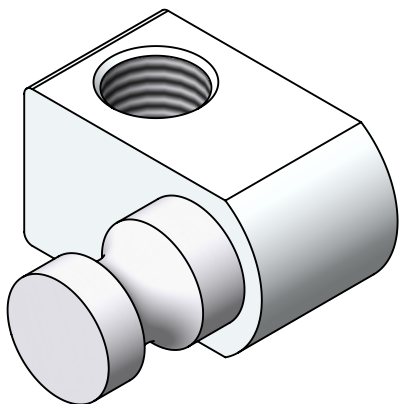


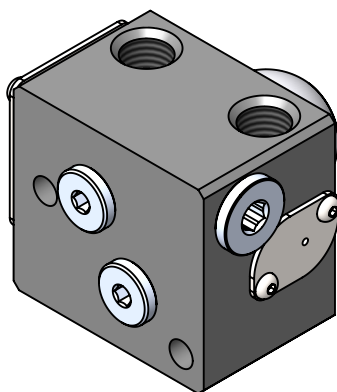
EMAT

SECTION 16

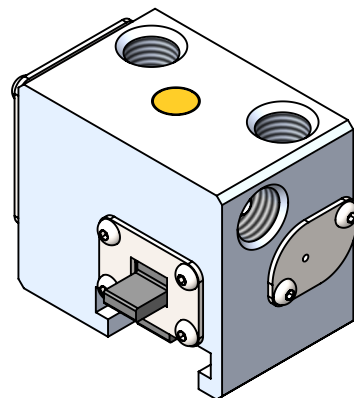
EMAT



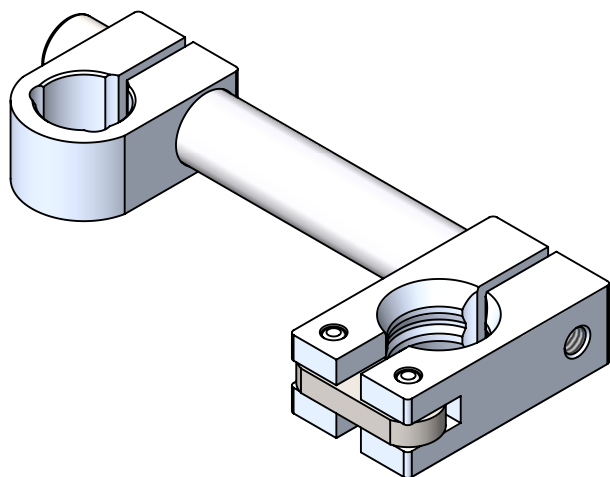
VACUUM CONNECTIONS



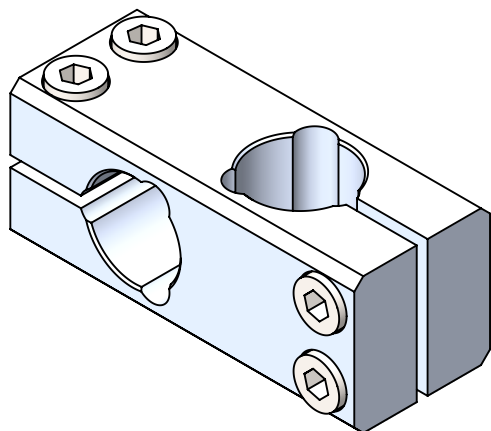
VACLOC ATTACHMENTS



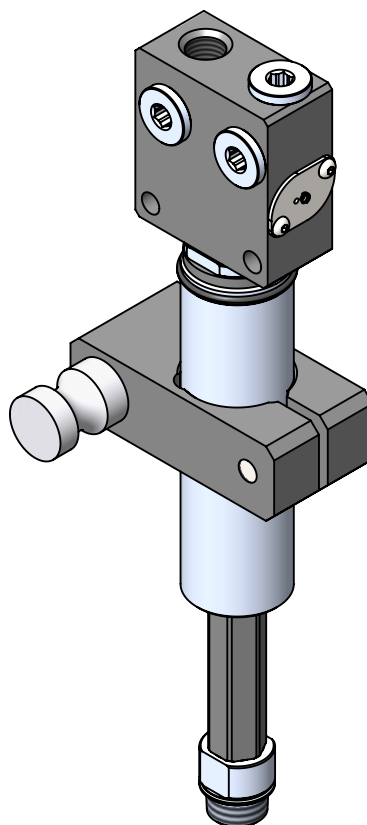
T-SLOT ATTACHMENTS



ARMS



ACCESSORIES



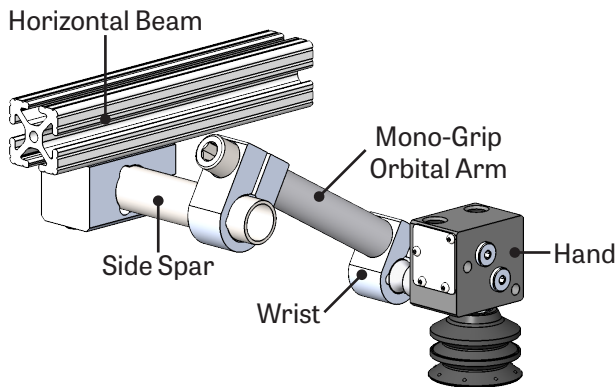
LEVEL COMPENSATORS

General Information	16:3 - 16:6
Vacuum Connections	16:7 - 16:9
VacLoc Work Attachments	16:10 - 16:15
T-Slot Receiver Work Attachments	16:16 - 16:28
Pump Performance	16:29 - 16:30
Level Compensator Work Attachments	16:31 - 16:41
EMAT Arms	16:6
EMAT Accessories	16:29 - 16:30

EMAT
EDCO USA MODULAR AUTOMATION TOOLING

EDCO USA Modular Automation Tooling (EMAT) provides an efficient way to construct automation or robotic tools with minimal design time. Rugged, lightweight anodized aluminum EMAT 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 either round tubing or t-slot structural extrusion, plus 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 suction 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 suction cup is the preferred method since a poor seal at one cup can't affect the vacuum level at any other cup. A discrete system also allows splitting the system into several independently controlled zones so that a wider variety of part sizes and shapes can be efficiently handled.

EMAT provides simplicity, adjustability, rigidity, serviceability, energy conservation, coaxial ejector technology and cost-effectiveness in a readily available package.

EDCO USA 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.

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.

Integral ES Energy-Saving controls provide a dramatic reduction in compressed air usage by only turning the vacuum pump on as needed to maintain the selected vacuum level.

EMAT tooling is easily reconfigurable to meet changing application requirements.

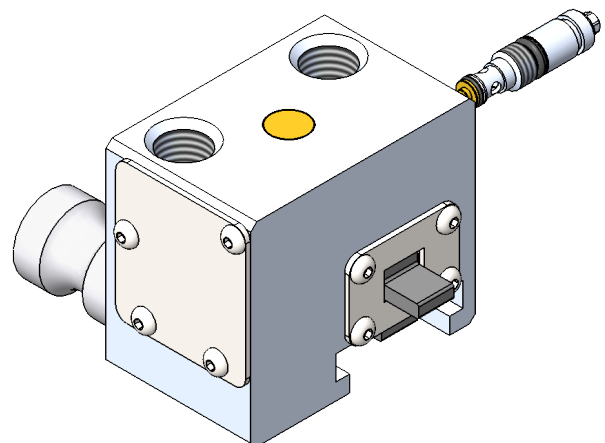
Fast and simple single-bolt arm adjustment (mono-clamp) and tri-arc grip provides superior positional security via higher clamping forces.

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.

COAXIAL VENTURI TECHNOLOGY

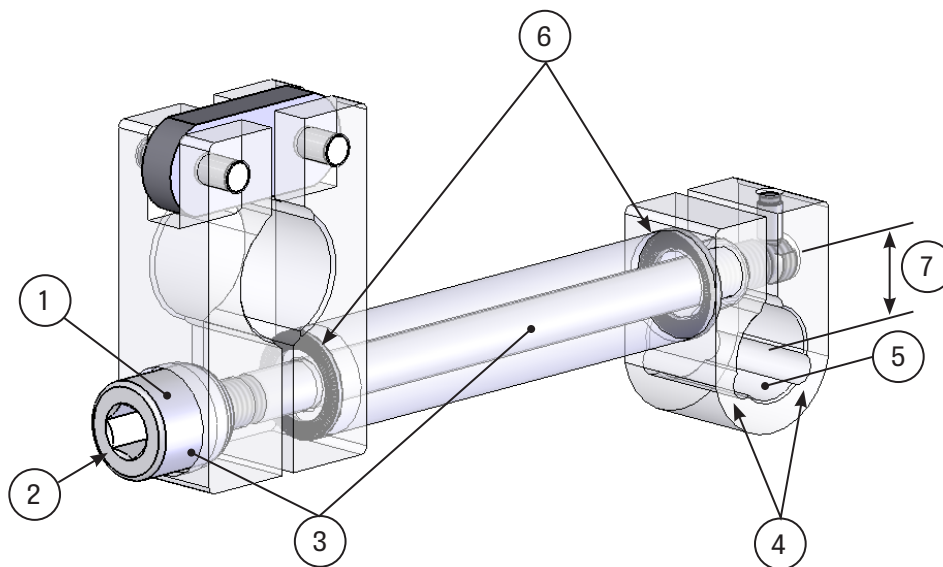
Proprietary EMAT coaxial ejector vacuum pumps are optimized to provide high vacuum flow and reduce compressed air consumption. There are no flap-valves to swell up or stick due to ingesting die lubricants and the simplified design is tolerant of debris.



EMAT
EMAT ARM FEATURES

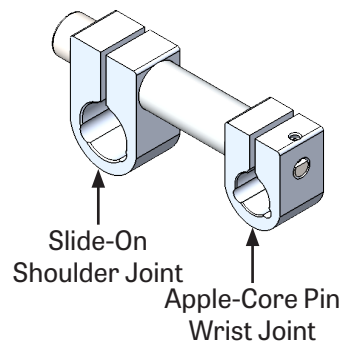
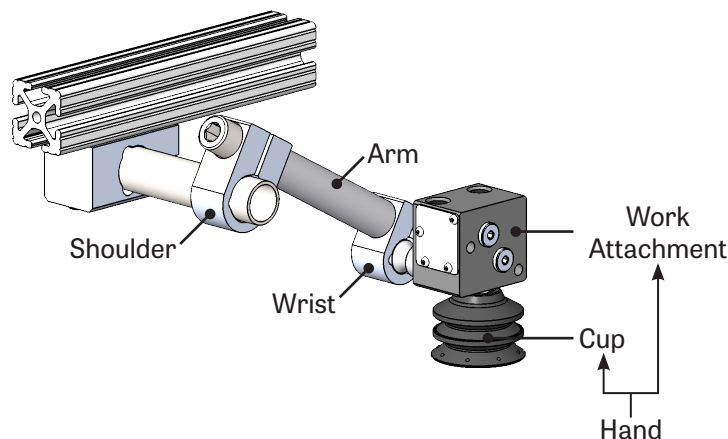
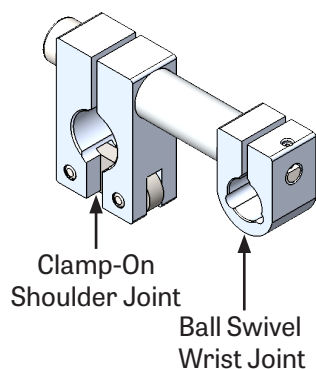
Improved technology provides greater arm positional security.

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 group 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.

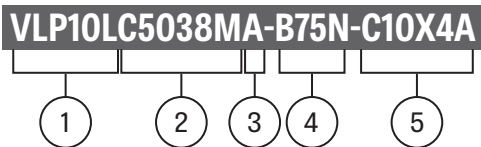
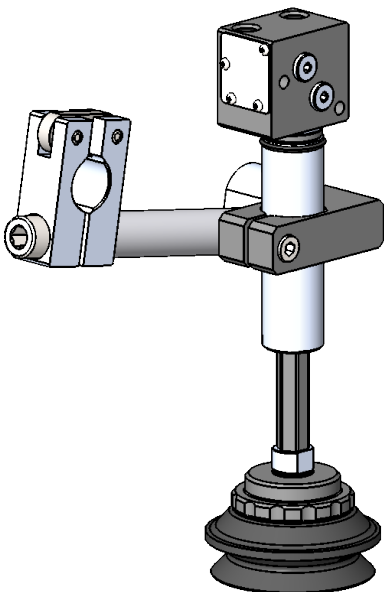
Components selected in steps 1 through 5 can be coded into a single, convenient part number. See "How To Order" for instructions.

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.

**EMAT
COMPLETE ARM ASSEMBLY - SELECTION GUIDE**

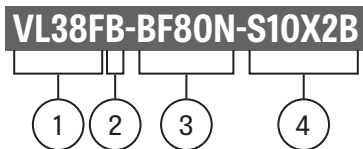
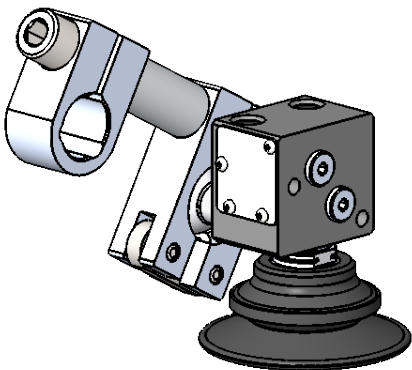
Complete arm assemblies can be ordered using the following part number layout.

EXAMPLE #1



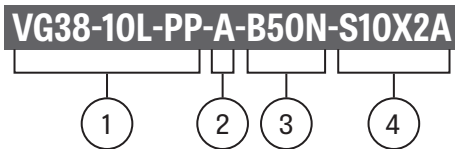
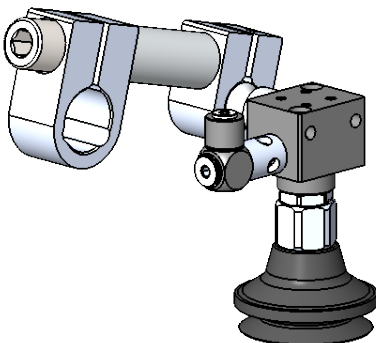
CODE	MODEL CODE	DESCRIPTION	COMPONENT
1	VLP10L	VacLoc with 10L Pump	Work Attachment
2	C5038M	Level Compensator with 50 mm Stroke and 3/8 NPT Male Cup Connection	Work Attachment
3	A	Apple-Core Pin Style Orbital Wrist Joint	Work Attachment
4	B75N	Bellows Style 75 mm Diameter Silicone Vacuum Cup	Cup
5	C10X4A	Clamp-On Shoulder Joint for 1" Tubing, 4" Arm Length Apple-Core Pin Style Orbital Wrist Joint	Arm

EXAMPLE #2



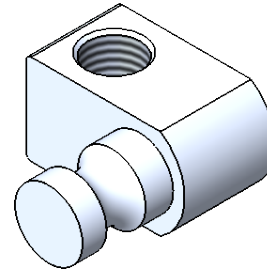
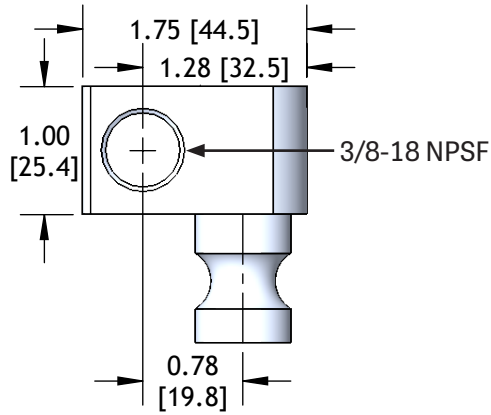
CODE	MODEL CODE	DESCRIPTION	COMPONENT
1	VL38F	VacLoc with 3/8" NPTF Female Cup Connection	Work Attachment
2	B	Ball Swivel Wrist Joint	Work Attachment
3	BF80N	Bellows Traction Foot style 80 mm Diameter Nitrile Vacuum Cup	Cup
4	S10X2B	Slide-On Shoulder Joint for 1" Tubing, 2" Arm Length Ball Swivel Wrist Joint	Arm

EXAMPLE #3

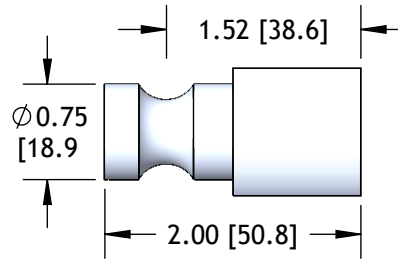
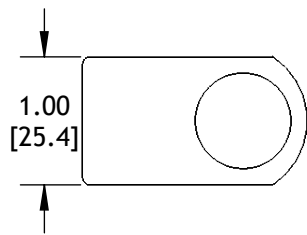


CODE	MODEL CODE	DESCRIPTION	COMPONENT
1	VG38-10L-PP	Vacuum Gripper with 10L Pump and Positive Purge	Work Attachment
2	A	Apple-Core Pin Style Orbital Wrist Joint	Work Attachment
3	B50N	Bellows Style 50 mm Diameter Ameriflex Vacuum Cup	Cup
4	S10X2A	Slide-On Shoulder Joint for 1" Tubing, 4" Arm Length Apple-Core Pin Style Orbital Wrist Joint	Arm

