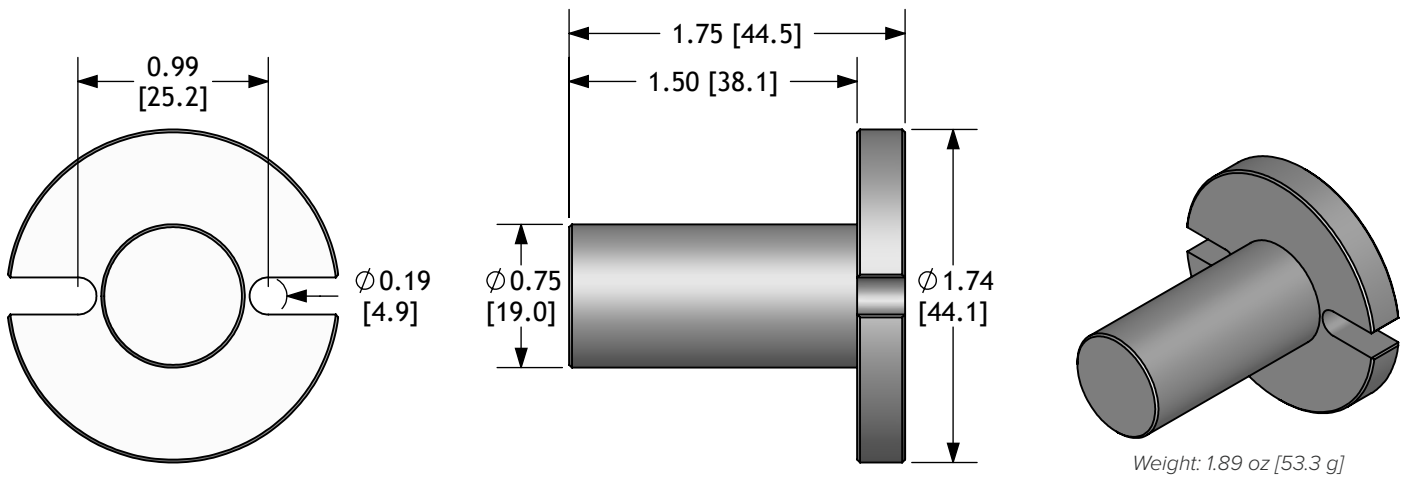
## Post-Style Gripper Mounts

Our Post-Style Gripper Mounts work well with a variety of our clamp mounts when you'd like to mount to a plate rather than use tubing.

### PGM50R: Post Gripper Mount w/ $\varnothing$ 1/2" Post



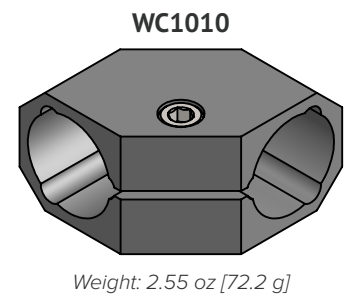
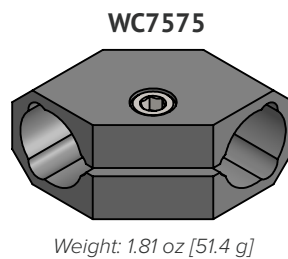
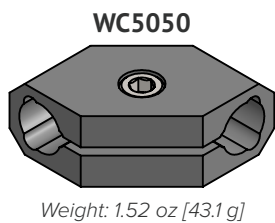
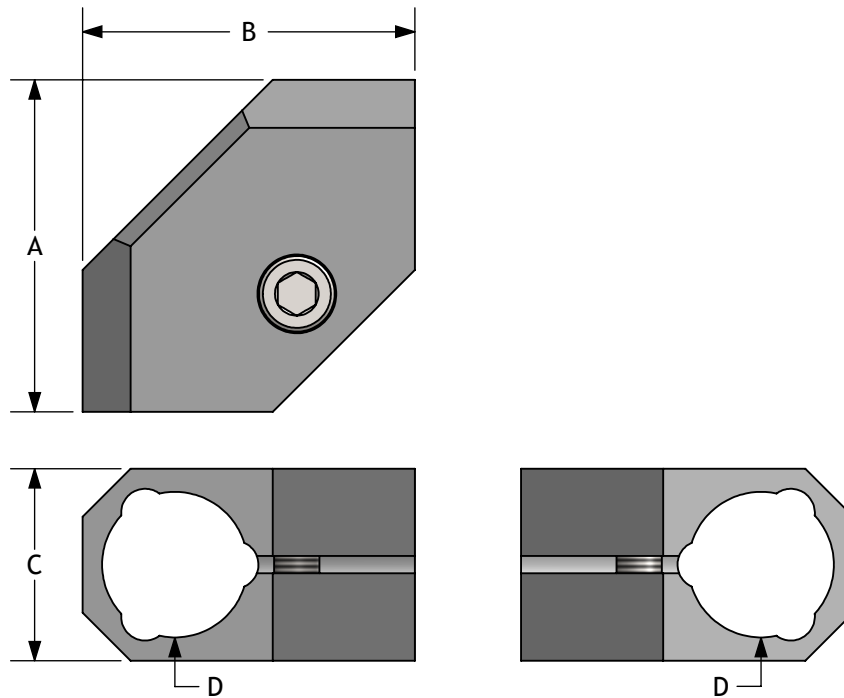
### PGM75R: Post Gripper Mount w/ $\varnothing$ 1/2" Post



## Wrist Clamps

Made of anodized aluminum, Wrist Clamps are a great way to mount two pieces of tubing (same  $\varnothing$ ) at a 90° angle.

Tube Size	
WC	5050
5050	$\varnothing$ 1/2" Tube
7575	$\varnothing$ 3/4" Tube
1010	$\varnothing$ 1" Tube

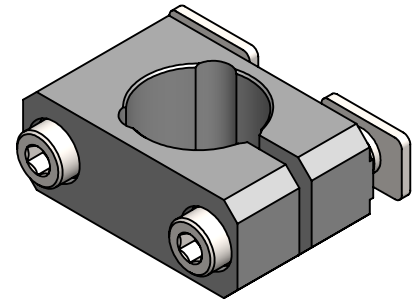


	A in [mm]	B in [mm]	C in [mm]	D in [mm]
WC5050	1.63 [41.3]	1.63 [41.3]	0.75 [19.1]	0.51 [12.9]
WC7575	1.73 [43.9]	1.73 [43.9]	1.00 [25.4]	0.76 [19.3]
WC1010	1.98 [50.3]	1.98 [50.3]	1.25 [31.8]	1.01 [25.6]

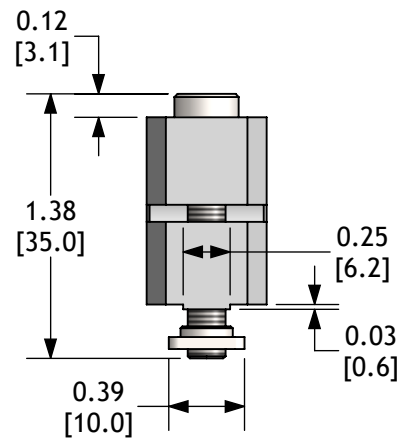
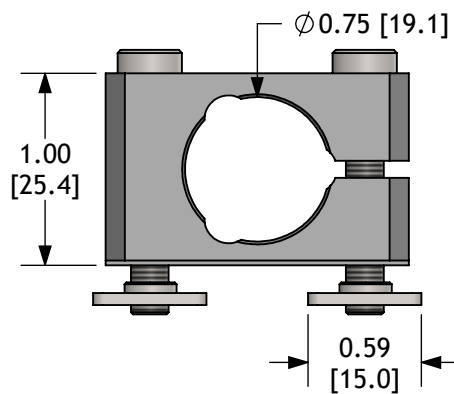
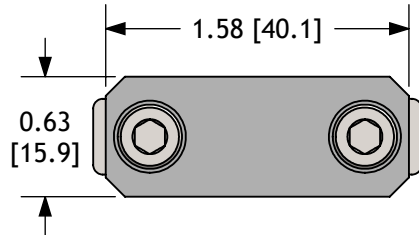
## XCLM75: Extrusion Clamp Mounts

An anodized aluminum clamp with stainless steel fasteners is perfect for mounting tubing to an extrusion.

Fits 1.00 in [25 mm] extrusion size.



Weight: 1.35 oz [38.3 g]

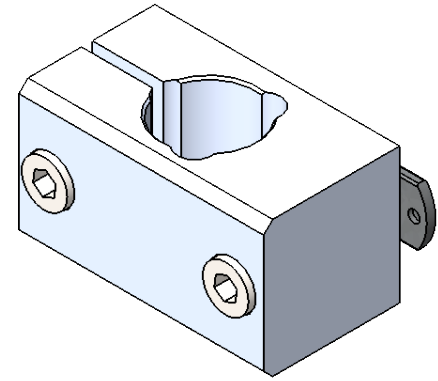
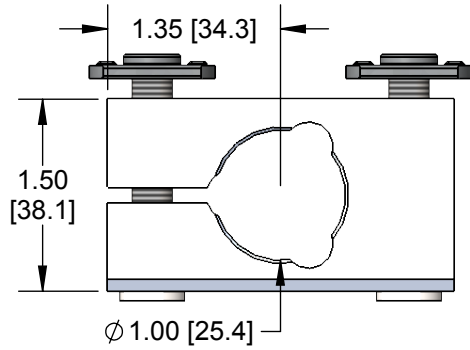


## Clamp Blocks & Mounts

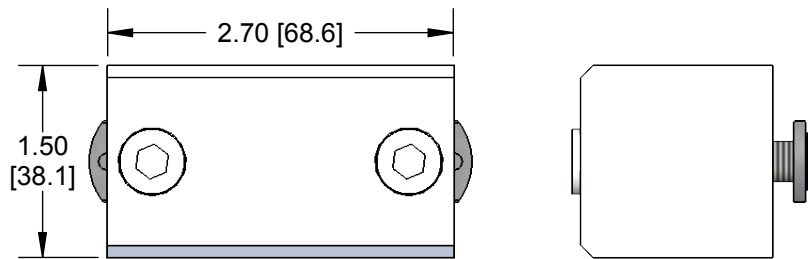
### E10: Extrusion Mount Clamp Block

Fits 1-1/2 in or 40 mm Extrusions.