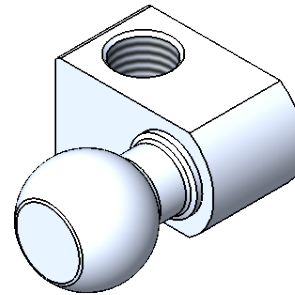
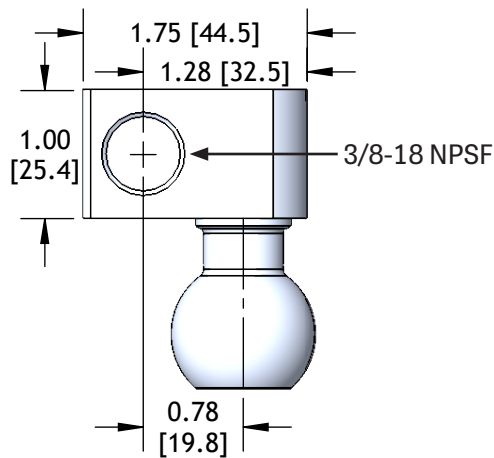
EMAT
V38FA : VACUUM CONNECTION W/ APPLE CORE PIN MOUNT



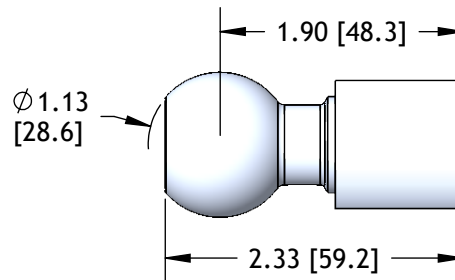
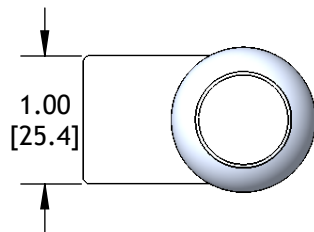
Weight: 0.17 lb [76.1 g]



V38FB : VACUUM CONNECTION W/ BALL SWIVEL MOUNT



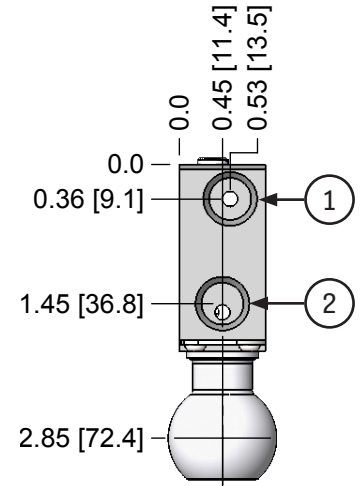
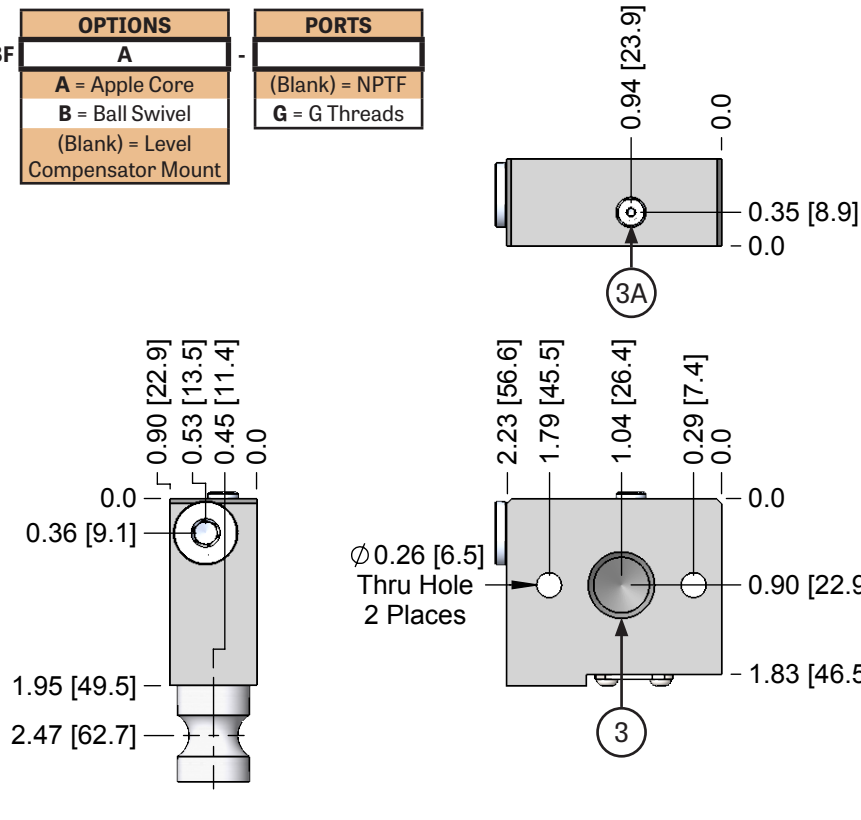
Weight: 0.22 lb [97.5 g]



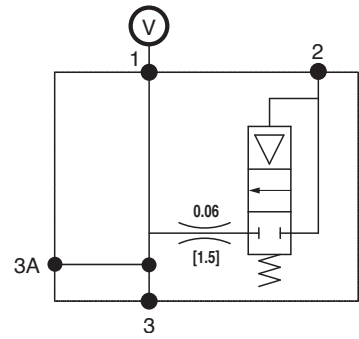
EMAT LOW PROFILE VACUUM CONNECTION W/ BLOW-OFF

Includes a 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.

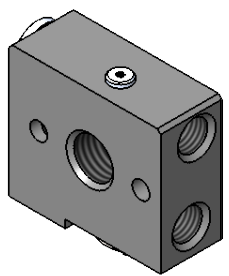
LVB38F	OPTIONS	PORTS
	A	(Blank) = NPTF
	A = Apple Core	G = G Threads
	B = Ball Swivel (Blank) = Level Compensator Mount	



CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8
3A	Sensor Port	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)

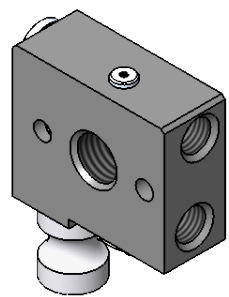


LEVEL COMPENSATOR



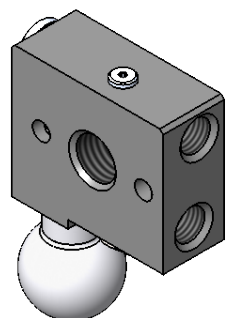
Weight: 0.27 lb [122.0 g]

APPLE CORE PIN



Weight: 0.33 lb [150.0 g]

BALL SWIVEL

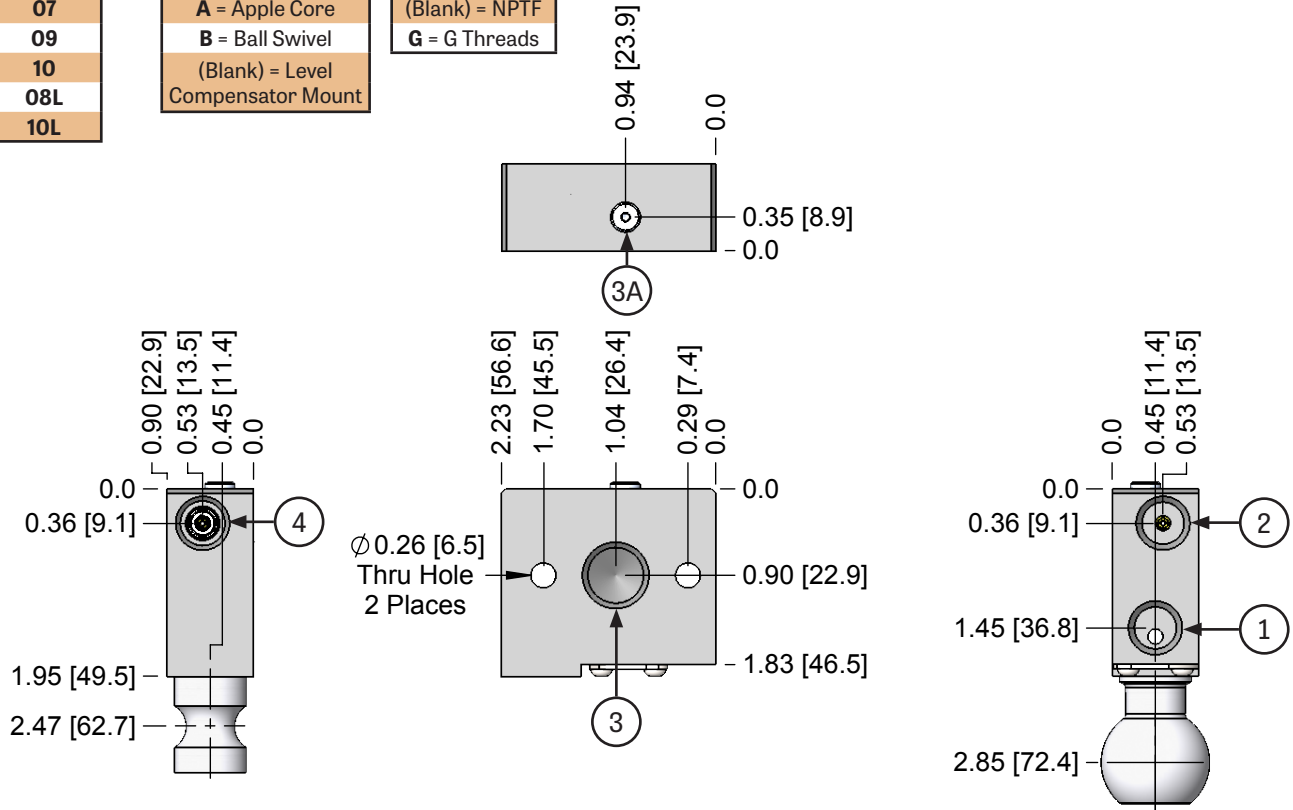


Weight: 0.38 lb [172.0 g]

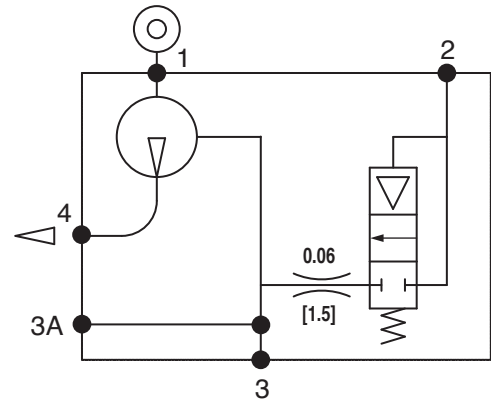
EMAT LOW PROFILE VACUUM PUMP W/ BLOW-OFF

Includes a coaxial vacuum pump, blow-off sequence valve and connection port for mounting a vacuum cup.

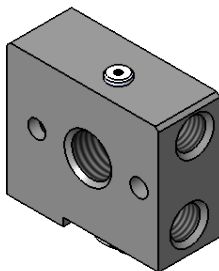
VENTURI SIZE		OPTIONS	PORTS
LPB	10L -38F		
	07	A = Apple Core	(Blank) = NPTF
	09	B = Ball Swivel	G = G Threads
	10	(Blank) = Level	
	08L	Compensator Mount	
	10L		



CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8
3A	Vacuum - Alternate	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)
4	Exhaust	G 1/4	G 1/4

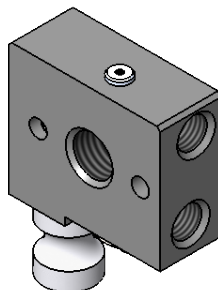


LEVEL COMPENSATOR



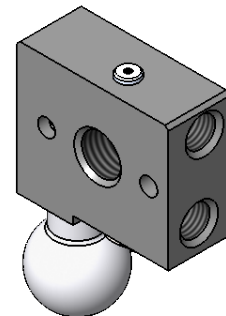
Weight: 0.27 lb [122.0 g]

APPLE CORE PIN



Weight: 0.33 lb [150.0 g]

BALL SWIVEL

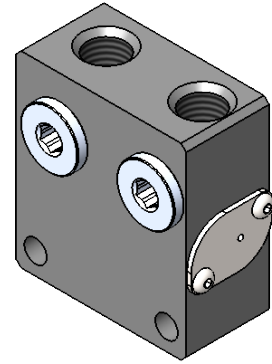
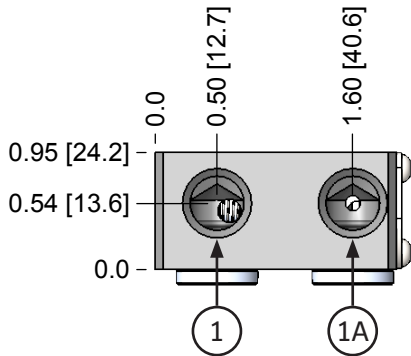


Weight: 0.38 lb [172.0 g]

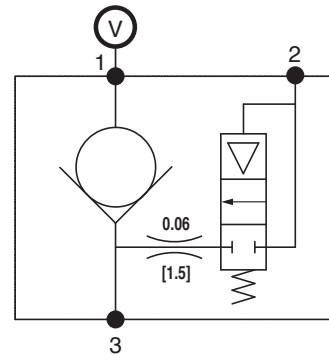
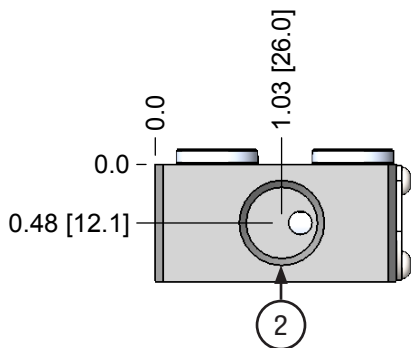
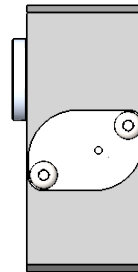
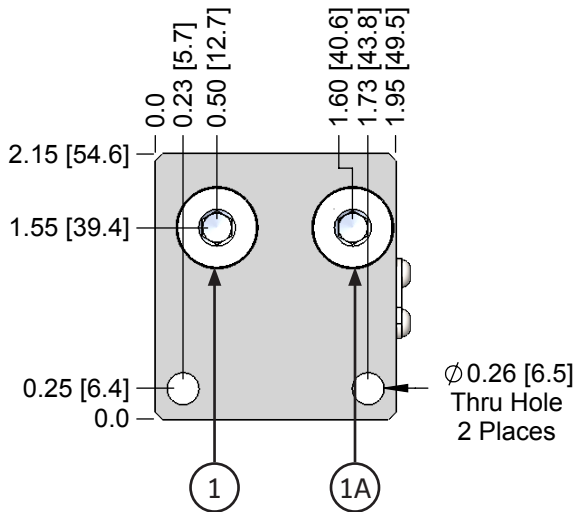
**EMAT
VACLOC**

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 units can be supplied and controlled by one solenoid valve.

PORTS	
VL38F-	(Blank) = NPTF
	G = G Threads



Weight: 0.32 lb [145.0 g]



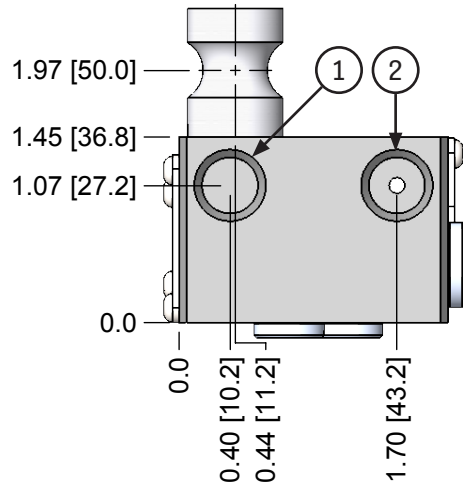
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8

EMAT VACLOC W/ APPLE CORE PIN OR BALL SWIVEL MOUNT

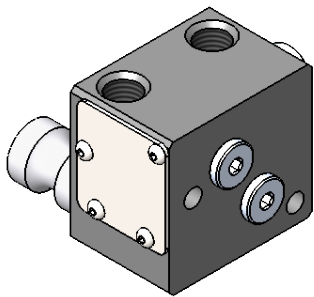
The VacLoc is a combination modular vacuum check valve and a sequence blow valve incorporated in a perfectly aligned, one-piece cartridge body featuring electroless-nickel plated valve seats for long life. An internal orifice provides balanced blow-off air flow so that several unites can be supplied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

VL38F	OPTIONS	PORTS
	A	
	A = Apple Core B = Ball Swivel	(Blank) = NPTF G = G Threads

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8
3A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF

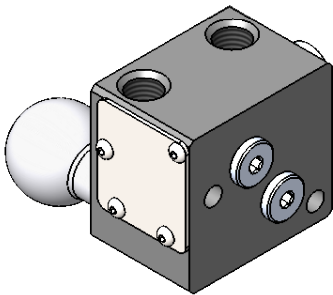


APPLE CORE PIN

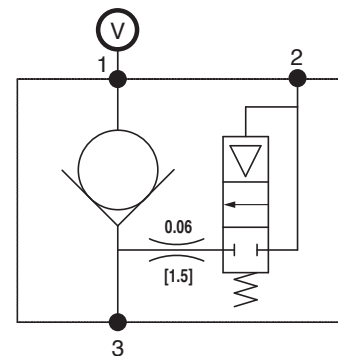
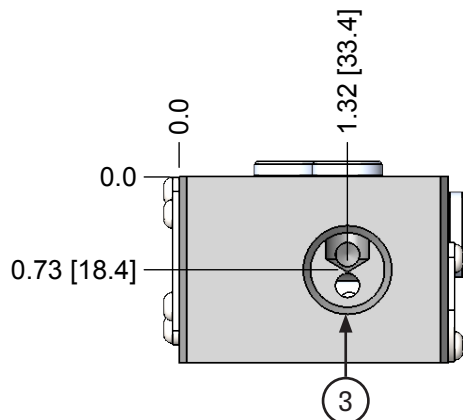
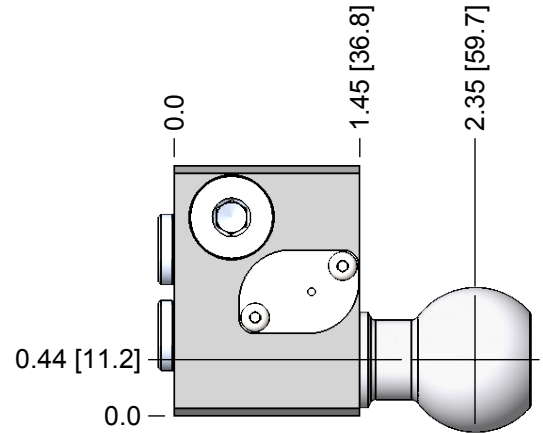
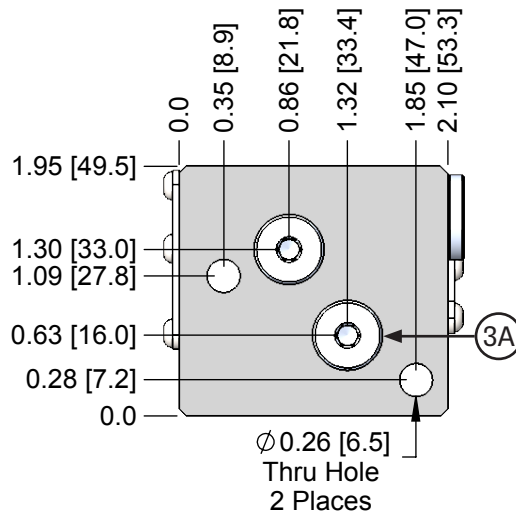