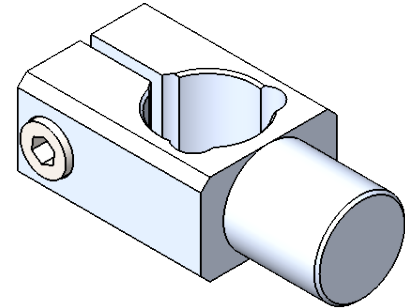
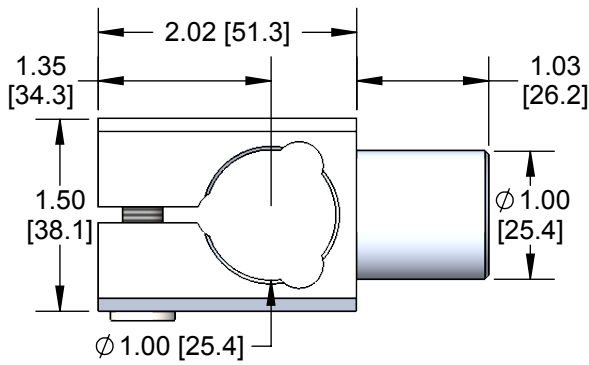
M8X45 Socket Head Cap Screws (2) and M8 T-Nuts (2) included.



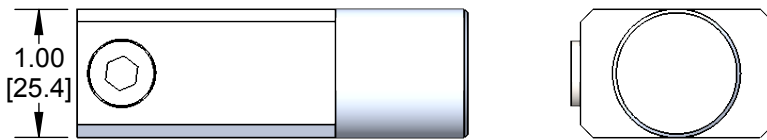
Weight: 0.54 lb [246.0 g]



### M3A: 3rd Axis Mount



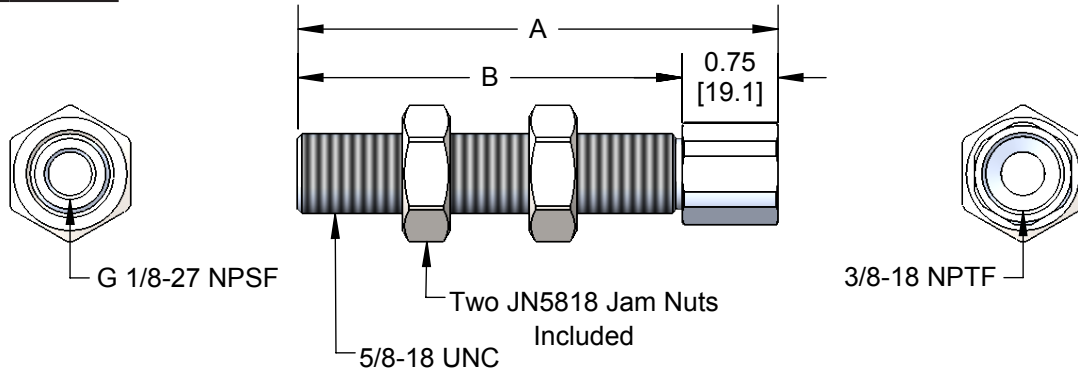
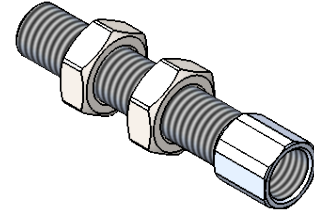
Weight: 0.30 lb (137.0 g)



## Height Adjusters

### AM38F: 3/8 NPTF, G 1/8 NPSF

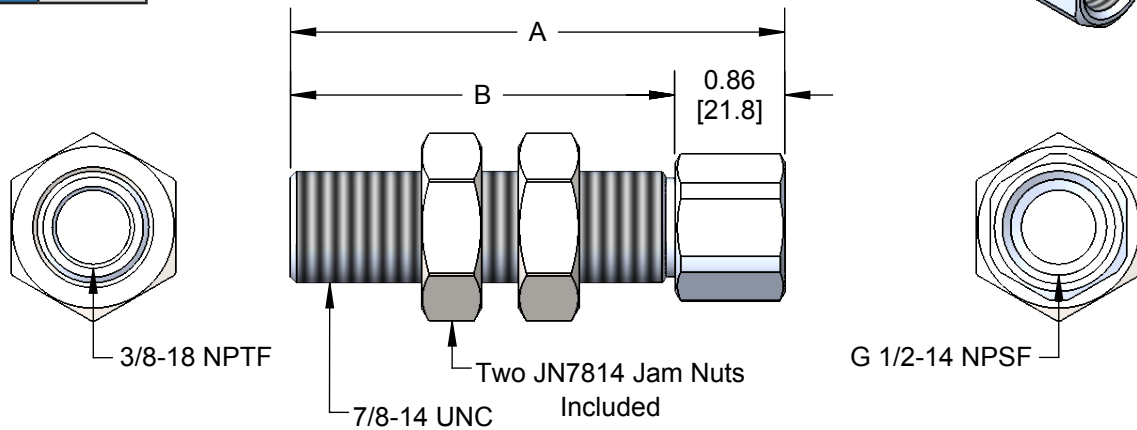
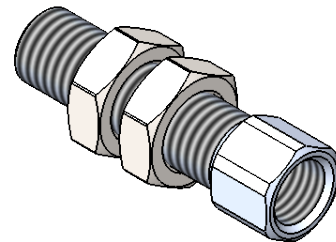
Effective Length	
AM38F-	2
2	2.00 in
3	3.00 in
45	4.50 in
8	8.00 in



	AM38F-2	AM38F-3	AM38F-45	AM38F-8
A: in [mm]	2.75 [69.9]	3.75 [95.3]	5.25 [133.0]	8.75 [222.0]
B: in [mm]	2.00 [50.8]	3.00 [76.2]	4.50 [114.0]	8.00 [203.0]
Weight: lb [g]	0.14 [65.3]	0.16 [73.0]	0.19 [85.3]	0.25 [113.0]

### AM12F: G 1/2 NPSF, 3/8 NPTF

Effective Length	
AM12F-	3
3	3.00 in
6	6.00 in
8	8.00 in

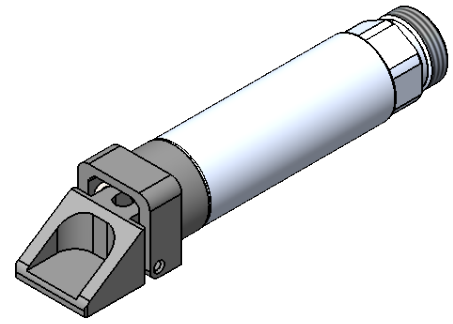


	AM12F-3	AM12F-6	AM12F-8
A: in [mm]	3.86 [98.0]	6.86 [174.0]	8.86 [225.0]
B: in [mm]	3.00 [76.2]	6.00 [152.0]	8.00 [203.0]
Weight: lb [g]	0.34 [156.0]	0.43 [193.0]	0.48 [218.0]

## Gripper Fingers

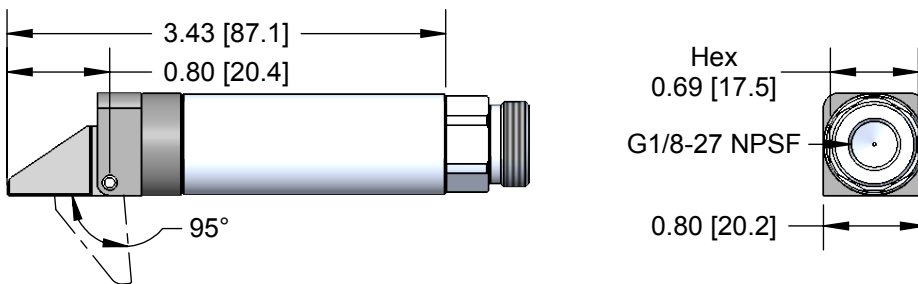
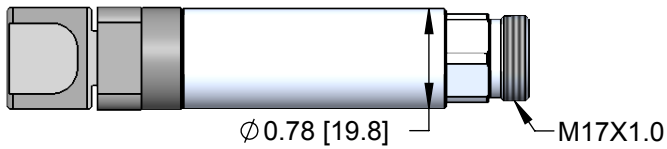
Pneumatic Finger Grippers with spring returns are used to secure parts at the edge.

The GRF20-95 and GRF30-95 provide a full 95° reach and are typically used with an edge clamp



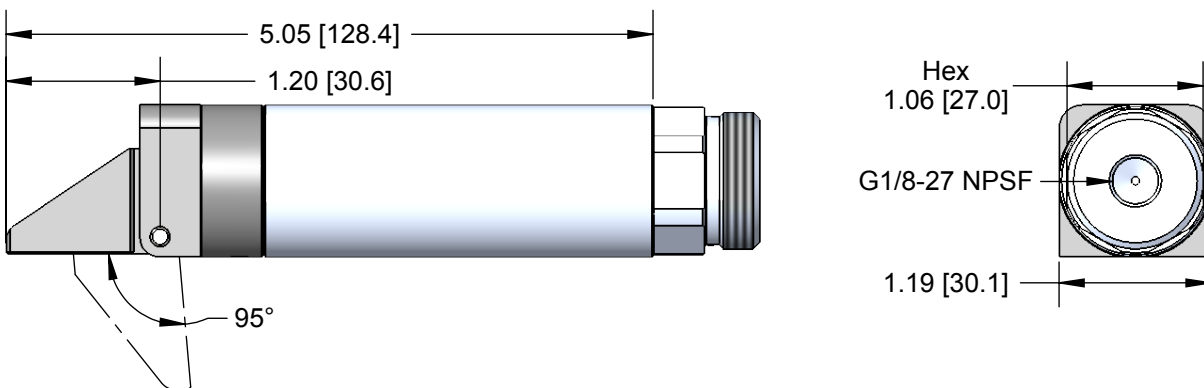
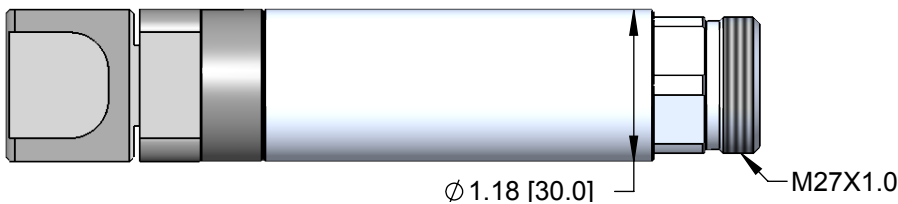
### GRF20-95: 95° Gripper Finger, Size 20

Weight: 2.14 oz [60.8 g]



### GRF30-95: 95° Gripper Finger, Size 30

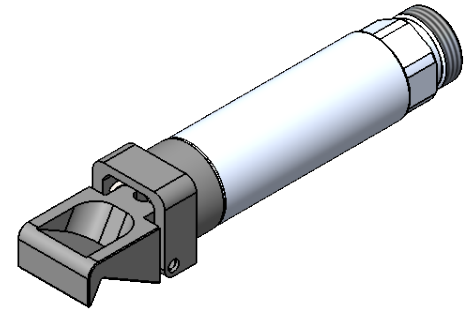
Weight: 6.45 oz [182.9 g]