Weight: 0.54 lb [243.0 g]

BALL SWIVEL



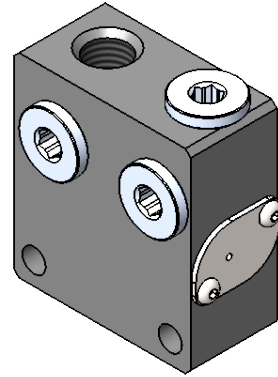
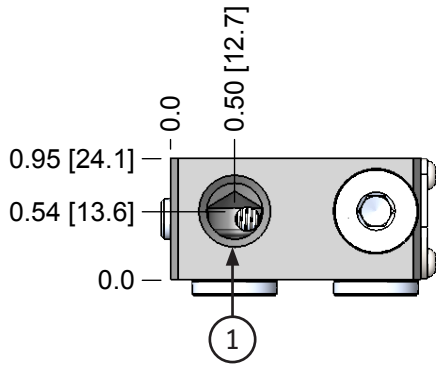
Weight: 0.59 lb [268.0 g]



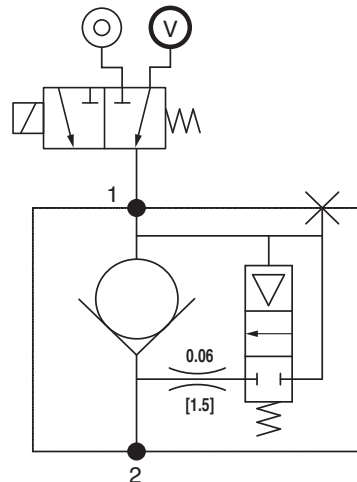
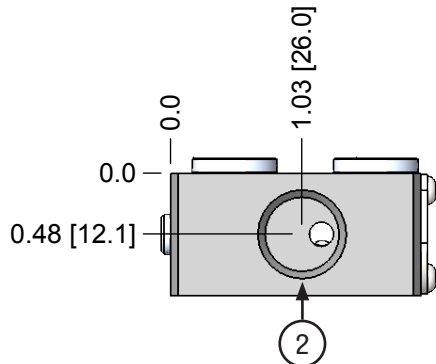
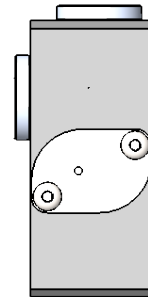
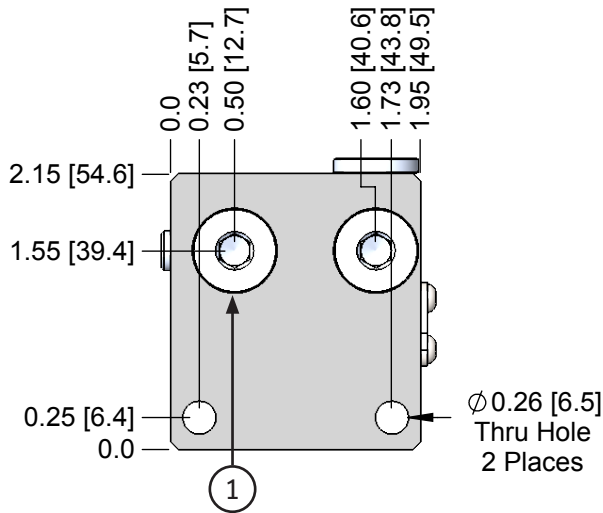
EMAT VACLOC W/ CROSS PORT OPTION

The Cross-Ported VacLoc option provides all of the features of a standard unit but with both vacuum and blow air being supplied via a single inlet port instead of two. A typical system would consist of multiple VLCP38F supplied through a selector valve that switches between vacuum and blow air.

PORTS	
VLCP38F-	(Blank) = NPTF
	G = G Threads



Weight: 0.32 lb [145.0 g]



CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum	3/8 NPSF	G 3/8

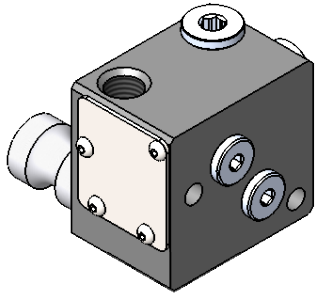
EMAT VACLOC W/ CROSS PORT OPTION & APPLE CORE PIN OR BALL SWIVEL MOUNT

The Cross-Ported option provides all of the features of a standard VacLoc but with both vacuum and blow air being supplied via a single inlet port instead of two. A typical system would consist of multiple VLCP38F supplied through a selector valve that switches between vacuum and blow air.

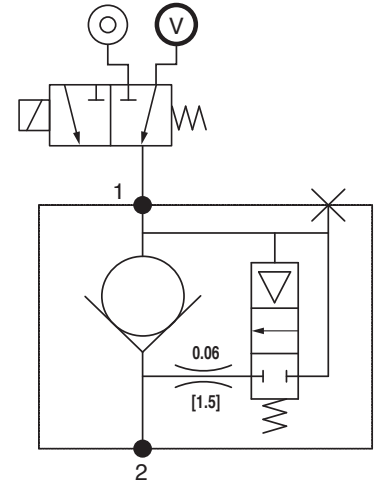
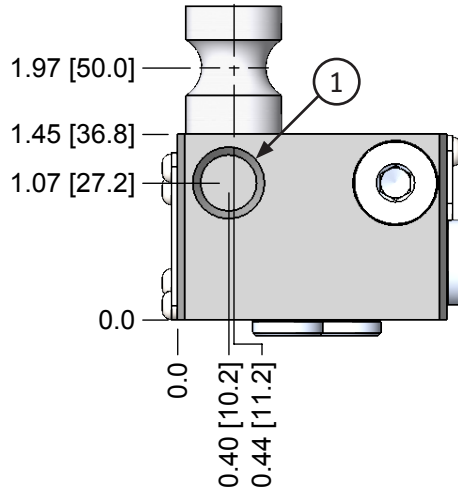
VLCP38F	OPTIONS	PORTS
	A	
	A = Apple Core B = Ball Swivel	(Blank) = NPTF G = G Threads

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum	3/8 NPSF	G 3/8

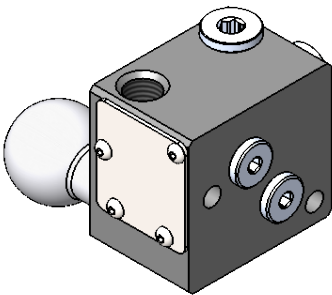
APPLE CORE PIN



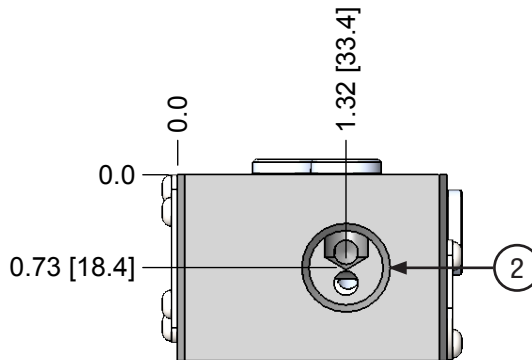
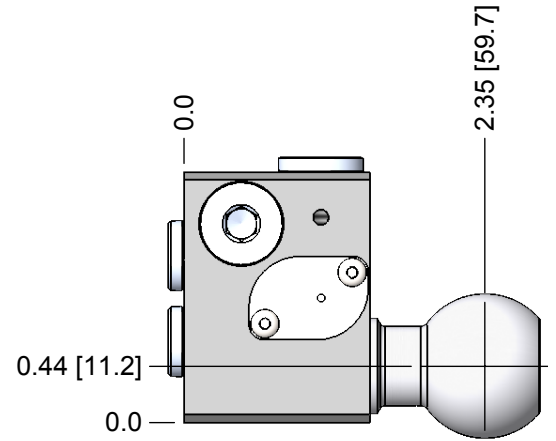
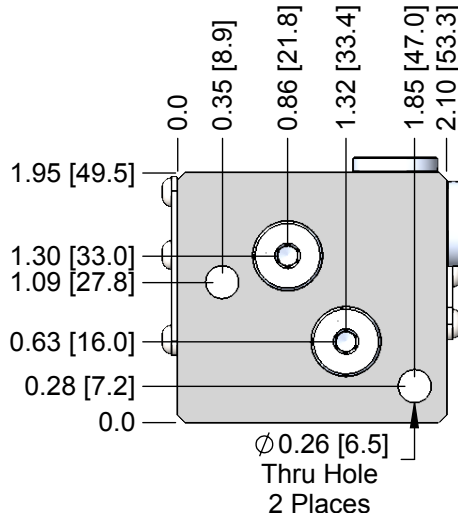
Weight: 0.54 lb [243.0 g]



BALL SWIVEL



Weight: 0.59 lb [268.0 g]



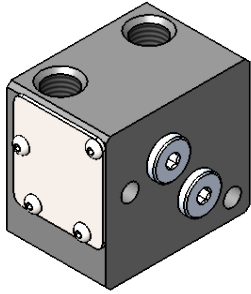
**EMAT
VACLOC W/ INTEGRAL PUMP**

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.

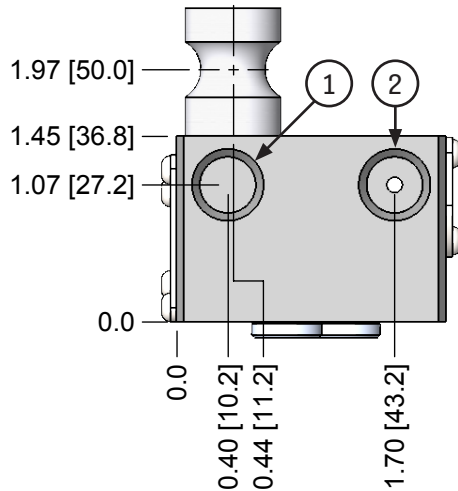
VENTURI SIZE		OPTIONS	PORTS
VLP	10L	-38F	(Blank) = NPTF
	07	A = Apple Core	G = G Threads
	09	B = Ball Swivel	
	10	(Blank) = Stand Alone	
	08L		
	10L		

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8
3A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
4	Exhaust	G 1/4	G 1/4

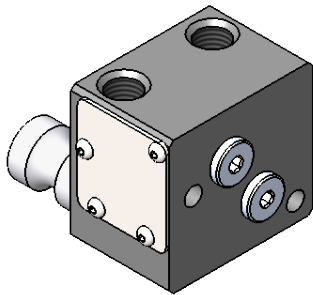
STAND ALONE



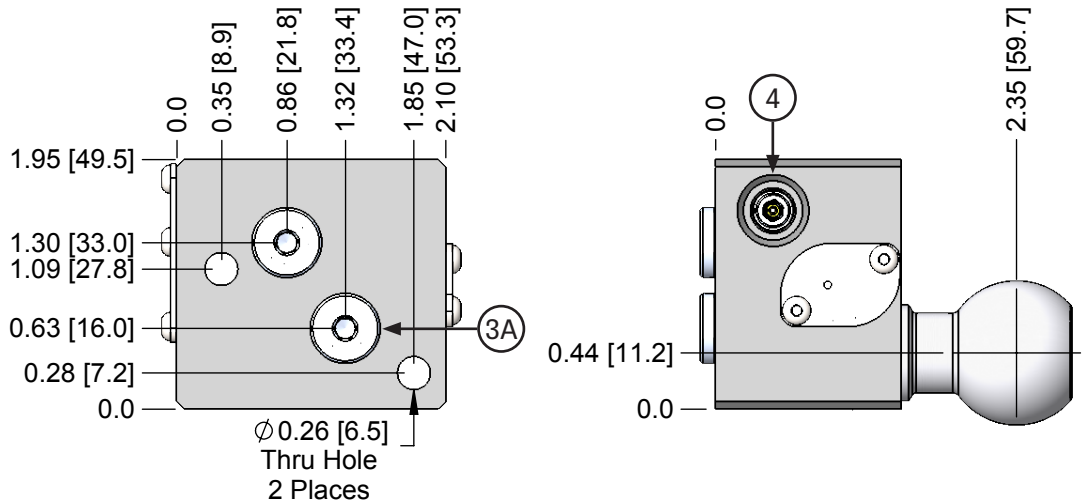
Weight: 0.47 lb [214.0 g]



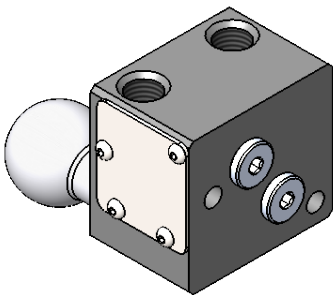
APPLE CORE PIN



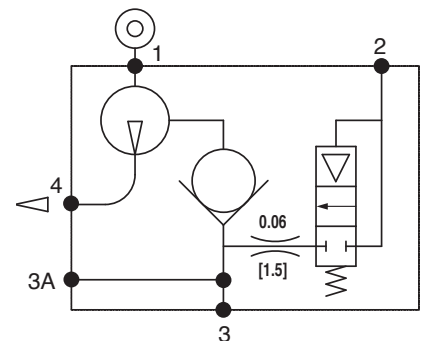
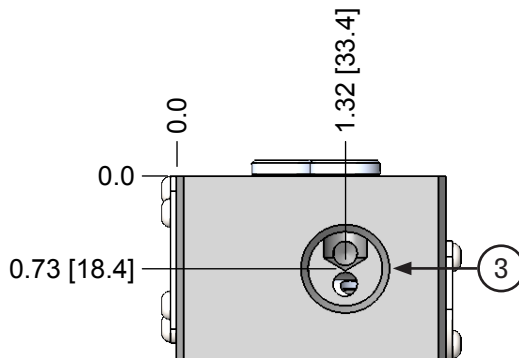
Weight: 0.54 lb [243.0 g]



BALL SWIVEL



Weight: 0.59 lb [268.0 g]

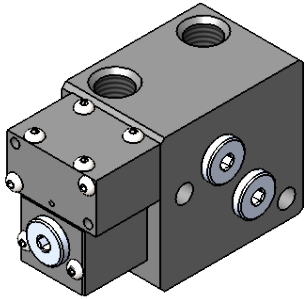


EMAT VACLOC W/ INTEGRAL PUMP & ENERGY SAVER OPTION

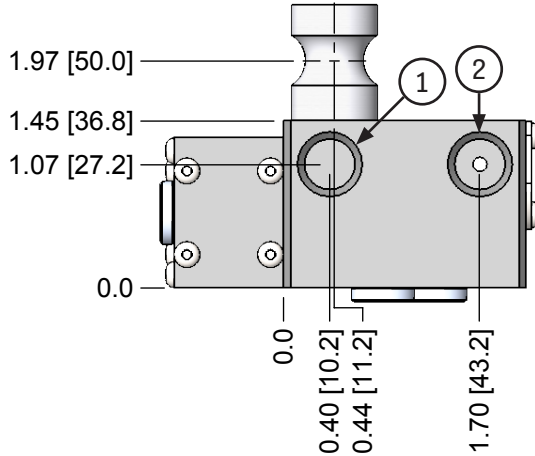
An adjustable vacustat control is added to a VLP assembly to automatically cycle the vacuum pump on only as required to maintain the desired vacuum level in a leak-free system. All VacLoc benefits are retained but air-energy consumption is reduced to only a small fraction of that required for a constant-on vacuum pump.