## Gripper Fingers

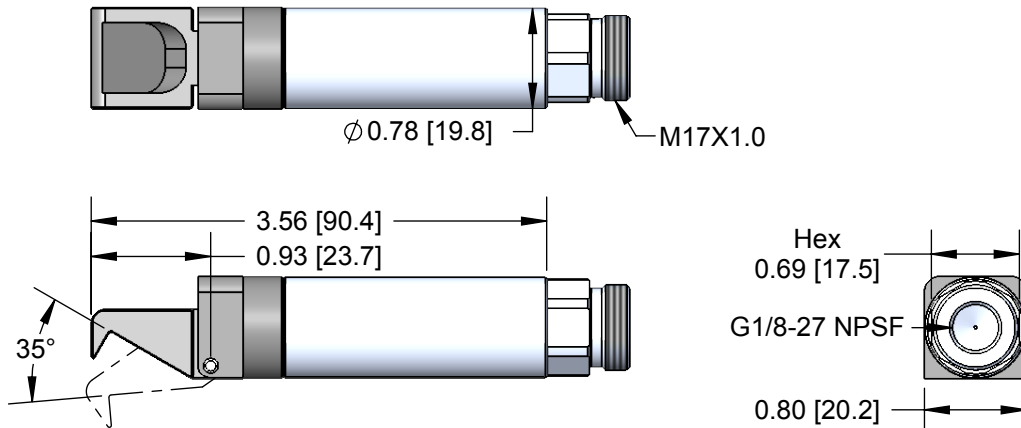
Pneumatic Finger Grippers with spring returns are used to secure parts at the edge.

The GRF20-35 and GRF30-35 provide a full 35° reach and are typically used with an edge clamp



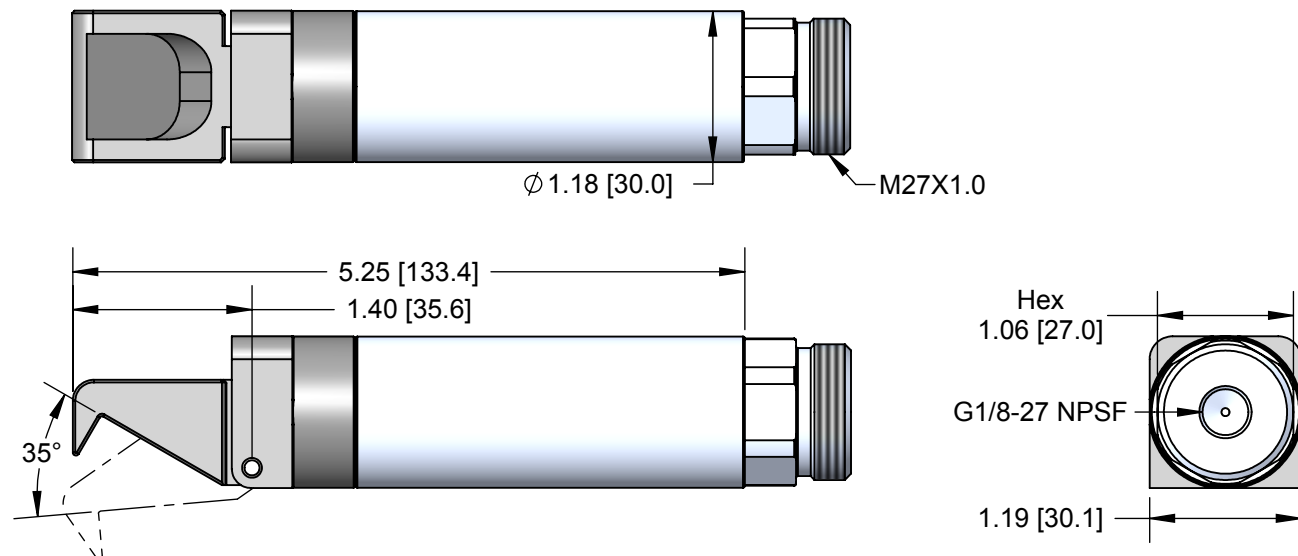
### GRF20-35: 35° Gripper Finger, Size 20

Weight: 2.24 oz [63.5 g]



### GRF30-35: 35° Gripper Finger, Size 30

Weight: 6.78 oz [192.3 g]

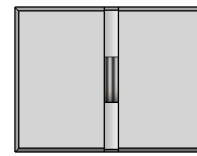
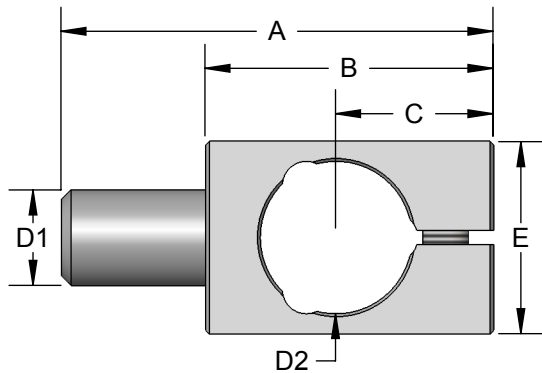
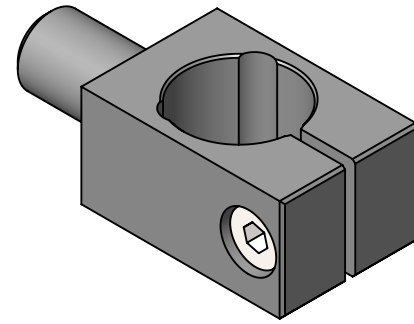




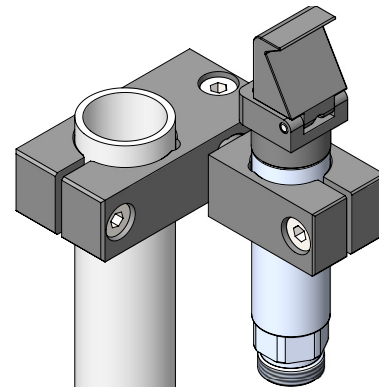
### Gripper Finger Mounts

EDCO USA Finger Gripper Clamps come in various sizes to provide a quality clamp for use with a Finger Gripper.

	Tube Ø
FGM-M20	50
50	1/2" Tube
75	3/4" Tube
100	1" Tube



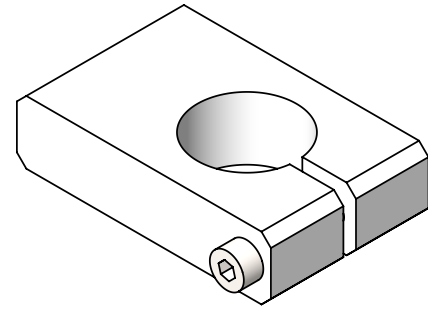
	A in [mm]	B in [mm]	C in [mm]	D1 in [mm]	D2 in [mm]	E in [mm]	F in [mm]	Weight oz [g]
FGM-M2050	2.25 [57.2]	1.50 [38.1]	0.82 [20.8]	0.50 [12.6]	0.79 [20.1]	1.00 [25.4]	0.75 [19.1]	1.48 [42.0]
FGM-M2075	2.25 [57.2]	1.50 [38.1]	0.82 [20.8]	0.75 [19.1]	0.79 [20.1]	1.00 [25.4]	0.75 [19.1]	1.75 [49.7]
FGM-M3075	2.70 [68.6]	1.95 [49.5]	1.02 [25.9]	0.75 [19.1]	1.18 [30.0]	1.50 [38.1]	0.75 [19.1]	2.77 [78.4]



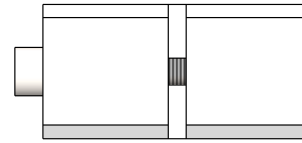
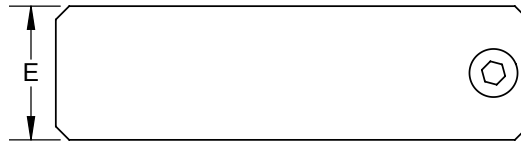
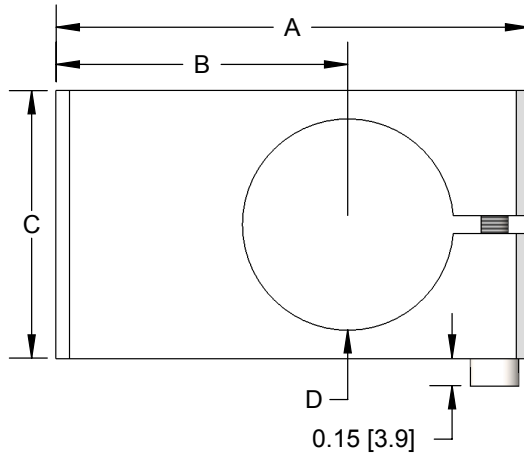
Example: CLM1050, FGM-M2050, and GRF20-35

### Edge Mounts

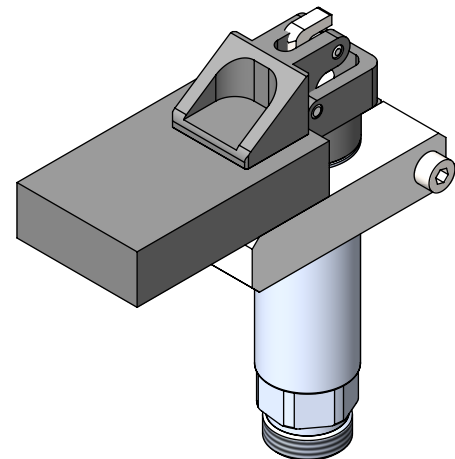
EDCO Edge Clamps are made out of Delrin and are designed for use with the EDCO Finger Grippers, acting as a stop for the part being gripped.



Tube Size		
ANF	20	D
20	20 mm Tube	
30	30 mm Tube	



	A in [mm]	B in [mm]	C in [mm]	D in [mm]	E in [mm]	Weight oz [g]
ANF20D	2.02 [51.2]	1.20 [30.5]	1.25 [31.8]	0.79 [20.0]	0.50 [12.7]	0.91 [25.8]
ANF30D	2.65 [67.3]	1.64 [41.5]	1.50 [38.1]	1.18 [30.0]	0.75 [19.1]	1.83 [51.8]

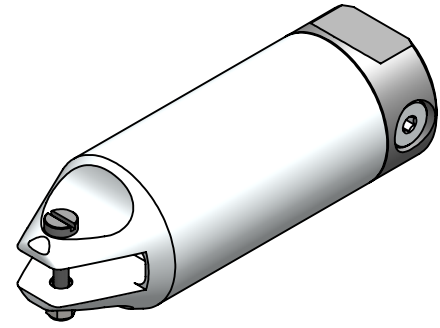


Example: ANF20D w/ GRF20-95

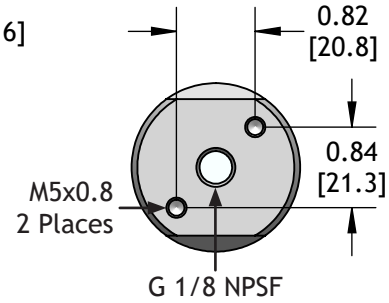
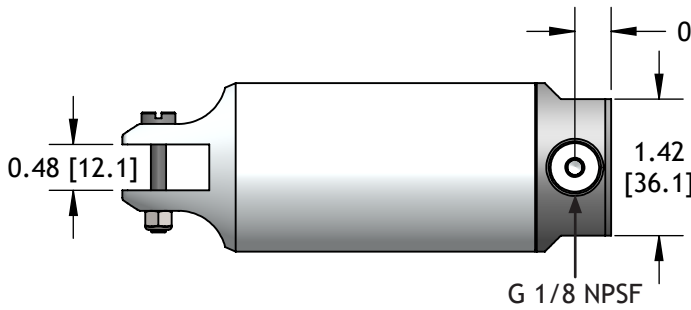
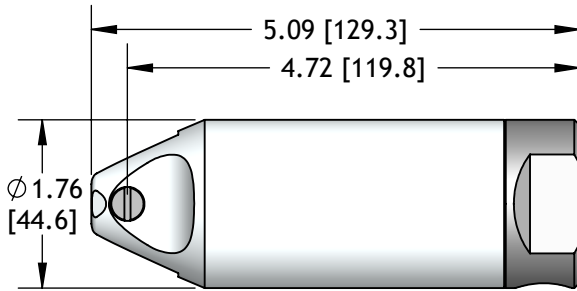
## NR20: Nipper Body

High-quality nipper bodies are designed for reliable operation over a long lifespan.

- accepts any brand size 20 nipper blades
- corrosion resistant stainless-steel spring
- machined aluminum body with low-friction, co-deposited nickel plating with teflon finish
- end cap includes 1/8" bottom and side air-supply ports.
- repair components made by EDCO USA available for purchase



Weight: 10.00 oz [283.6 g]



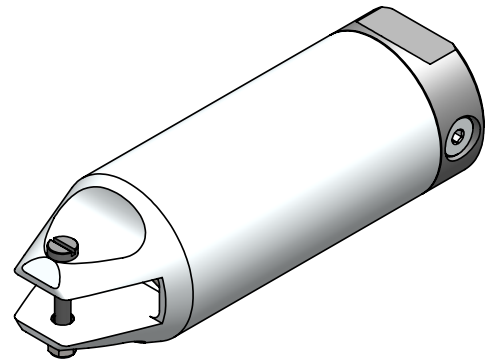
Technical Specifications	
Sprue Ø Cut:	0.28 in [7.0 mm]
Cutting Pressure:	980 lbf*
Air Consumption:	4.75 in <sup>3</sup>

\*When compressed air is supplied at 87 psi.

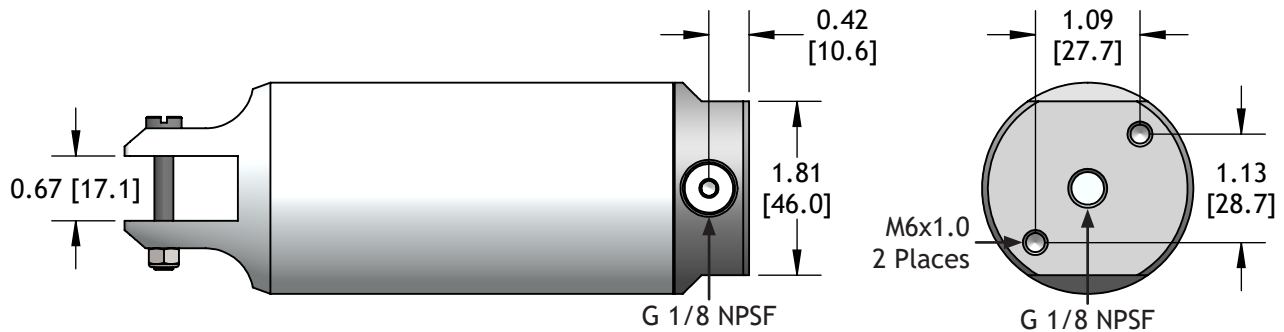
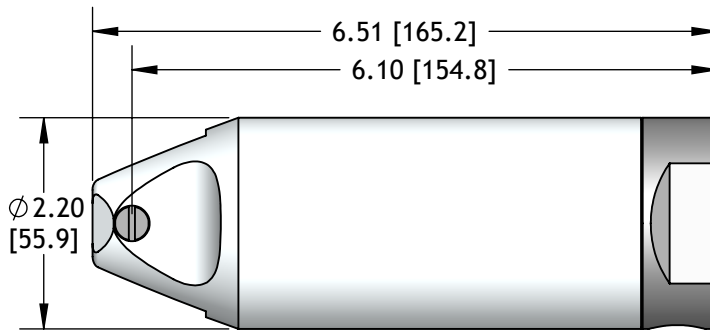
## NR30: Nipper Body

High-quality nipper bodies are designed for reliable operation over a long lifespan.

- accepts any brand size 30 nipper blades
- corrosion resistant stainless-steel spring
- machined aluminum body with low-friction, co-deposited nickel plating with teflon finish
- end cap includes 1/8" bottom and side air-supply ports.
- repair components made by EDCO USA available for purchase



Weight: 18.30 oz [518.8 g]



Technical Specifications	
Sprue Ø Cut:	0.39 in [10.0 mm]
Cutting Pressure:	1,320 lbf*
Air Consumption:	10.35 in <sup>3</sup>

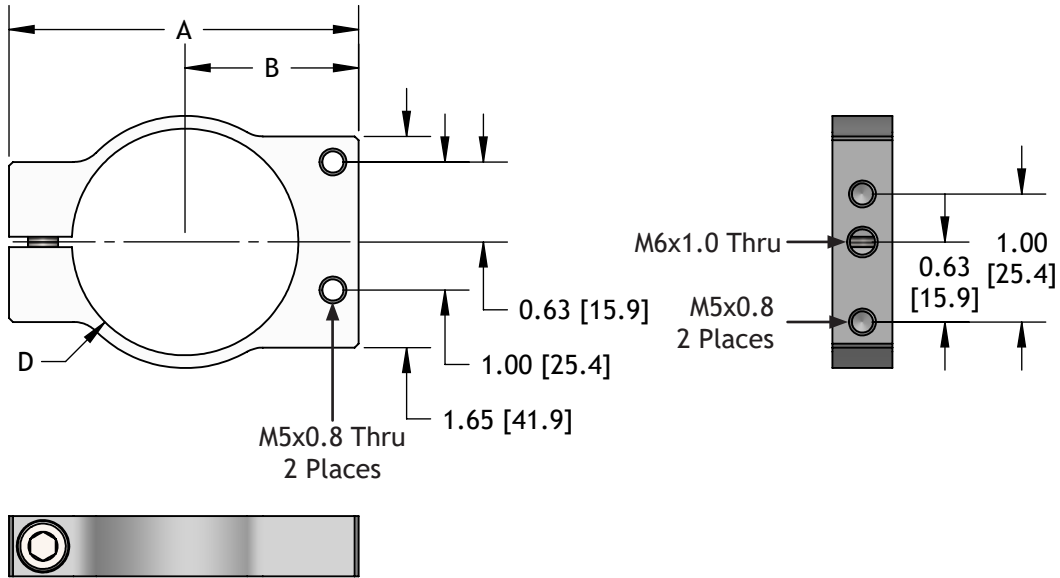
\*When compressed air is supplied at 87 psi.

## Nipper Mounts

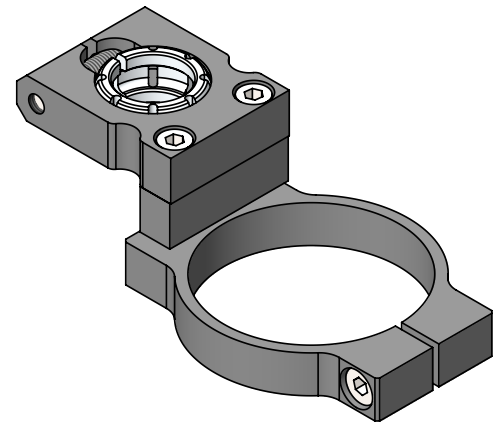
Anodized aluminum nipper mounts are perfect for mounting nippers with other EOAT components.

See page 17:29 to order a preassembled Swivel Nipper Mount.

Nipper Body Size	
NM	20
20	NR20
30	NR30



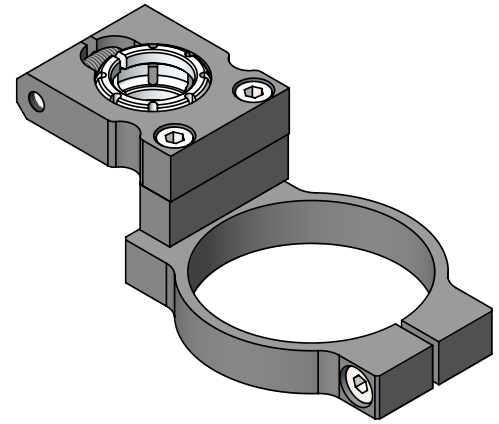
	A in [mm]	B in [mm]	D in [mm]	Compatible Nipper	Weight oz [g]
NM20	2.73 [69.3]	1.36 [34.4]	1.97 [50.0]	NR20	1.52 [43.0]
NM30	3.13 [79.5]	1.56 [39.5]	2.21 [56.1]	NR30	1.72 [48.6]