VENTURI SIZE		ES-38F	OPTIONS	PORTS
VLP	10L		A	(Blank) = NPTF
	07		A = Apple Core	G = G Threads
	09		B = Ball Swivel	
	10		(Blank) = Stand Alone	
	08L			
	10L			

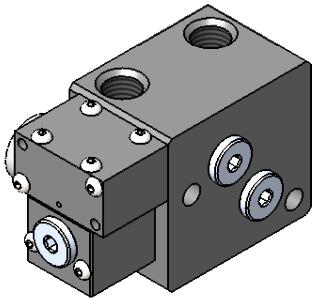
STAND ALONE



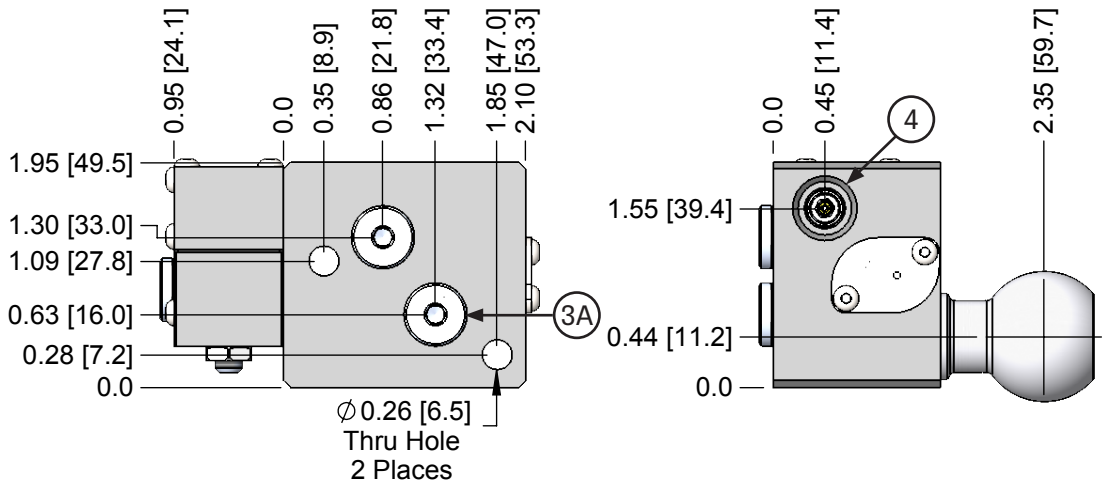
Weight: 0.62 lb [280.0 g]



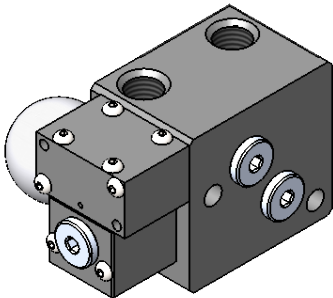
APPLE CORE PIN



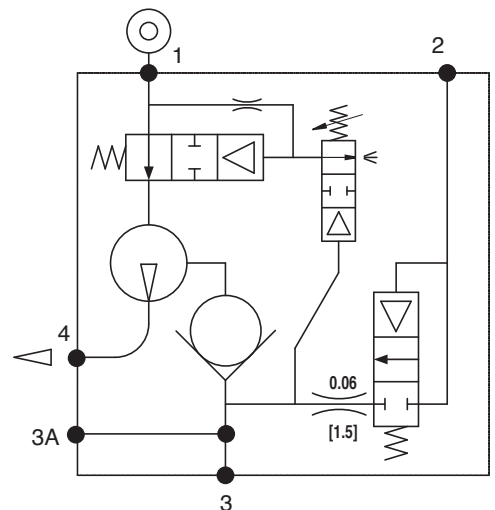
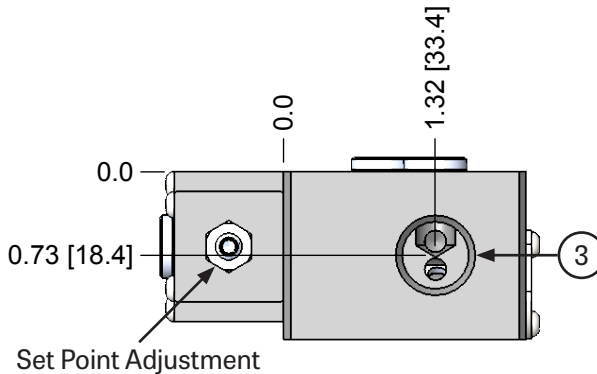
Weight: 0.68 lb [309.0 g]



BALL SWIVEL



Weight: 0.73 lb [332.0 g]

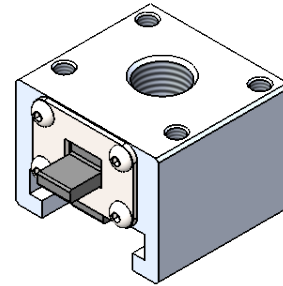
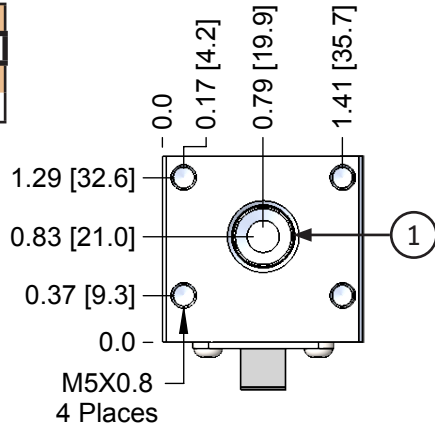


CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	3/8 NPSF	G 3/8
3A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
4	Exhaust	G 1/4	G 1/4

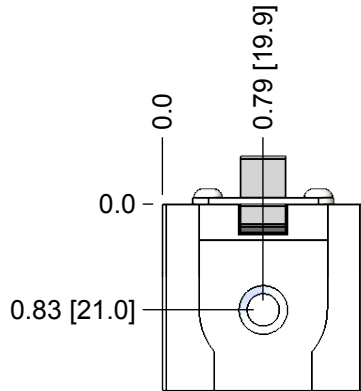
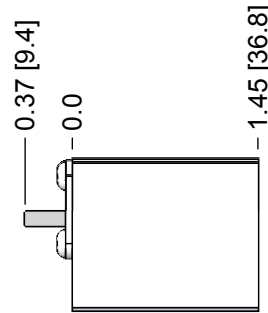
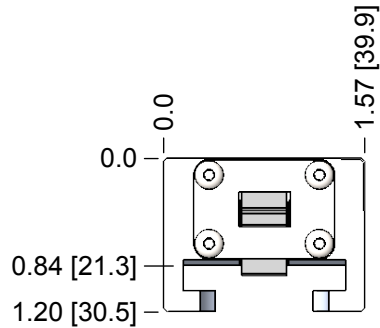
EMAT T-SLOT RECEIVER W/ VACUUM CONNECTION

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.

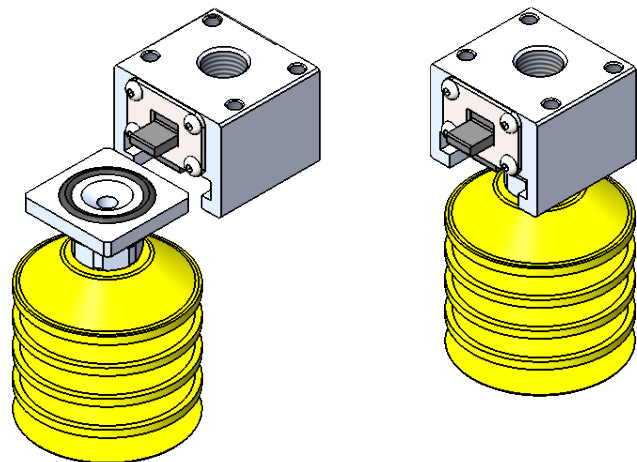
PORTS	
TR-14-	(Blank) = NPTF
	G = G Threads



Weight: 0.20 lb [90.7 g]

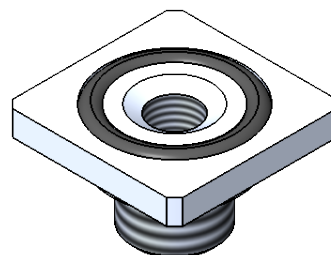
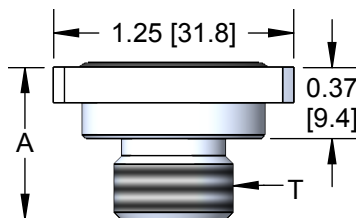


CODE	FUNCTION	NPT	G
1	Vacuum	1/4 NPTF	G1/4



T-SLOT ADAPTERS

FITTINGS	WEIGHT oz [g]	A in [mm]	T THREAD
TSA-18M	0.75 [21.3]	0.61 [15.5]	G 1/8 NPT
TSA-38M	0.68 [19.3]	0.79 [20]	G 3/8 NPT
TSA-12M	0.59 [16.7]	0.79 [20]	G 1/2 NPT

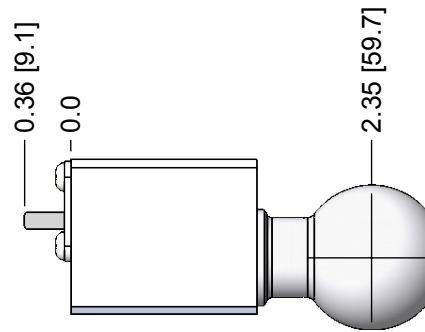
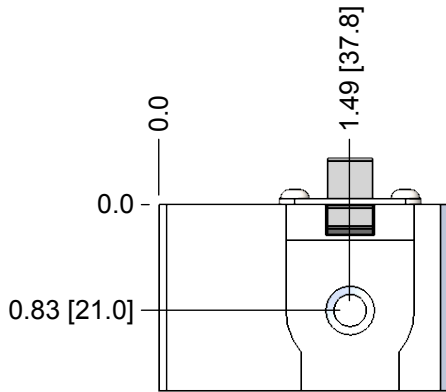
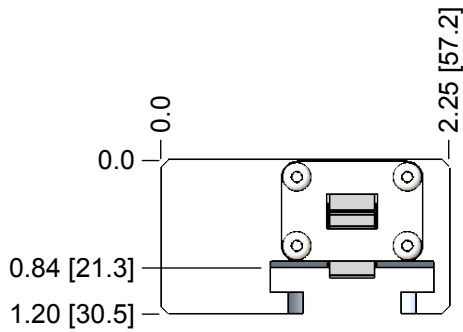
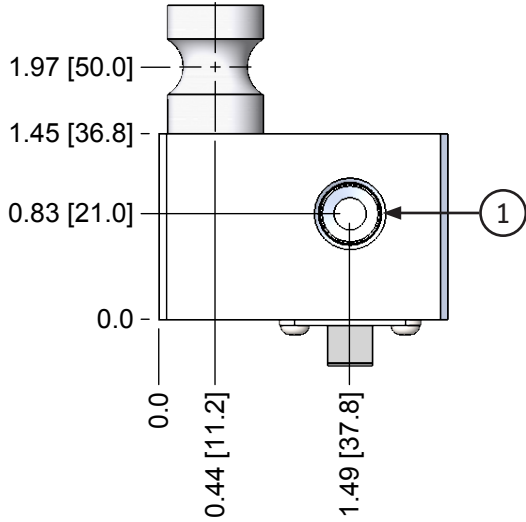


EMAT

T-SLOT RECEIVER W/ VACUUM CONNECTION & APPLE CORE PIN OR BALL SWIVEL MOUNT

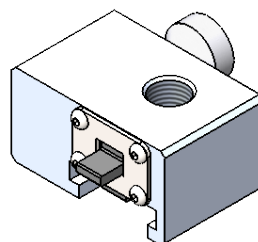
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

TR-14		OPTIONS	PORTS
		A	
		A = Apple Core	(Blank) = NPTF
		B = Ball Swivel	G = G Threads



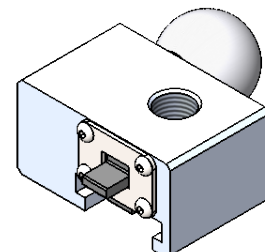
CODE	FUNCTION	NPT	G
1	Vacuum	1/4 NPTF	G 1/4

APPLE CORE PIN



Weight: 0.35 lb [159.0 g]

BALL SWIVEL

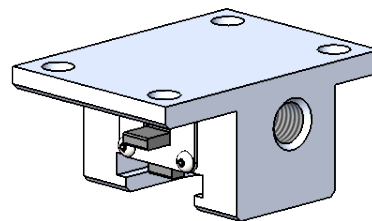
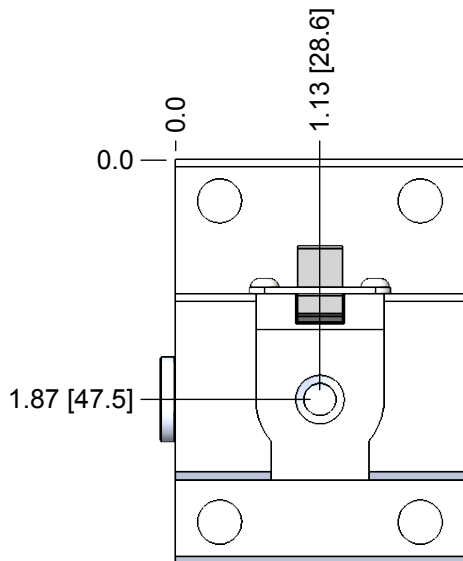
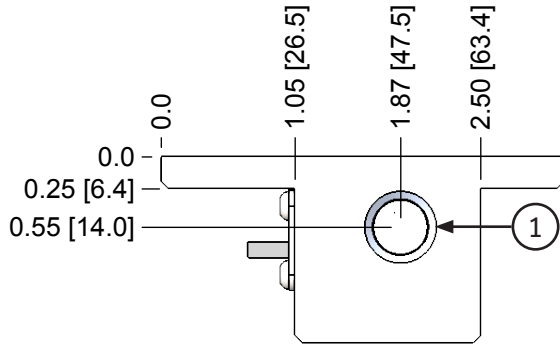
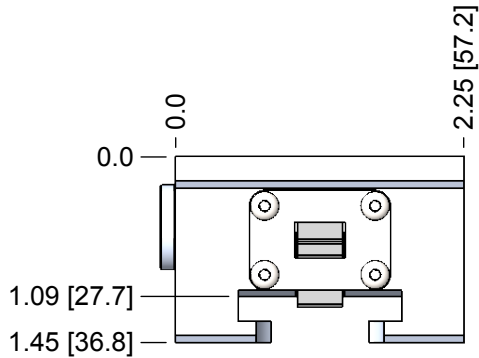
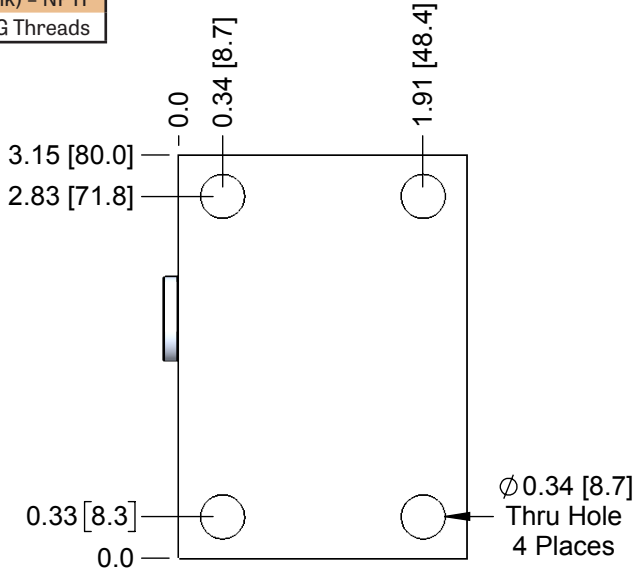


Weight: 0.40 lb [181.0 g]

EMAT SURFACE MOUNT T-SLOT RECEIVER 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.

PORTS	
TR-14S-	
(Blank)	= NPTF
G	= G Threads



Weight: 0.46 lb [209.0 g]

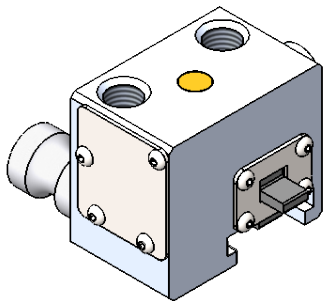
CODE	FUNCTION	NPT	G
1	Vacuum	1/4 NPTF	G 1/4

EMAT T-SLOT RECEIVER W/ VACUUM CONNECTION & BLOW-OFF

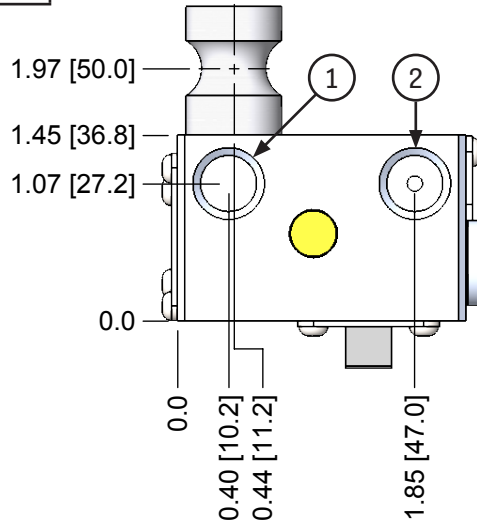
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation. Includes a blow-off sequence valve, and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

VBT	OPTIONS	PORTS
	A	(Blank) = NPTF
	A = Apple Core	G = G Threads
	B = Ball Swivel	

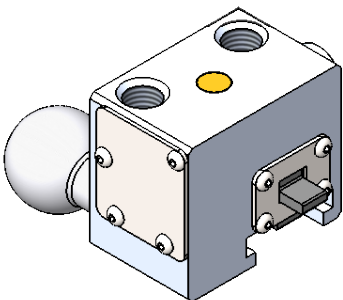
APPLE CORE PIN



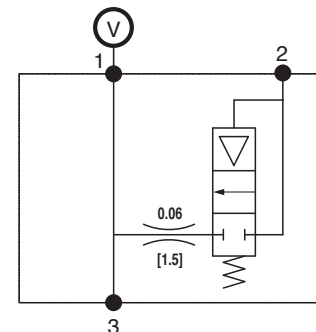
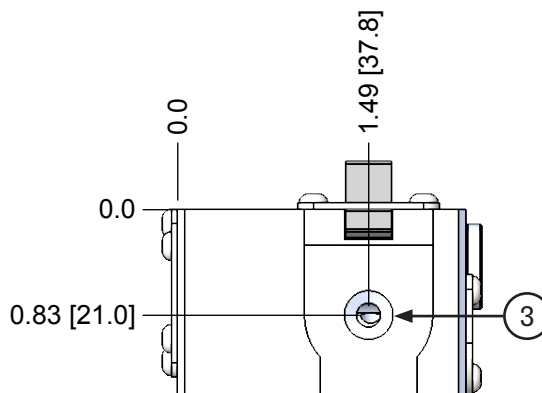
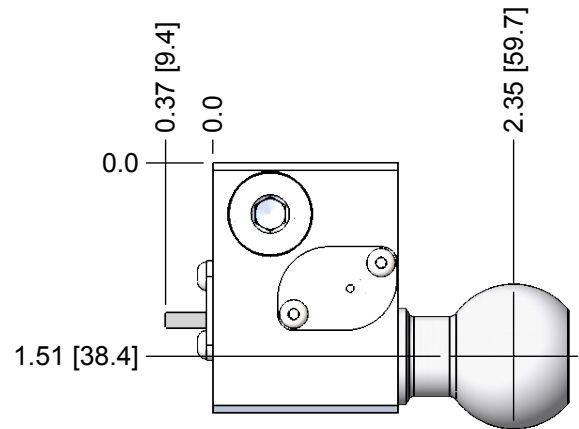
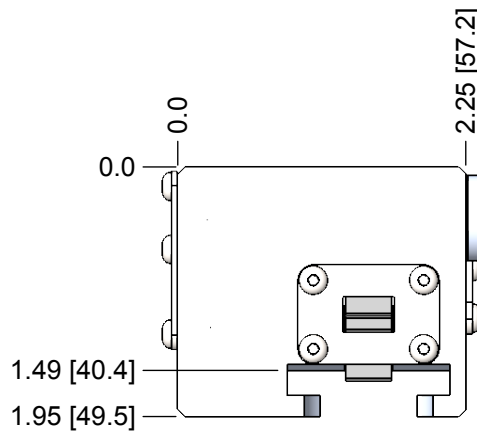
Weight: 0.56 lb [253.0 g]



BALL SWIVEL



Weight: 0.61 lb [276.0 g]

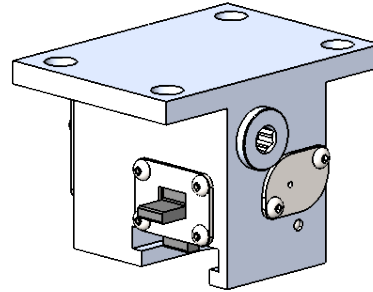
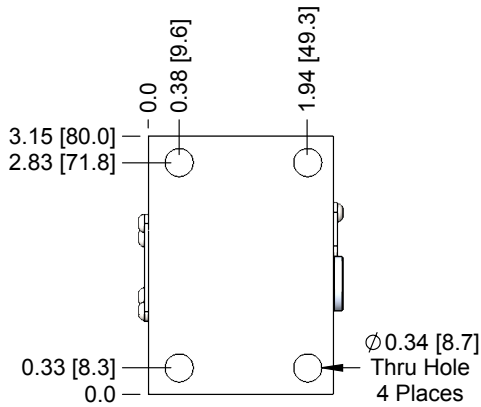


CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot

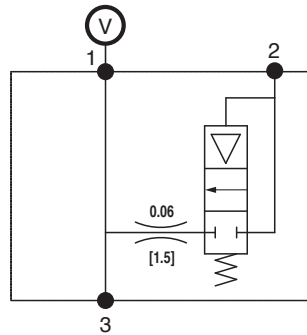
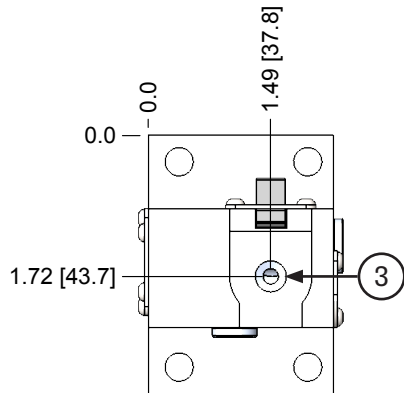
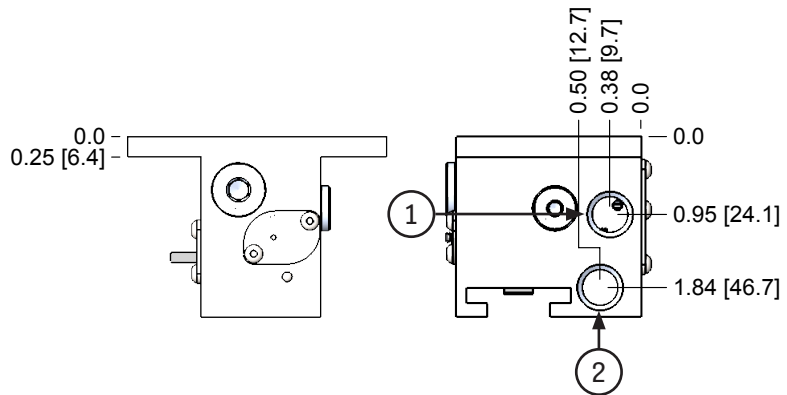
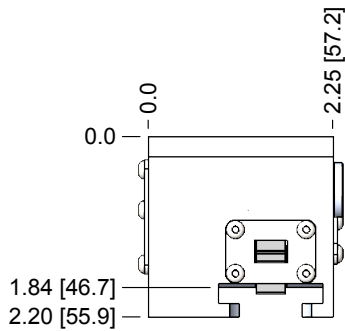
EMAT SURFACE MOUNT T-SLOT RECEIVER W/ VACUUM CONNECTION & BLOW-OFF

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. Includes a blow-off sequence valve, and a vacuum source connection.

PORTS	
VBTS-	(Blank) = NPTF
	G = G Threads



Weight: 0.7 lb [319.0 g]

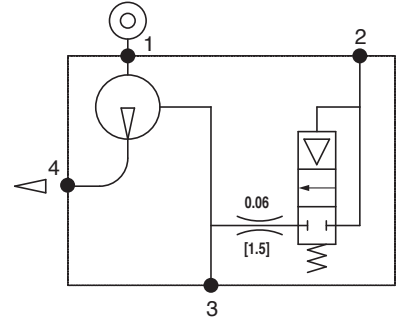
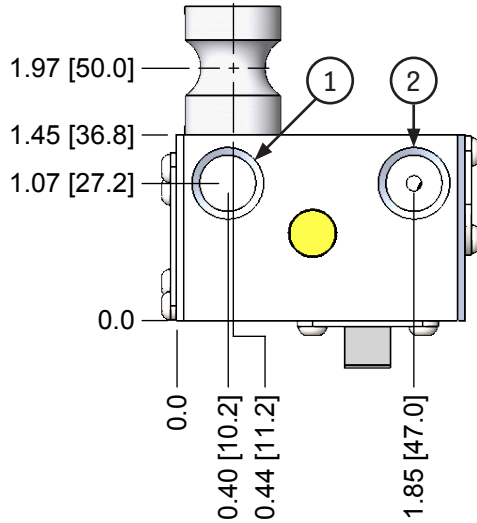


CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot

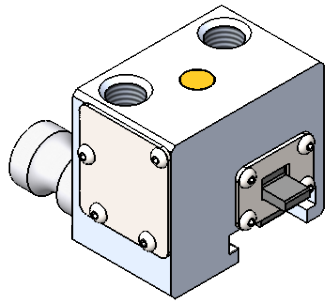
EMAT T-SLOT RECEIVER W/ INTEGRAL PUMP & BLOW-OFF

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. Includes a coaxial vacuum pump and a blow-off sequence valve.

VENTURI SIZE	OPTIONS	PORTS
PB 10L		
07	A = Apple Core	(Blank) = NPTF
09	B = Ball Swivel	G = G Threads
10		
08L		
10L		

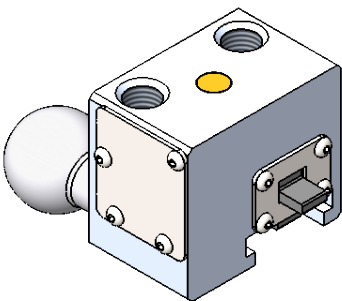


APPLE CORE PIN

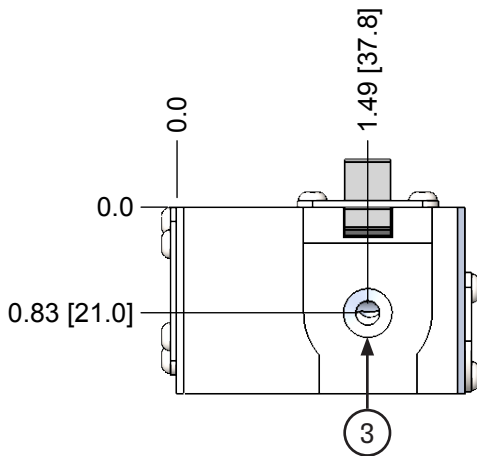
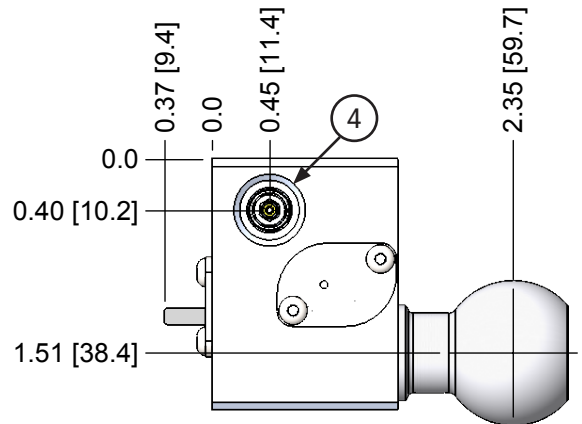
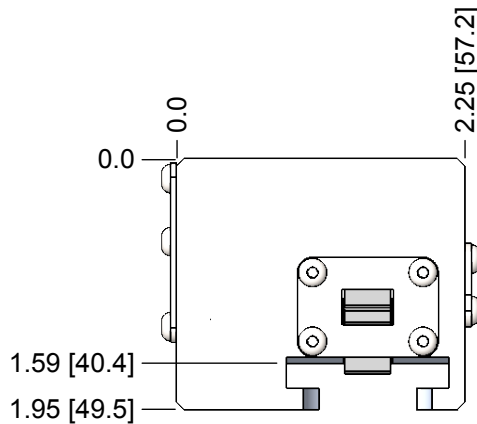


Weight: 0.56 lb [253.0 g]

BALL SWIVEL



Weight: 0.61 lb [276.0 g]

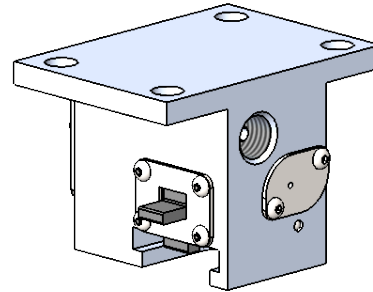
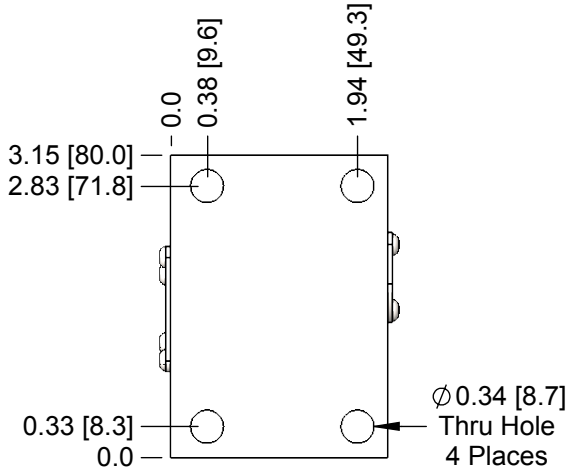


CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

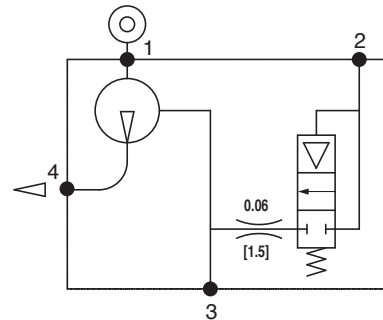
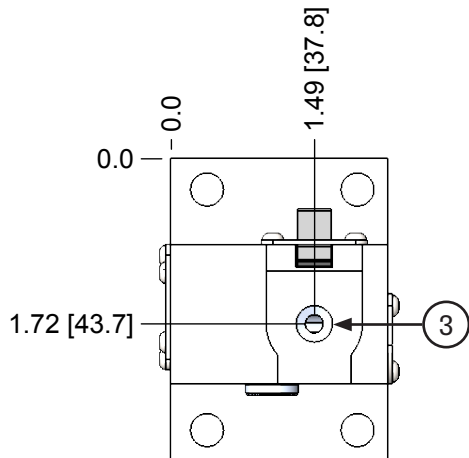
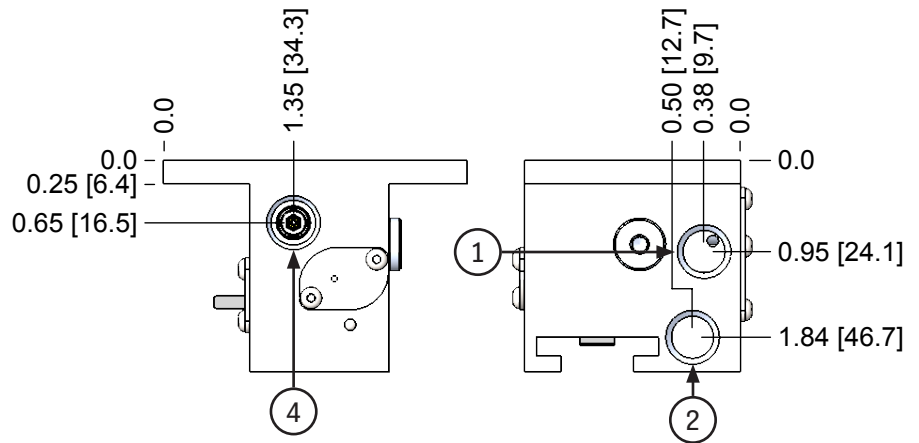
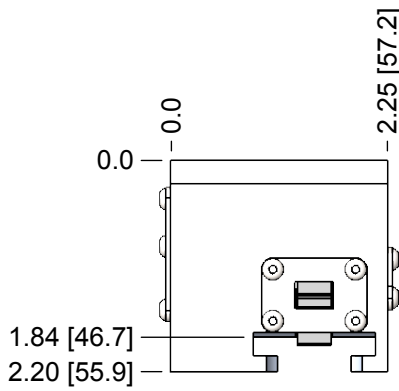
EMAT SURFACE MOUNT T-SLOT RECEIVER W/ INTEGRAL PUMP & BLOW-OFF

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. Includes a coaxial vacuum pump and a blow-off sequence valve.

VENTURI SIZE		PORTS	
PB	10L	TS-	
	07		(Blank) = NPTF
	09		G = G Threads
	10		
	08L		
	10L		



Weight: 0.70 lb [319.0 g]



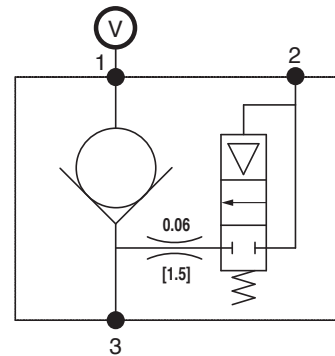
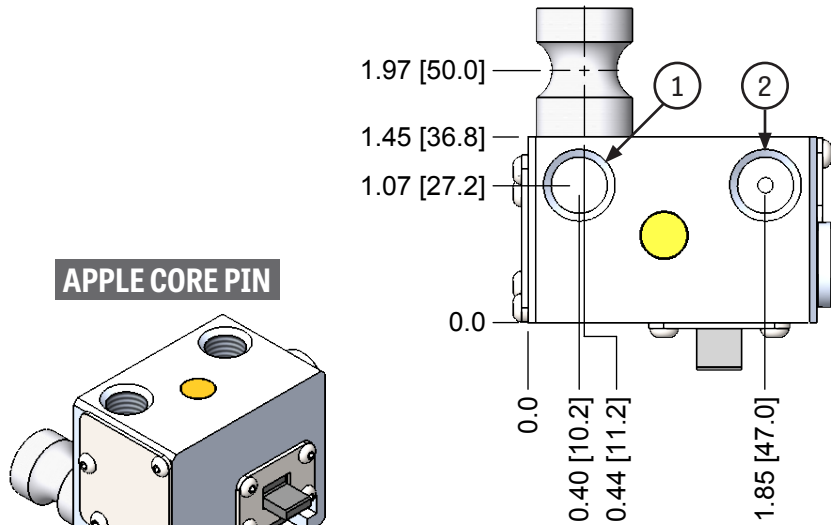
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

EMAT T-SLOT RECEIVER W/ VACLOC & APPLE CORE PIN OR BALL SWIVEL MOUNT

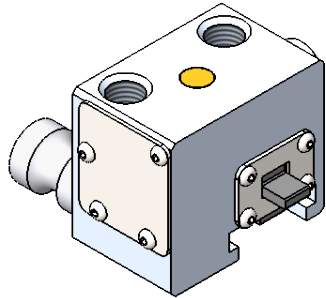
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

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 units can be supplied and controlled by one solenoid valve.