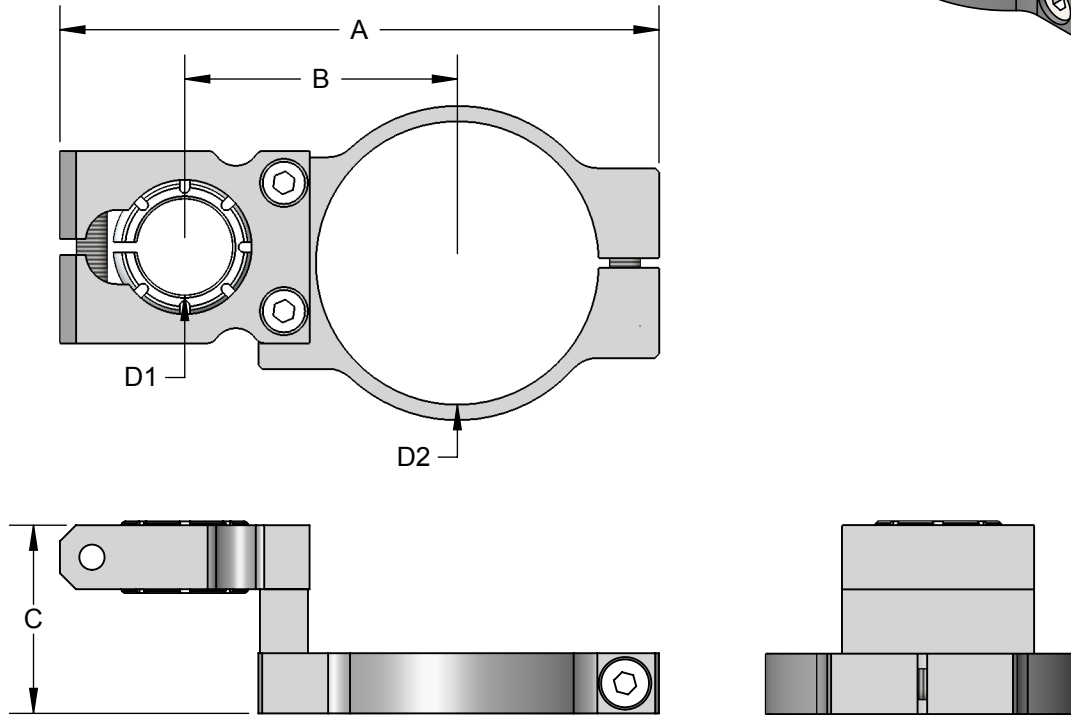
Example: SNM7530-50

## Swivel-Nipper Mounts

Swivel-Nipper Mounts combine the functionality of our Nipper Mounts and Swivel-Ball Mounts with the flexibility of our Stand-Off Mounts with a Mount Plate for a complete assembly.



	Tube Size	Nipper Size	Stand-Off
<b>SNM</b>	<b>75</b>	<b>75</b>	<b>75</b>
50	Ø 1/2" Tube	50 NR20	(Blank) None
75	Ø 3/4" Tube	75 NR30	-50 1/2" Stand-Off
			-125 1-1/4" Stand-Off



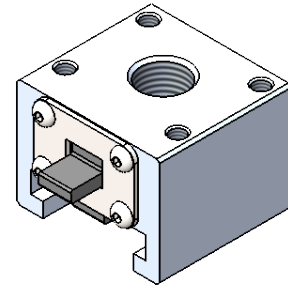
	A in [mm]	B in [mm]	C in [mm]	D1 in [mm]	D2 in [mm]	Weight oz [g]
SNM5020	4.02 [102.1]	1.82 [46.2]	0.97 [24.6]	0.50 [12.8]	1.77 [45.0]	3.34 [94.7]
SNM5020-50	4.02 [102.1]	1.82 [46.2]	1.47 [37.3]	0.50 [12.8]	1.77 [45.0]	3.84 [109.0]
SNM5020-125	4.02 [102.1]	1.82 [46.2]	2.22 [56.4]	0.50 [12.8]	1.77 [45.0]	4.64 [131.5]
SNM5030	4.42 [112.3]	2.02 [51.3]	0.97 [24.6]	0.50 [12.8]	2.21 [56.1]	3.54 [100.3]
SNM5030-50	4.42 [112.3]	2.02 [51.3]	1.47 [37.3]	0.50 [12.8]	2.21 [56.1]	4.04 [114.6]
SNM5030-125	4.42 [112.3]	2.02 [51.3]	2.22 [56.4]	0.50 [12.8]	2.21 [56.1]	4.83 [137.0]
SNM7520	4.28 [108.7]	1.93 [49.0]	0.97 [24.6]	0.75 [19.1]	1.77 [45.0]	3.49 [99.0]
SNM7520-50	4.28 [108.7]	1.93 [49.0]	1.47 [37.3]	0.75 [19.1]	1.77 [45.0]	4.00 [113.3]
SNM7520-125	4.28 [108.7]	1.93 [49.0]	2.22 [56.4]	0.75 [19.1]	1.77 [45.0]	4.79 [135.8]
SNM7530	4.68 [118.9]	2.13 [54.1]	0.97 [24.6]	0.75 [19.1]	2.21 [56.1]	3.69 [104.6]
SNM7530-50	4.68 [118.9]	2.13 [54.1]	1.47 [37.3]	0.75 [19.1]	2.21 [56.1]	4.19 [118.9]
SNM7530-125	4.68 [118.9]	2.13 [54.1]	2.22 [56.4]	0.75 [19.1]	2.21 [56.1]	4.99 [141.4]

### T-Slot Receivers w/ Vacuum Connection

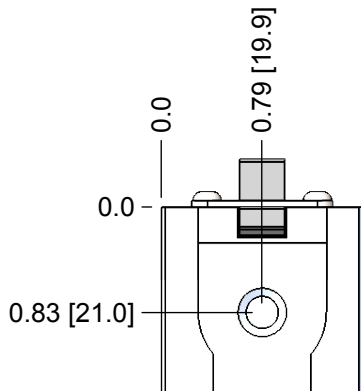
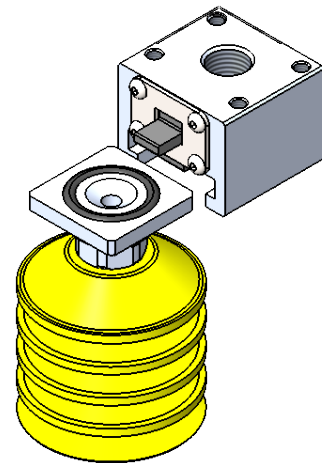
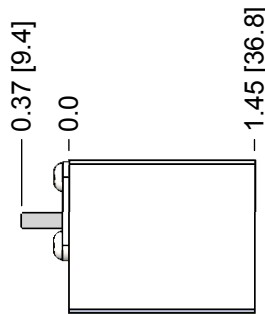
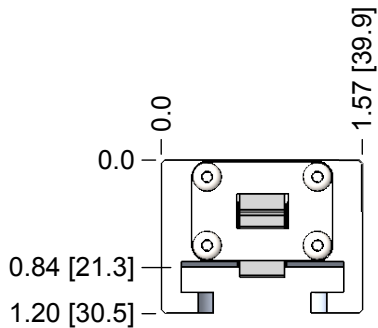
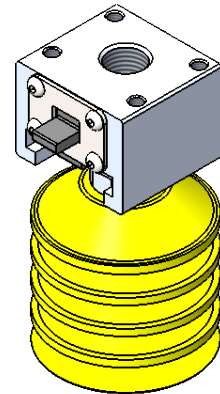
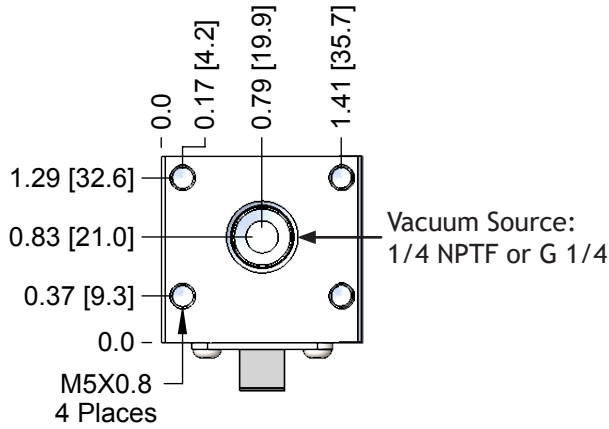
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

See the Vacuum Cups Fittings section for T-Slot Adapters.

Ports	
TR-14	
(Blank)	NPT Threads
-G	G Threads



Weight: 0.20 lb [90.7 g]

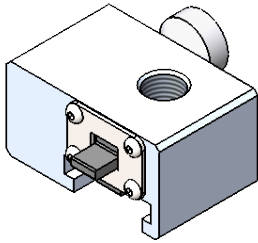


## T-Slot Receivers w/ Vacuum Connection

### T-Slot Receiver w/ Vacuum Connection & Apple Core Pin or Ball Swivel Mount

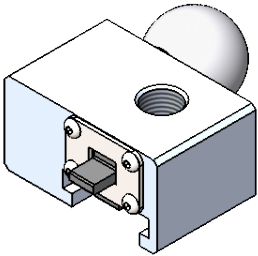
	Mount	Ports	
TR-14	-A		
-A	Apple Core Pin	(Blank)	NPT Threads
-B	Ball Swivel	-G	G Threads

**Apple Core Pin**

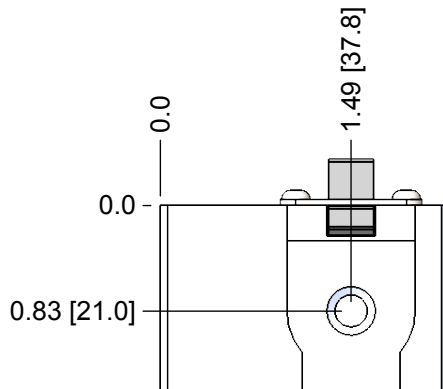
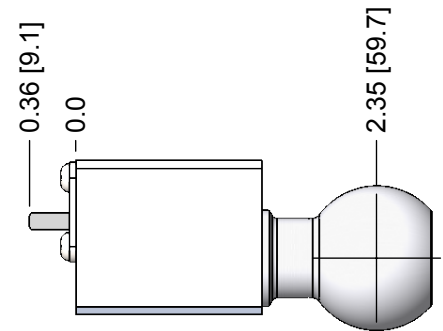
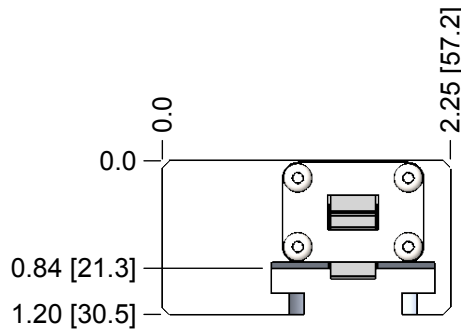
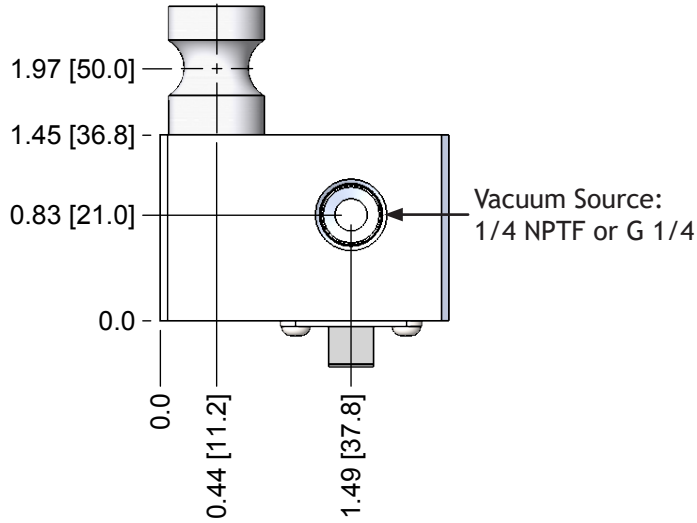