OPTIONS	PORTS
A	
A = Apple Core	(Blank) = NPTF
B = Ball Swivel	G = G Threads

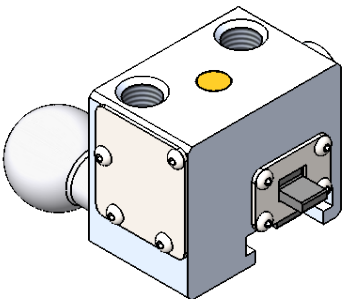


APPLE CORE PIN

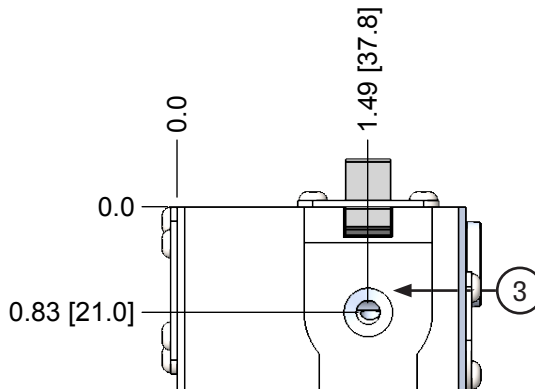
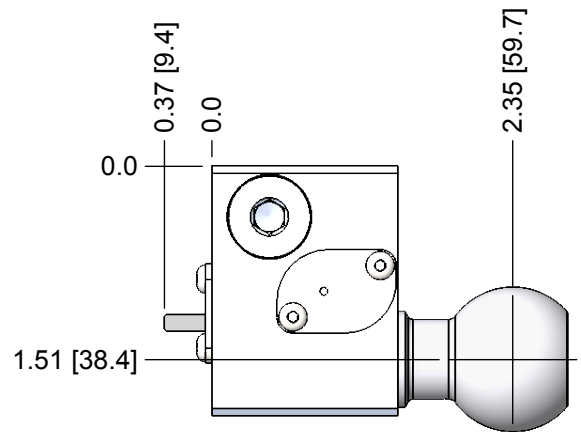
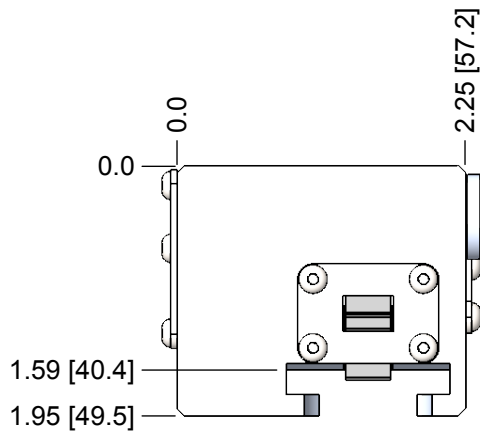


Weight: 0.56 lb [253.0 g]

BALL SWIVEL



Weight: 0.61 lb [276.0 g]



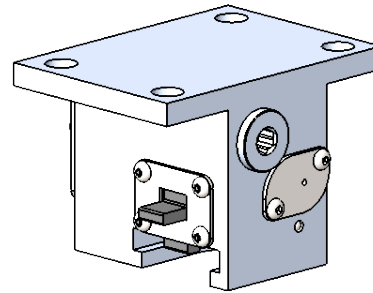
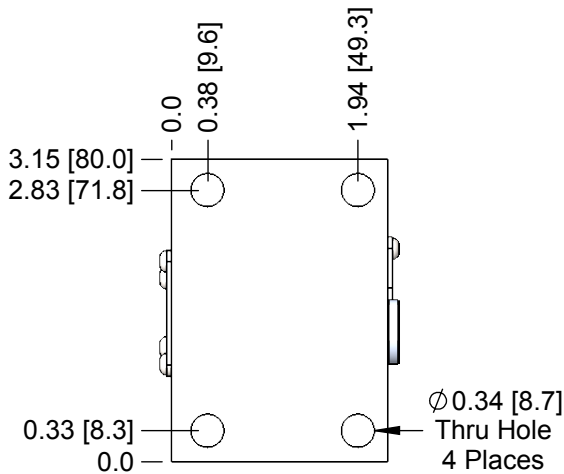
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot

EMAT SURFACE MOUNT T-SLOT RECEIVER W/ VACLOC

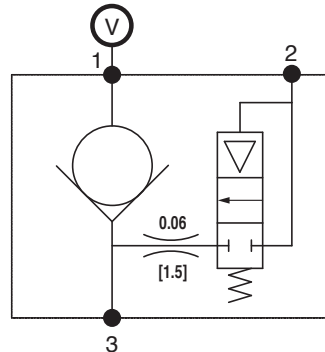
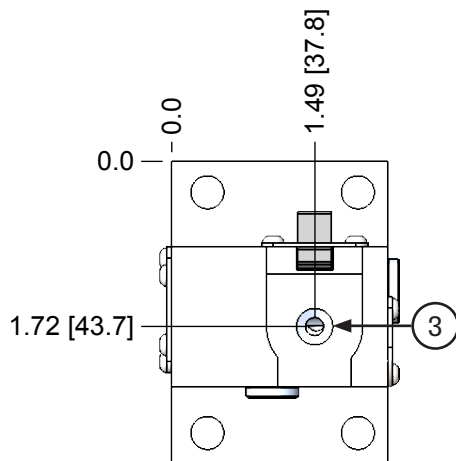
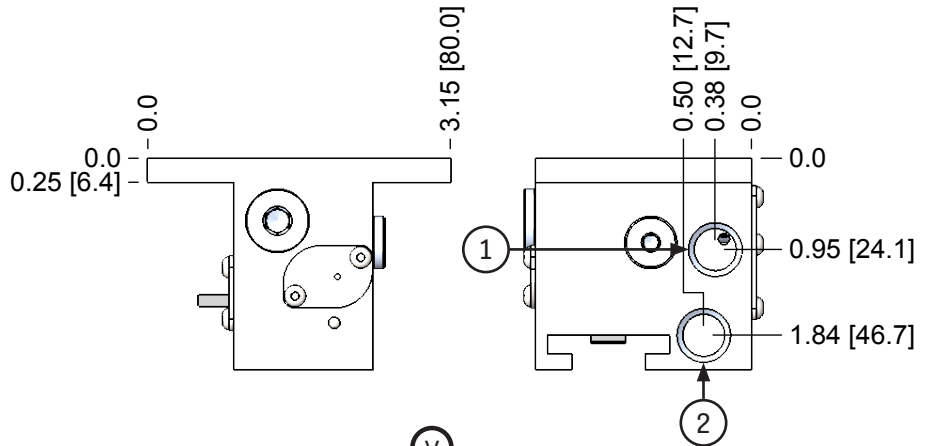
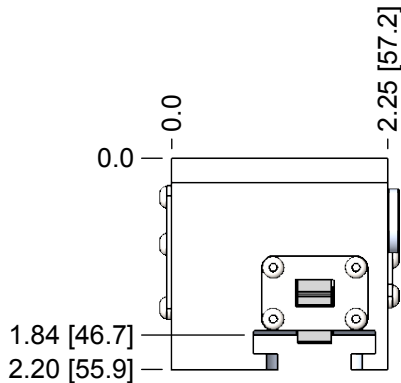
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

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 units can be supplied and controlled by one solenoid valve.

PORTS	
VLTS-	(Blank) = NPTF
	G = G Threads



Weight: 0.70 lb [319.0 g]



CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot

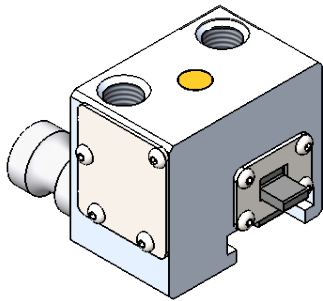
EMAT T-SLOT RECEIVER W/ VACLOC & INTEGRAL PUMP

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.

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.

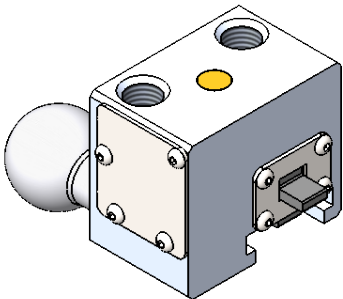
VENTURI SIZE		T	OPTIONS		PORTS	
VLP	10L			A		
	07		A = Apple Core		(Blank) = NPTF	
	09		B = Ball Swivel		G = G Threads	
	10					
	08L					
	10L					

APPLE CORE PIN

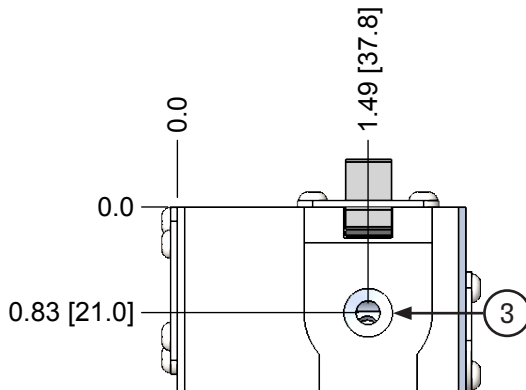
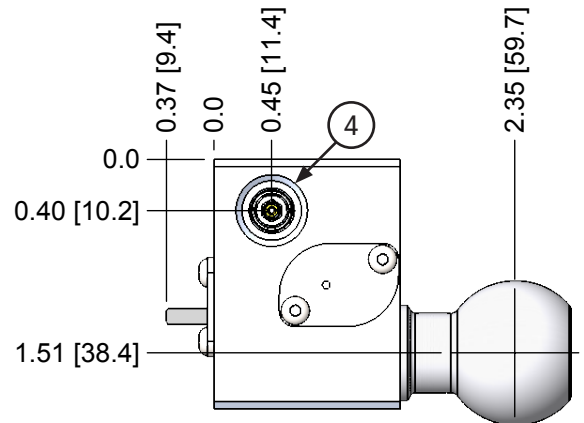
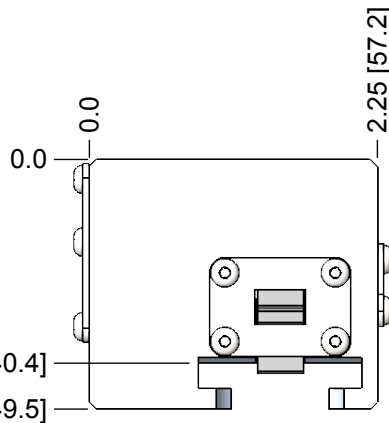
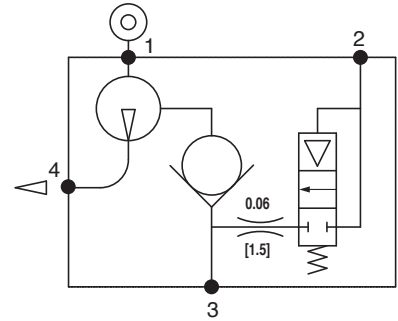
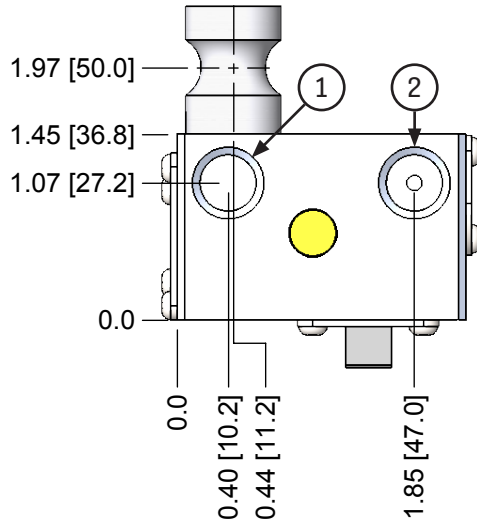


Weight: 0.58 lb [262.0 g]

BALL SWIVEL



Weight: 0.63 lb [286.0 g]



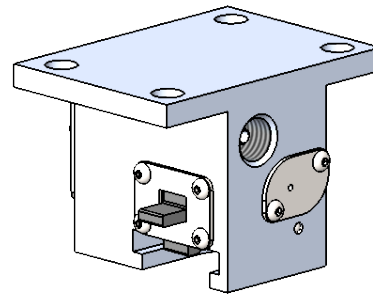
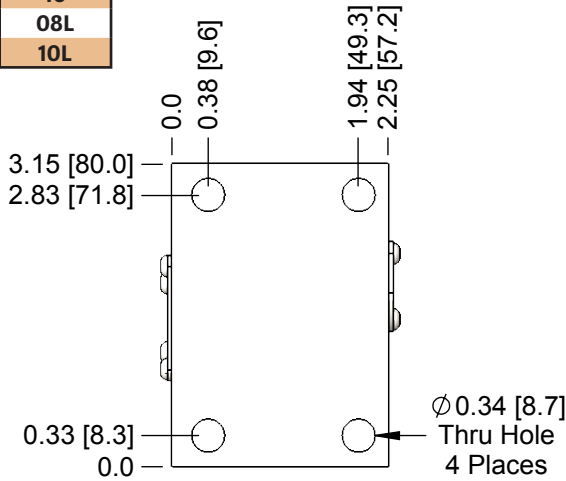
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

EMAT SURFACE MOUNT T-SLOT RECEIVER W/ VACLOC & INTEGRAL PUMP

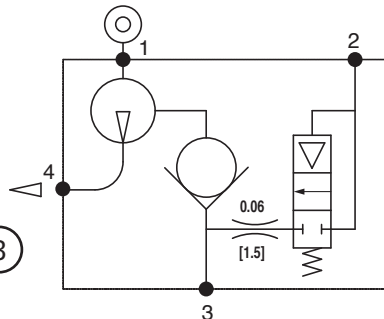
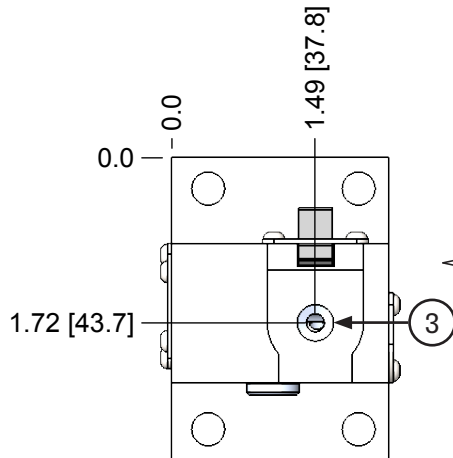
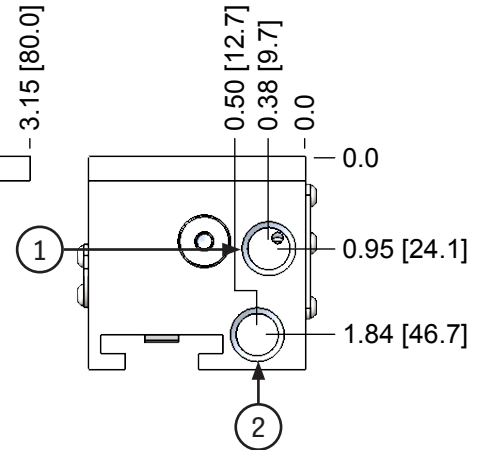
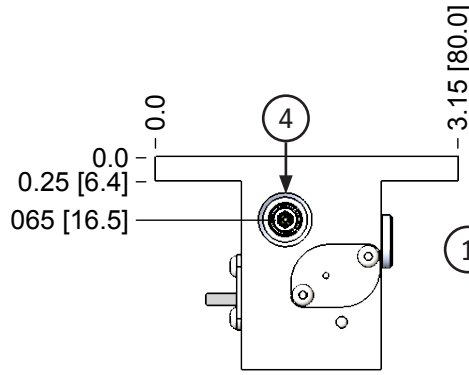
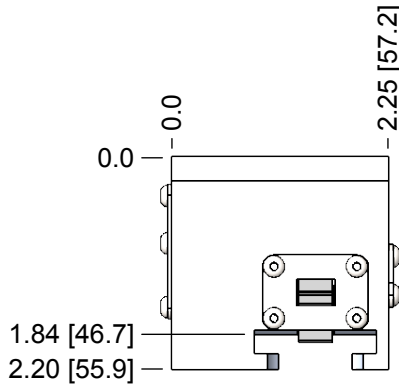
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High quality Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

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.

VENTURI SIZE		PORTS	
VLP	10L	TS	
	07		(Blank) = NPTF
	09		G = G Threads
	10		
	08L		
	10L		



Weight: 0.70 lb [319.0 g]



CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

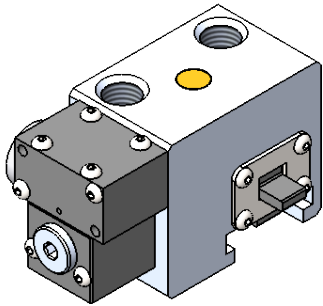
EMAT T-SLOT RECEIVER W/ VACLOC, INTEGRAL PUMP, & ENERGY SAVER

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.

An adjustable vacustat control is added to a VLP assembly to automatically cycle the vacuum pump on only as required to maintain the desired vacuum level in a leak-free system. All VacLoc benefits are retained but air-energy consumption is reduced to on a small fraction of the required level required for a constant-on vacuum pump.