Weight: 0.35 lbs [159.0 g]

**Ball Swivel**



Weight: 0.40 lbs [181.0 g]

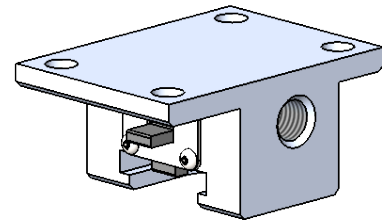




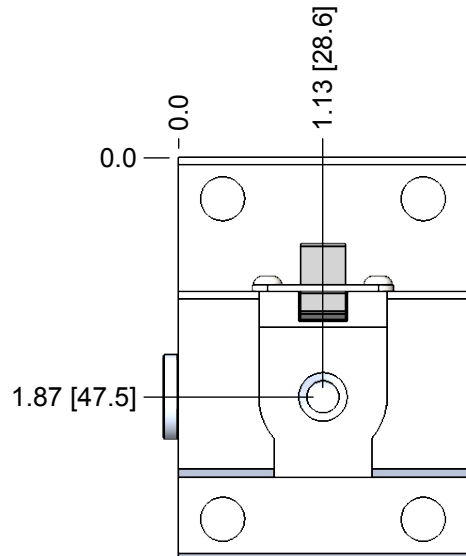
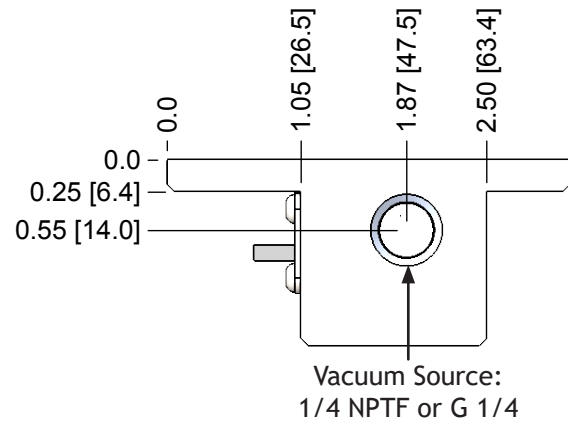
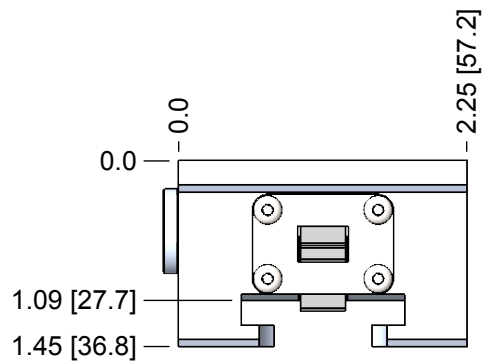
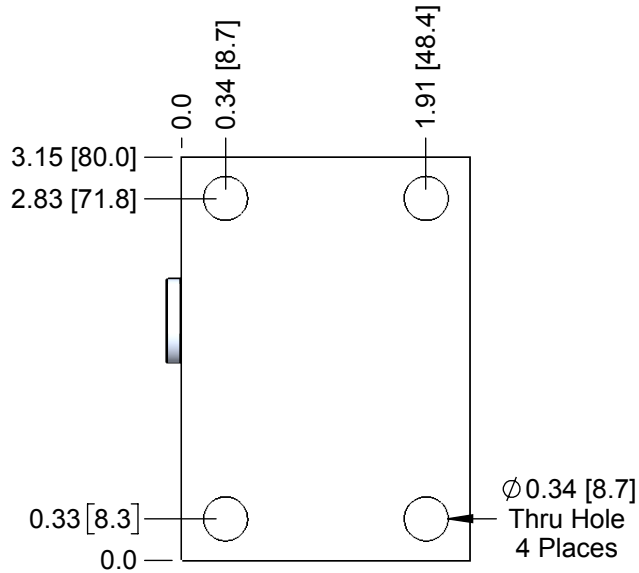
### T-Slot Receivers w/ Vacuum Connection

#### Surface Mount T-Slot Receiver w/ Vacuum Connection

Ports	
TR-14-S	
(Blank)	NPT Threads
-G	G Threads



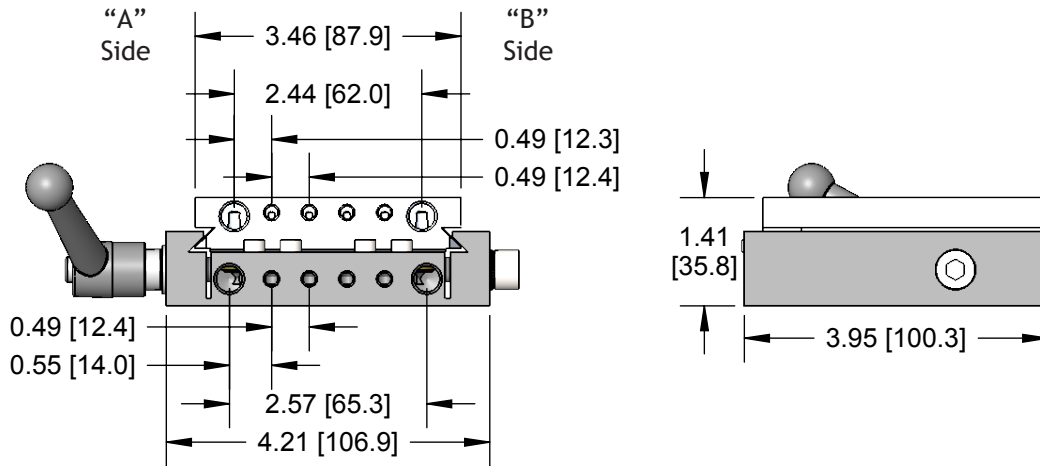
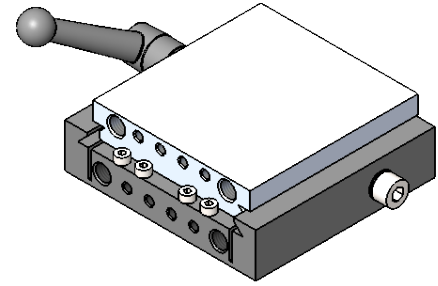
Weight: 0.46 lb [209.0 g]



## Quick Change Slides

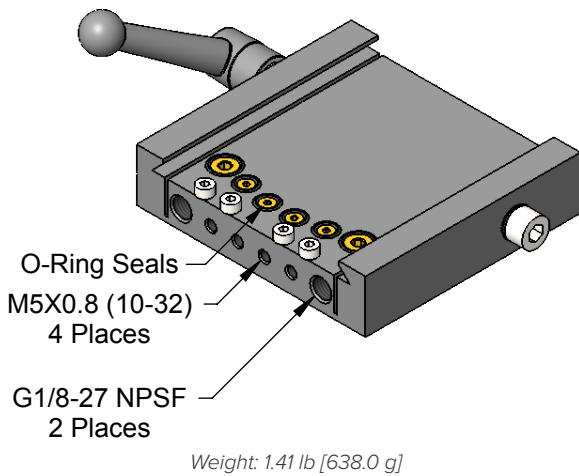
QCS provides a cost-effective method to increase productivity by virtually eliminating end-of-arm tool change-over time. With QCS, a robot can be re-tooled for a different part and back in service within a few minutes. Compressed air and vacuum lines are automatically connected as the tool plate mates with the clamp base on the robot arm. The clamp handle can be indexed to a convenient position in 30° increments.

Please contact us for details about custom layouts.

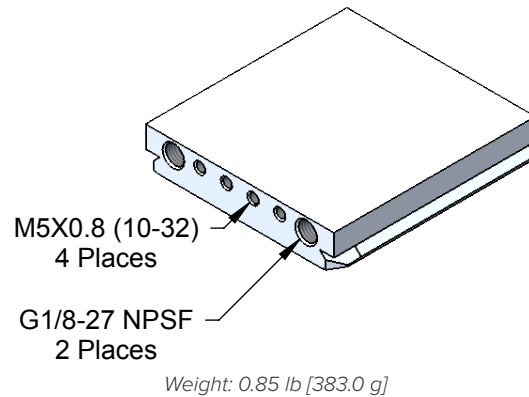


## Robot Clamp Base

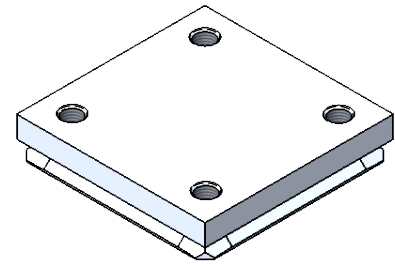
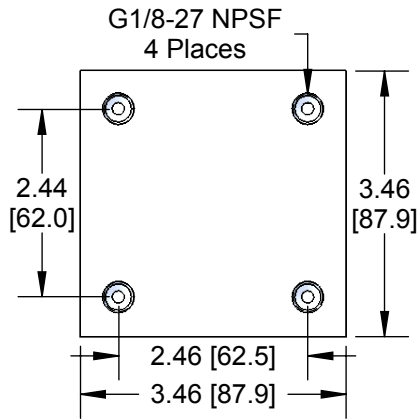
Handle Location	
QCS-100B-	A
A	Handle on "A" Side
B	Handle on "B" Side



## Tool Plate: QCS-100T



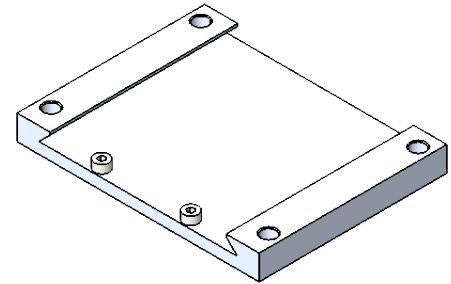
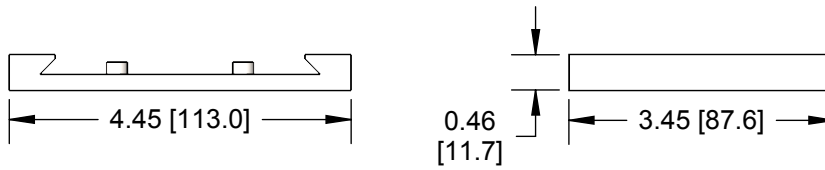
### Tool Plate: QCS-100TD



Weight: 0.77 lb [347.0 g]

### Tool Park: QCS-100P

An optional Tool Park provides convenient storage and protection for end-of-arm tools when not in service. One Tool Park per Tool Plate is required for efficient operation.