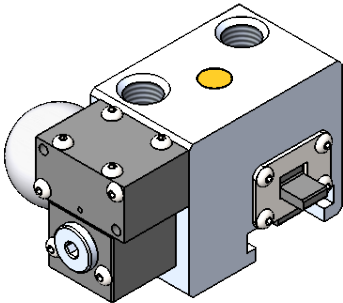
VENTURI SIZE		OPTIONS	PORTS
VLP	10L	A	(Blank) = NPTF
	07	A = Apple Core	G = G Threads
	09	B = Ball Swivel	
	10		
	08L		
	10L		

APPLE CORE PIN

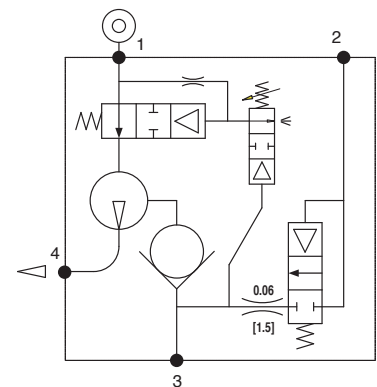
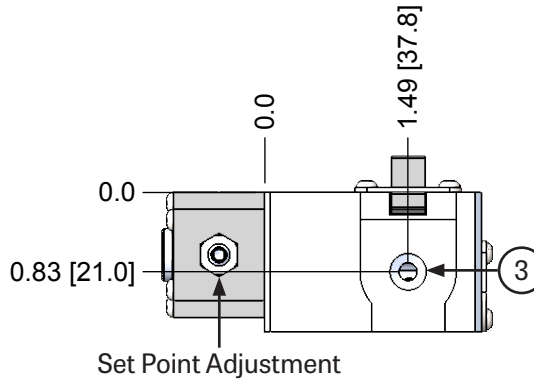
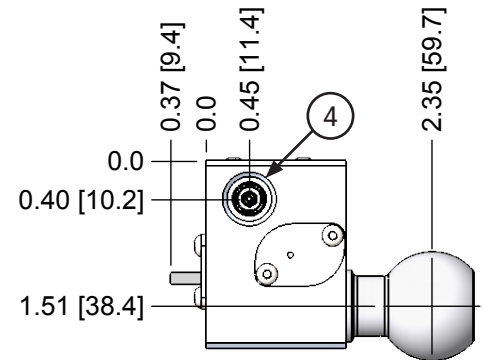
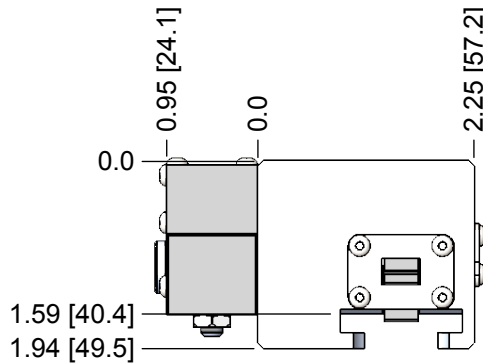
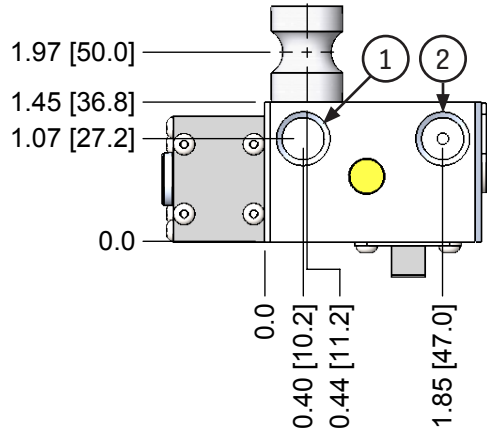


Weight: 0.70 lb [319.0 g]

BALL SWIVEL



Weight: 0.75 lb [342.0 g]



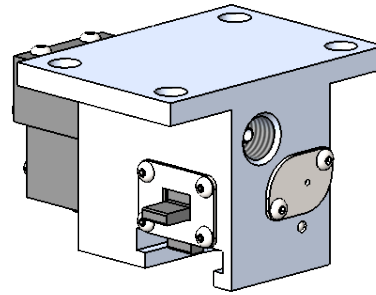
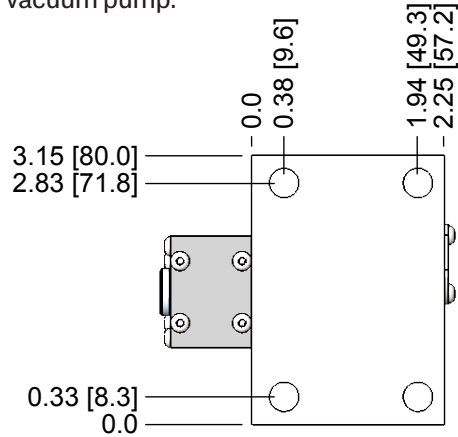
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

EMAT SURFACE MOUNT T-SLOT RECEIVER W/ VACLOC, INTEGRAL PUMP, & ENERGY SAVER

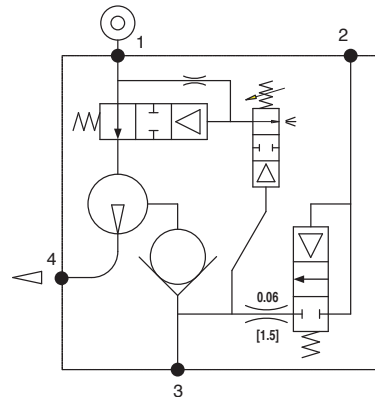
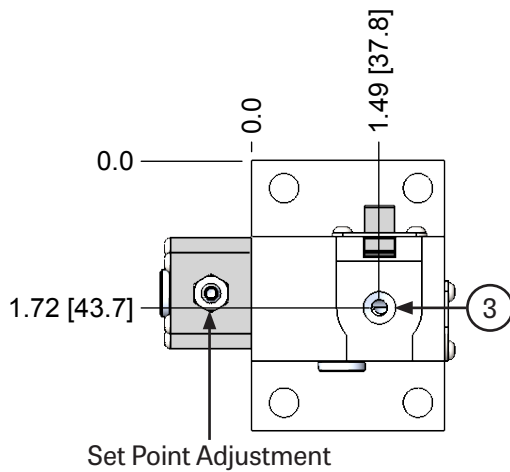
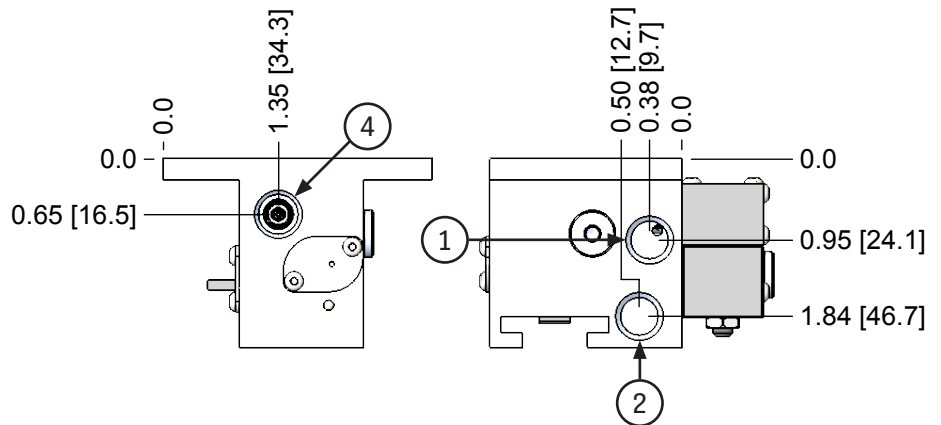
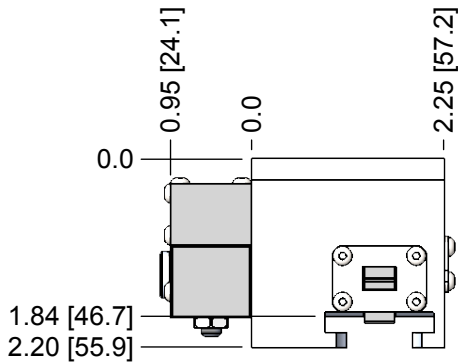
Provides a bayonet-style quick-change for suction cups equipped with o-ring sealed T-slot adapters. High-quality, Teflon impregnated nickel plating reduces friction during insertion and the simplified latch features a larger finger tab for comfortable operation.

An adjustable vacustat control is added to a VLP assembly to automatically cycle the vacuum pump on only as required to maintain the desired vacuum level in a leak-free system. All VacLoc benefits are retained but air-energy consumption is reduced to on a small fraction of the required level required for a constant-on vacuum pump.

VENTURI SIZE		PORTS	
VLP	10L	TSES-	(Blank) = NPTF
	07		G = G Threads
	09		
	10		
	08L		
	10L		

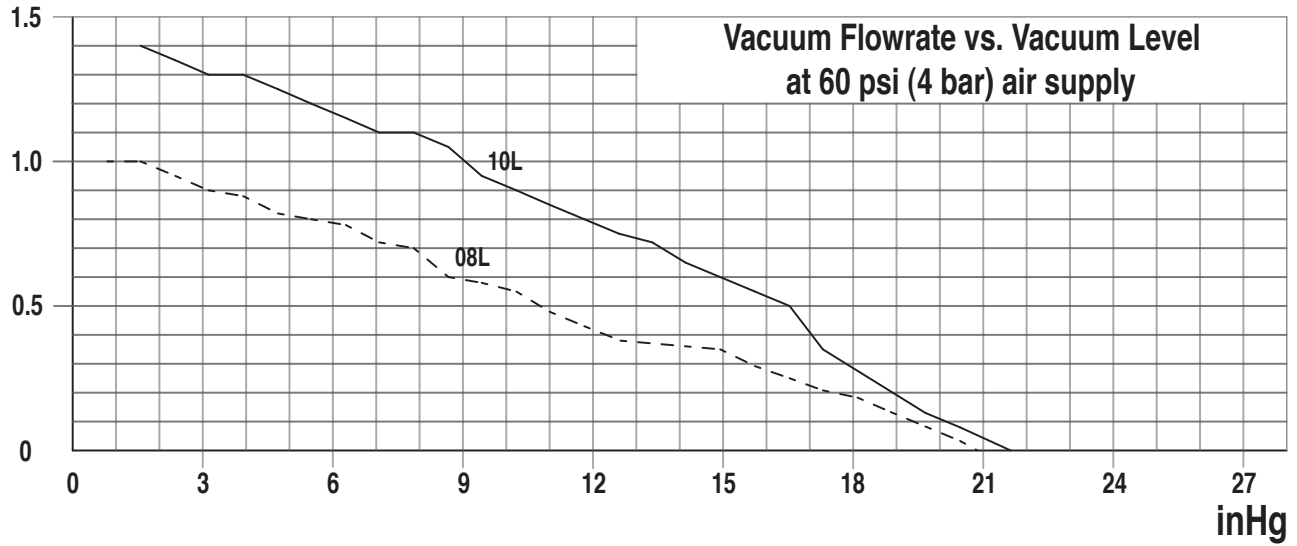


Weight: 0.79 lb [357.0 g]

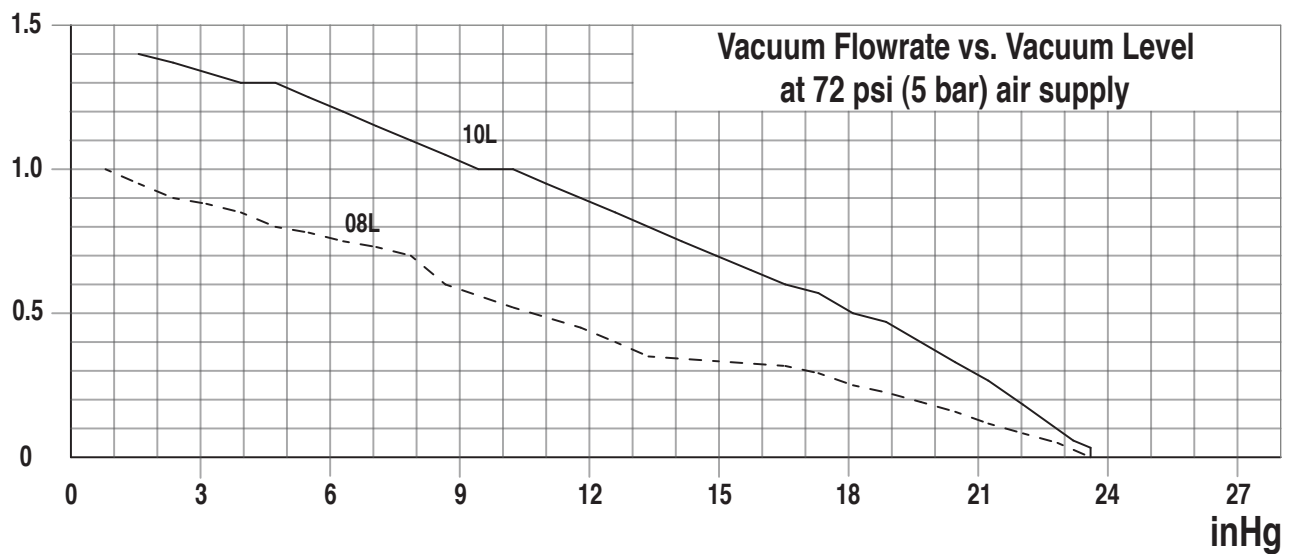


CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Pilot - Blow Off	1/4 NPTF	G 1/4
3	Vacuum	T-Slot	T-Slot
4	Exhaust	G 1/4	G 1/4

SCFM



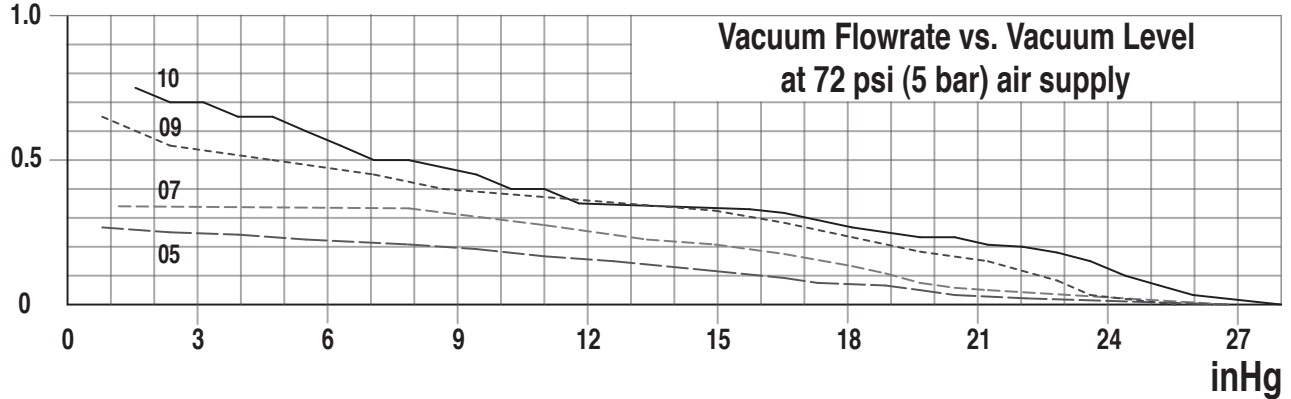
SCFM



All performance data presented is a representation of production pumps but is not a guarantee due to variations in local barometric pressure and of mass produced components.

**EMAT
PERFORMANCE**

SCFM



VACUUM FLOW - SCFM

MODEL	AIR SUPPLY PSI	AIR CONS. SCFM	MAX VACUUM inHG	SCFM AT VACUUM LEVEL							
				3 inHG	6 inHG	9 inHG	12 inHG	15 inHG	18 inHG	21 inHG	24 inHG
ER05	72	0.4	26.7	0.25	0.22	0.20	0.15	0.12	0.07	0.03	0.01
ER07	72	0.8	26.7	0.34	0.33	0.31	0.25	0.21	0.14	0.05	0.02
ER09	72	1.4	25.5	0.54	0.47	0.40	0.36	0.32	0.24	0.15	0.02
ER10	72	1.8	28	0.70	0.57	0.46	0.35	0.33	0.27	0.21	0.12
ER08L	72	1.2	23.6	0.88	0.76	0.58	0.44	0.33	0.26	0.13	-
ER10L	72	1.9	23.6	1.34	1.22	1.03	0.89	0.70	0.51	0.29	-
ER08L	60	1.0	20.4	0.91	0.79	0.59	0.42	0.35	0.19	-	-
ER10L	60	1.65	21.6	1.31	1.17	1.01	0.79	0.60	0.28	0.04	-

SCFM X 28.32 = nl / m

EVACUATION TIME - SEC / 100 IN³

MODEL	AIR SUPPLY PSI	AIR CONS. SCFM	MAX VACUUM inHG	SCFM AT VACUUM LEVEL							
				3 inHG	6 inHG	9 inHG	12 inHG	15 inHG	18 inHG	21 inHG	24 inHG
ER05	72	0.4	26.7	1	2.5	4.5	7.5	12.5	20	35	-
ER07	72	0.8	26.7	0.8	1.80	3.1	5.1	8.1	13.1	22.8	-
ER09	72	1.4	25.5	0.45	1.1	2	3.4	5.4	8.7	14.8	-
ER10	72	1.8	28	0.36	2.88	1.66	2.8	4.6	7.5	12.7	-
ER08L	72	1.2	23.6	0.28	0.69	1.28	2.2	3.7	6.1	10.5	-
ER10L	72	1.9	23.6	0.2	0.46	0.83	1.38	2.2	3.6	6.1	-
ER08L	60	1.0	20.4	0.28	0.68	1.26	2.1	3.6	6.1	11	-
ER10L	60	1.65	21.6	0.2	0.46	0.82	1.4	2.3	3.8	6.8	-

sec / 100 in³ X 0.61 = sec / l

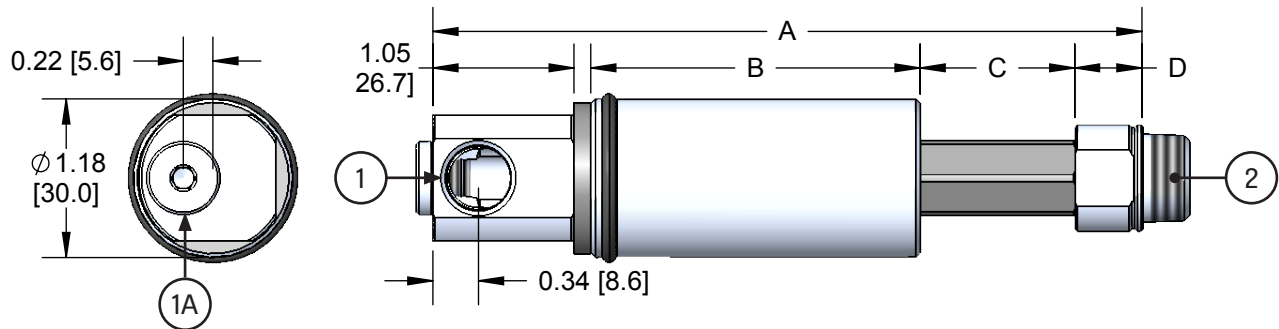
All performance data presented is a representation of production pumps but is not a guarantee due to variations in local barometric pressure and of mass produced components.

EMAT LEVEL COMPENSATORS

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.