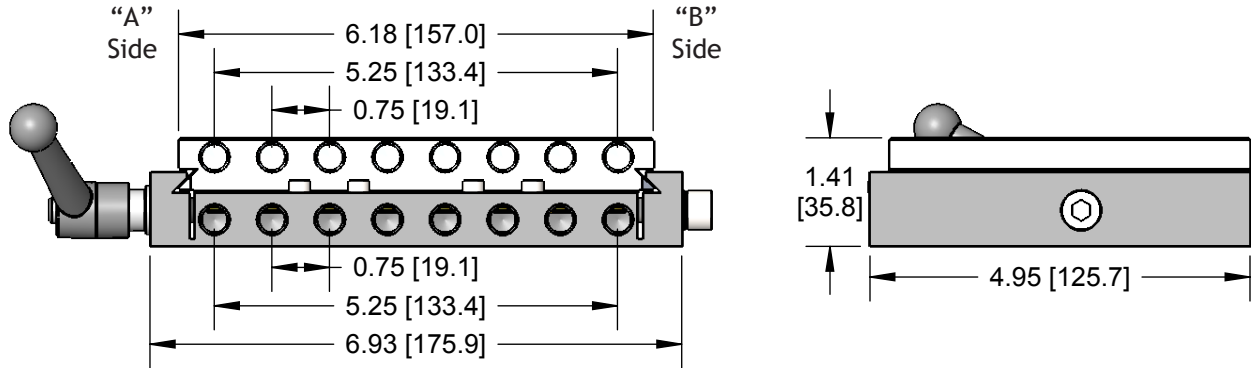
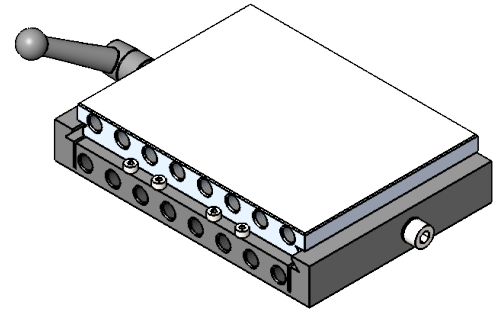


Weight: 0.39 lb [178.0 g]

### Quick Change Slides

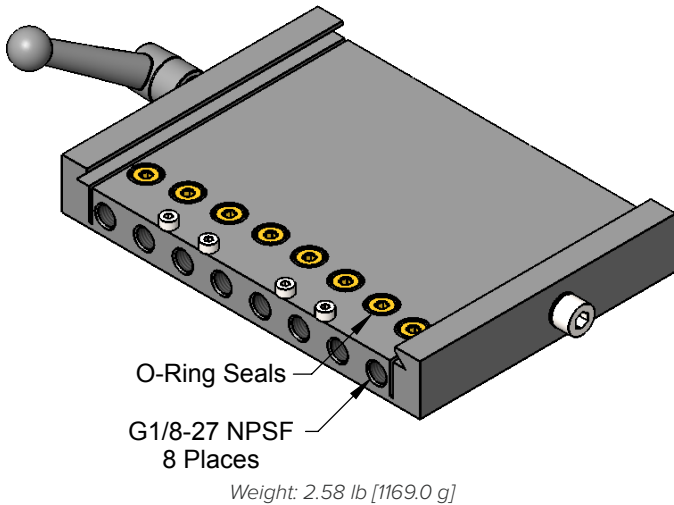
QCS provides a cost-effective method to increase productivity by virtually eliminating end-of-arm tool change-over time. With QCS, a robot can be re-tooled for a different part and back in service within a few minutes. Compressed air and vacuum lines are automatically connected as the tool plate mates with the clamp base on the robot arm. The clamp handle can be indexed to a convenient position in 30° increments.

Please contact us for details about custom layouts.

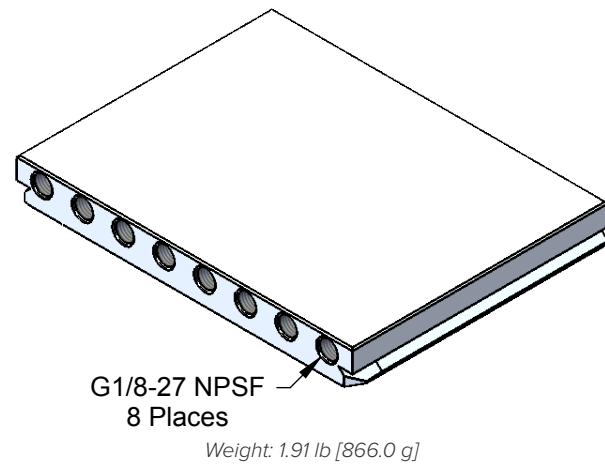


### Robot Clamp Base

Handle Location	
QCS-140B-	A
A	Handle on "A" Side
B	Handle on "B" Side

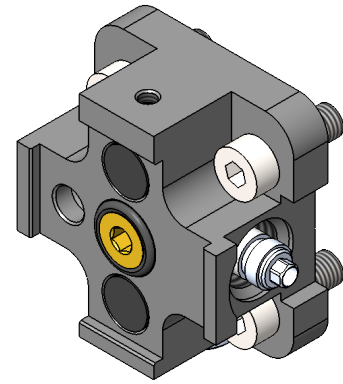


### Tool Plate: QCS-140T



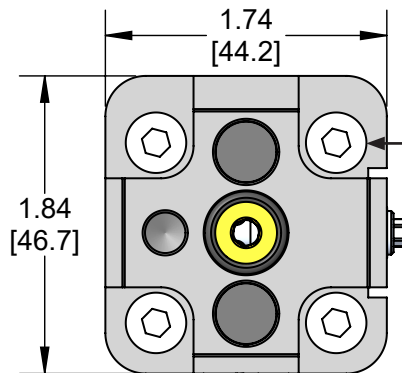
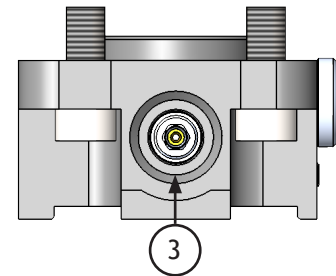
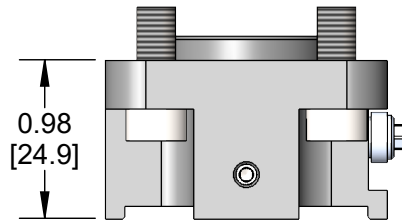
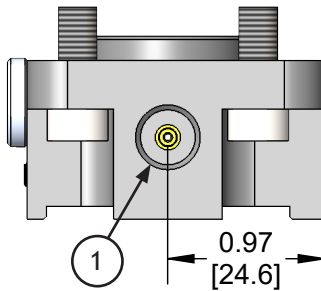
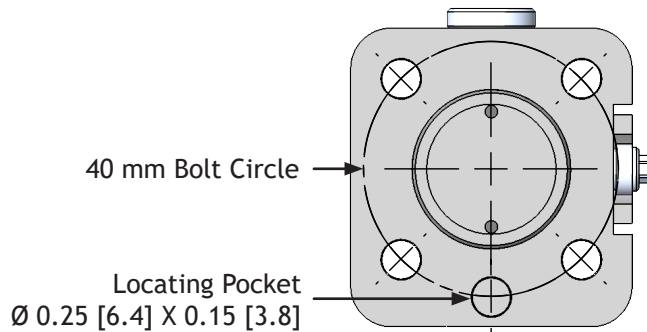
### RQCP: Robot Quick Change Pump

Vacuum pump fits Flexpicker and other robots with four 6mm tapped interface on 40 mm bolt circle. Tool is magnetically coupled to pump for fast replacement for either maintenance or for changeover to manipulate a different part. Handles up to 4.4 lbs (2kg) load. High vacuum flow venturis allow fast evacuation and the purge options quickly dissipate vacuum to optimize cycle times.

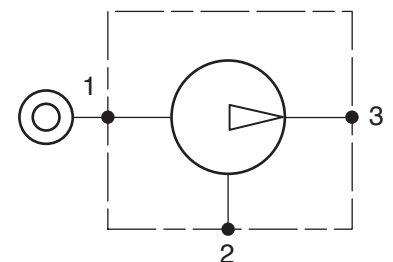
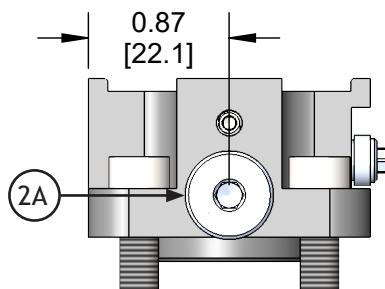


Weight: 3.70 oz [104.9 g]

Venturi Series		Purge Option	
RQCP-	10L	A	
08L	ER08L	(Blank)	None
10L	ER10L	-LP	Limited Pressure Purge
		-PP	Positive Pressure Purge



M6 Screws Included (Qty 4)

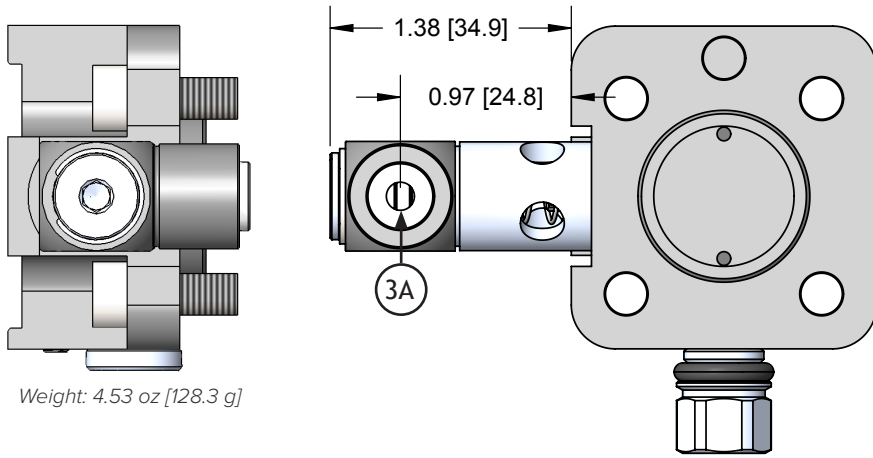


Code	Function	Threads
1	Air Supply	G 1/8 NPSF
2A	Vacuum - Auxiliary	G 1/8 NPSF
3	Exhaust	G 1/4

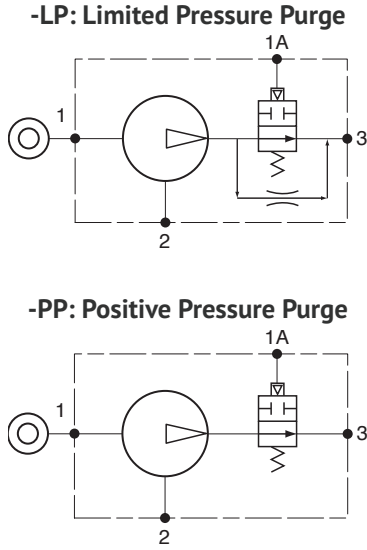
### RQCP: Purge Options

Purge option provides faster part placement by quickly dissipating residual vacuum which is especially useful when using bellows-style vacuum cups. When placing a part, the air supply to the vacuum pump is left on and a compressed air signal to the Purge unit blocks off the pump exhaust to redirect venturi air into the vacuum tool to quickly dissipate any residual vacuum.

The purge should remain on until the suction cups have separated from the part that was placed then for a brief additional time to blow out any ingested debris. VSP-18 Switch protector is highly recommended when using both a Purge option and a monitoring vacuum sensor to prevent overpressure damage.

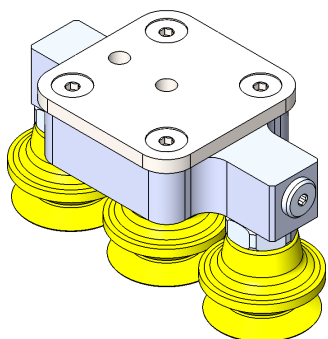
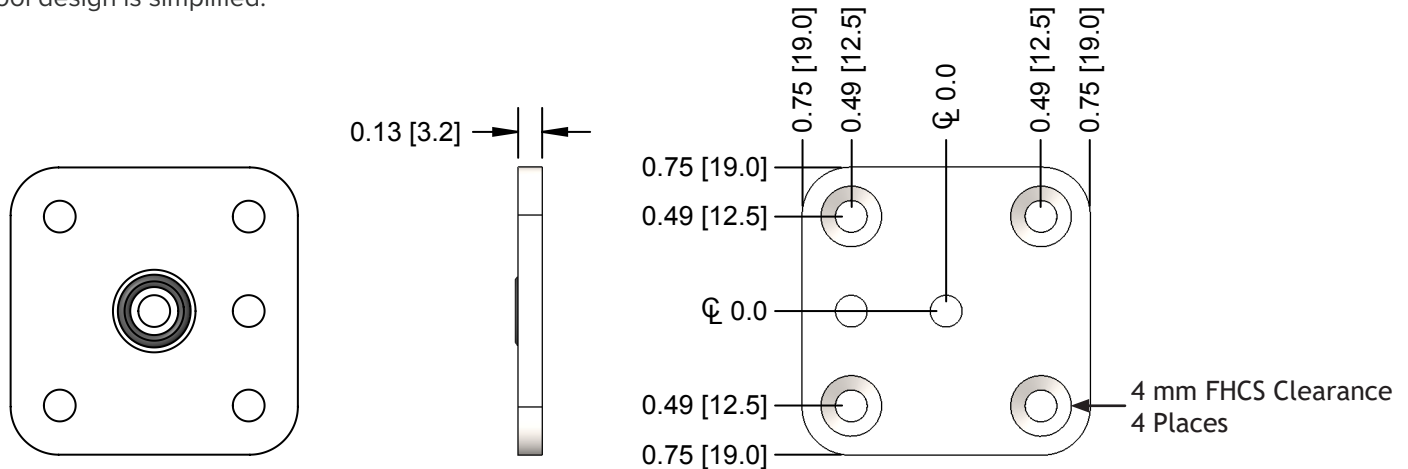


Weight: 4.53 oz [128.3 g]

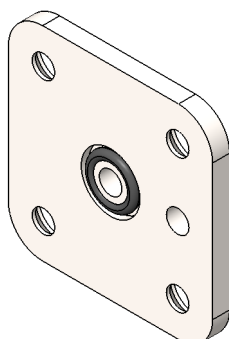


### RQCP-P: Tool Plate

Precision steel tool plate is used to mount and register tooling to the RQCP pump. A port seal passes pump vacuum into the tool so that tool design is simplified.



Example (Not For Sale)

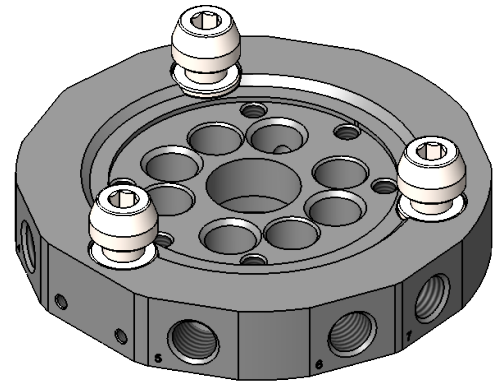
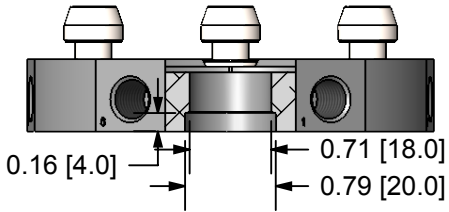


Weight: 1.08 oz [30.5 g]

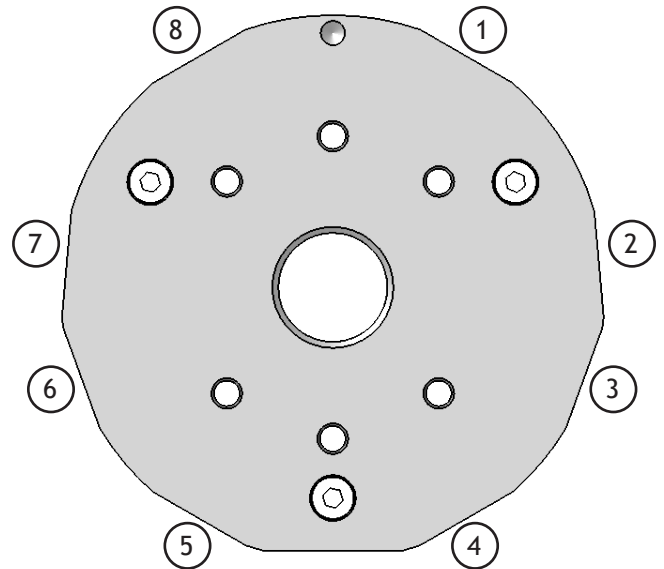
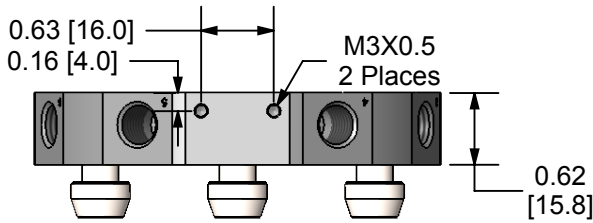
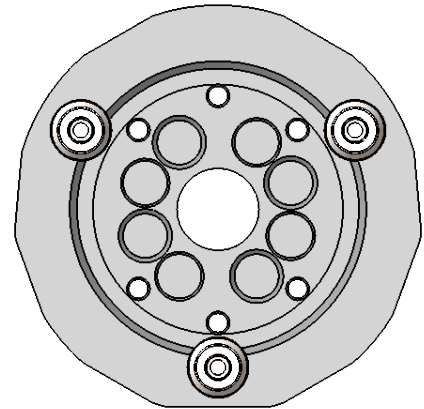
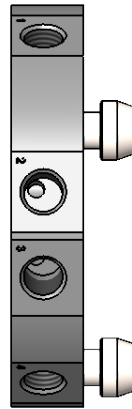
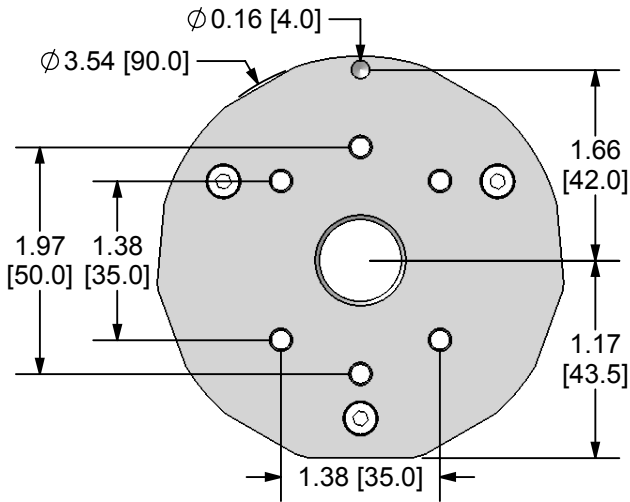
### QC90-B: Tool-Side Quick Changer

Tool-side EOAT Changer is typically used on injection molding machines to handle tools weighing up to 25 lbs. Mates with 90mm robot-side changer made by others.

G 1/8 NPSF Connections (Qty 8)



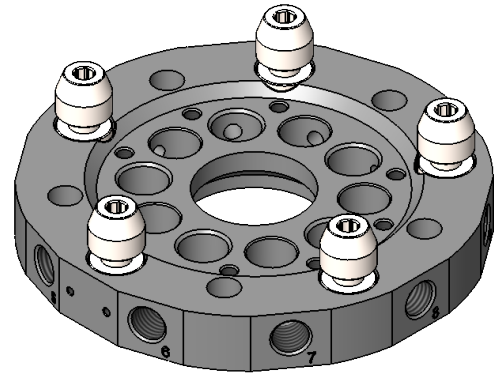
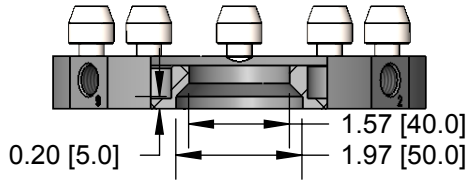
Weight: 7.90 oz [224.0 g]



### QC150-B: Tool-Side Quick Changer

Tool-side EOAT Changer is typically used on injection molding machines to handle tools weighing up to 65 lbs. Mates with 150mm robot-side changer made by others.

G 1/4 Connections (Qty 10)



Weight: 29.69 oz [841.6 g]