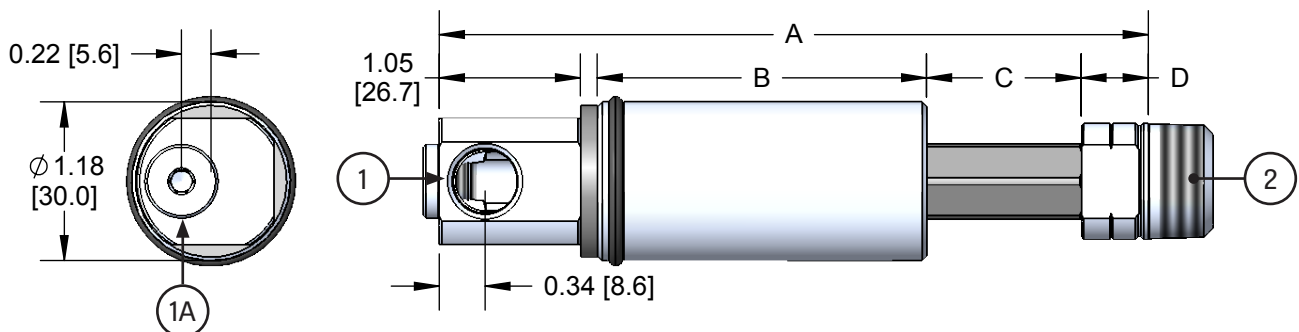
LC	STROKE	THREAD SIZE	THREAD
	25	38M	
	25 = 25 mm	38M = 3/8	(Blank) = NPTF
	50 = 50 mm	12M = 1/2	G = G Threads



O-ring retainer prevents level compensator from slipping through the mount.

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
1A	Air Supply - Alternate	G 1/8 NPSF	G 1/8 NPSF
2	Vacuum	3/8 NPTF	G 3/8

PART NUMBER	A LENGTH in [mm]	B SLEEVE HEIGHT 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]
LC5038M	7.88 [200.0]	4.20 [107.0]	2.00 [50.0]	0.50 [12.7]	0.60 [274.0]



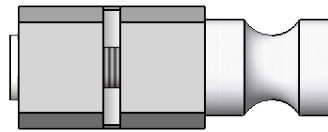
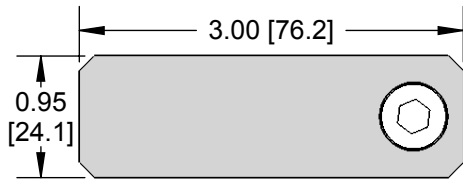
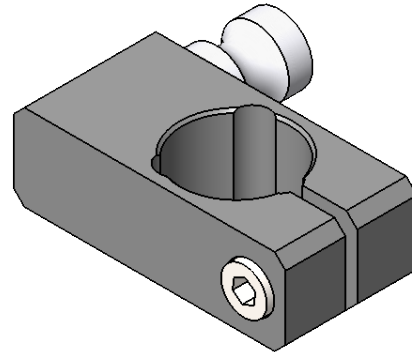
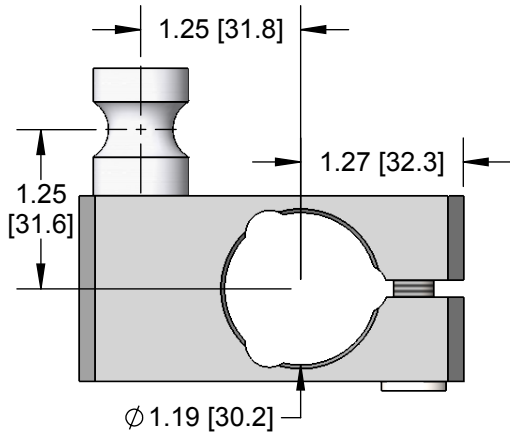
O-ring retainer prevents level compensator from slipping through the mount.

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
1A	Air Supply - Alternate	G 1/8 NPSF	G 1/8 NPSF
2	Vacuum	1/2 NPTF	G 1/2

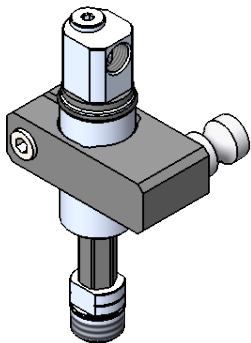
PART NUMBER	A LENGTH in [mm]	B SLEEVE HEIGHT in [mm]	C STROKE in [mm]	D COUPLER in [mm]	WEIGHT lb (g)
LC2512M	5.13 [130.0]	2.45 [62.2]	1.00 [25.0]	0.5 (12.7)	0.42 (189)
LC5012M	7.88 [200.0]	4.20 [107.0]	2.00 [50.0]	0.5 (12.7)	0.6 (274)

EMAT
LEVEL COMPENSATORS W/ APPLE CORE PIN MOUNT

STROKE	THREAD SIZE	THREAD
25	12M	
25 = 25 mm	38M = 3/8	(Blank) = NPT
50	12M = 1/2	G = G Threads

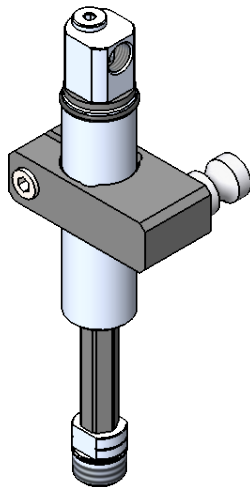


LC2512MA



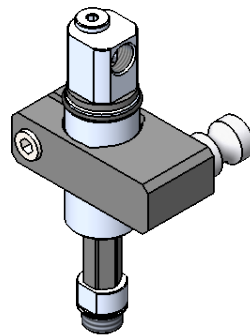
Weight: 0.76 lb [343.0 g]

LC5012MA



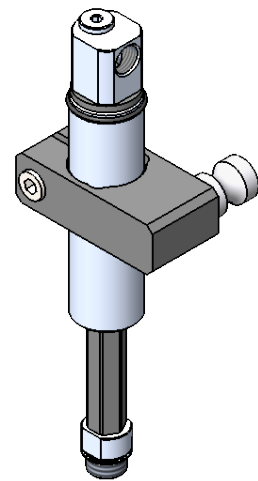
Weight: 0.94 lb [428.0 g]

LC2538MA



Weight: 0.76 lb [343.0 g]

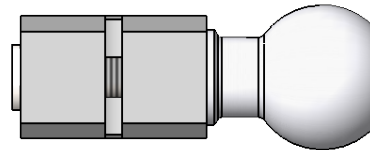
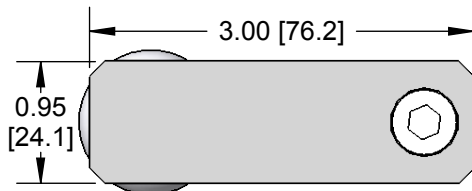
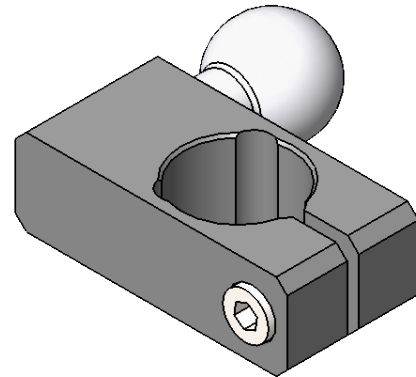
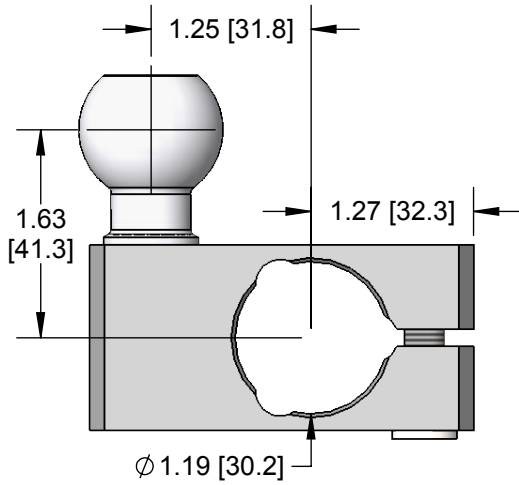
LC5038MA



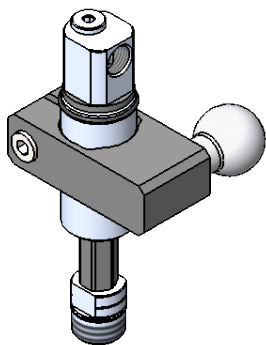
Weight: 0.94 lb [428.0 g]

EMAT
LEVEL COMPENSATORS W/ BALL SWIVEL MOUNT

STROKE	THREAD SIZE	THREAD
25	12M	
25 = 25 mm	38M = 3/8	(Blank) = NPT
50	12M = 1/2	G = G Threads

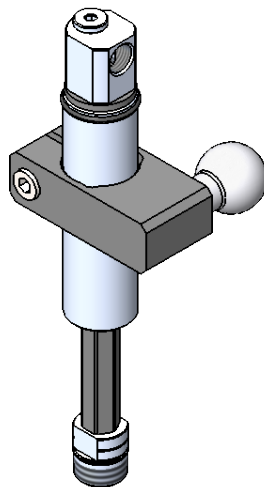


LC2512MB



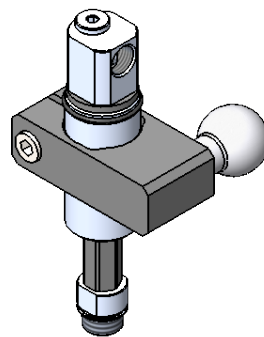
Weight: 0.81 lb [366.0 g]

LC5012MB



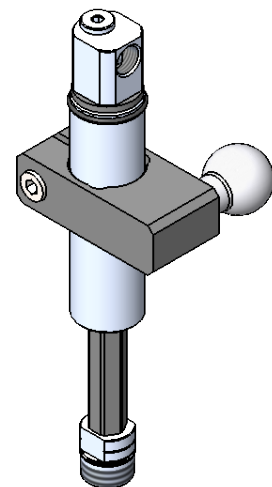
Weight: 0.99 lb [451.0 g]

LC2538MB



Weight: 0.81 lb [366.0 g]

LC5038MB

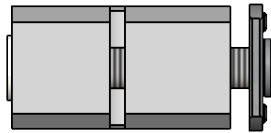
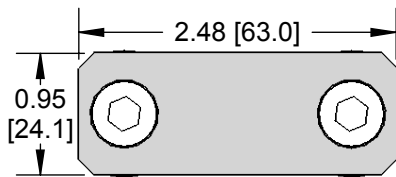
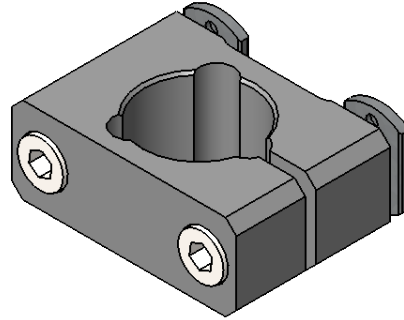
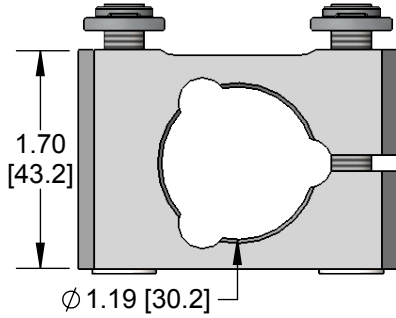


Weight: 0.99 lb [451.0 g]

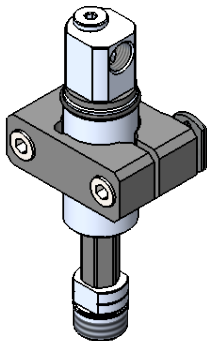
**EMAT
LEVEL COMPENSATORS W/ EXTRUSION MOUNT**

LC	STROKE	THREAD SIZE	E-	THREAD
	25	12M		(Blank) = NPT
	25 = 25 mm	38M = 3/8		
	50 = 50 mm	12M = 1/2		

Two M8x50 screws and two M8 t-nuts included.
Extrusion not included.

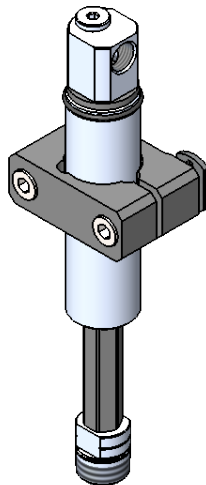


LC2512ME



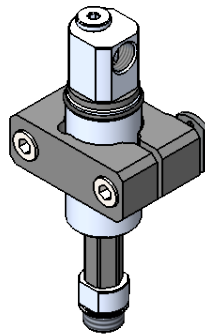
Weight: 0.77 lb [349.0 g]

LC5012ME



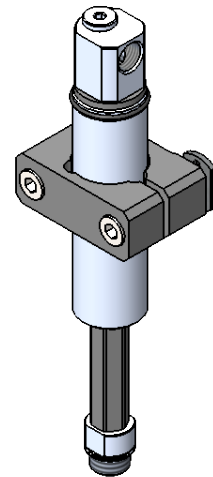
Weight: 0.96 lb [435.0 g]

LC2538ME



Weight: 0.77 lb [349.0 g]

LC5038ME



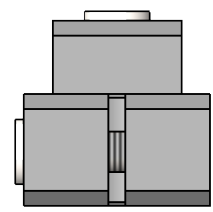
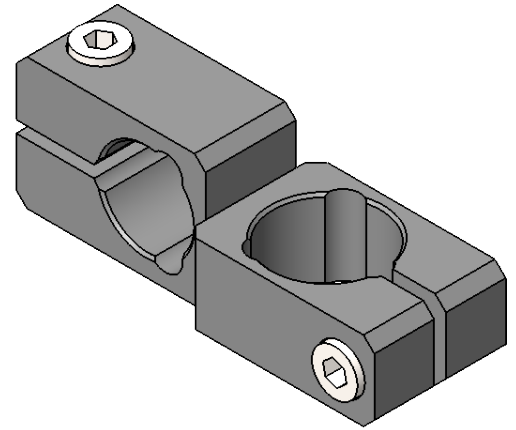
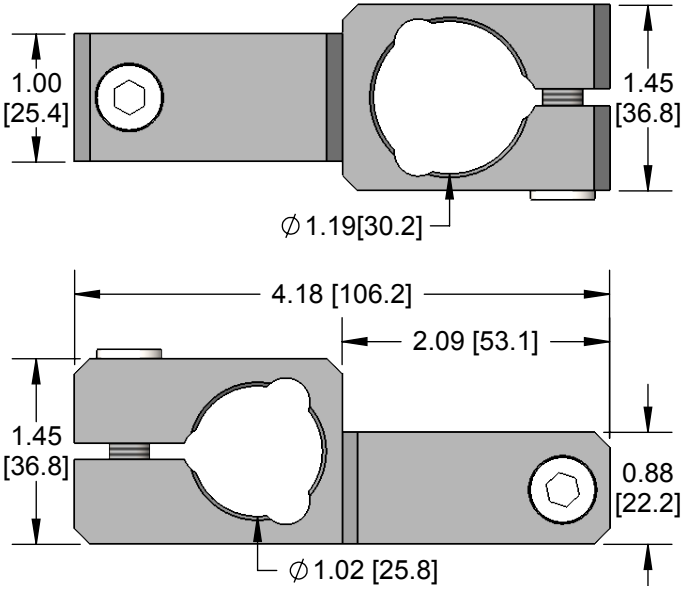
Weight: 0.96 lb [435.0 g]

**EMAT
LEVEL COMPENSATORS W/ 1.0" SLIDE-ON MOUNT**

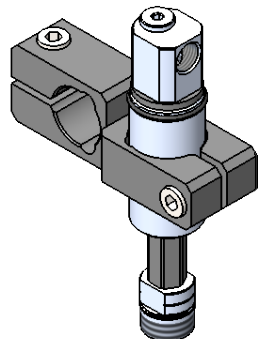
STROKE	THREAD SIZE	THREAD
25	12M	
25 = 25 mm	38M = 3/8	(Blank) = NPT
50	12M = 1/2	G = G Threads

LC

S10-

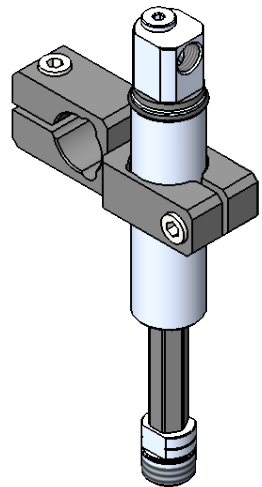


LC2512MS10



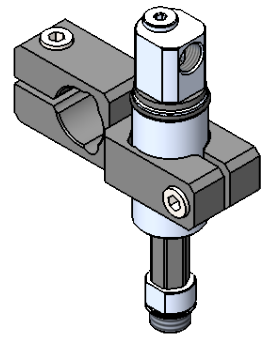
Weight: 0.82 lb [371.0 g]

LC5012MS10



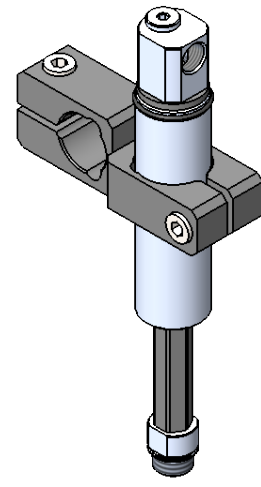
Weight: 1.00 lb [456.0 g]

LC2538MS10



Weight: 0.82 lb [371.0 g]

LC5038MS10

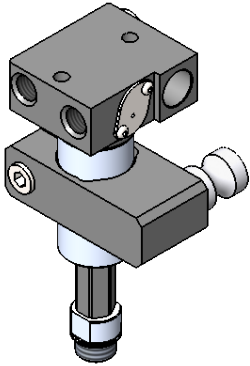


Weight: 1.00 lb [456.0 g]

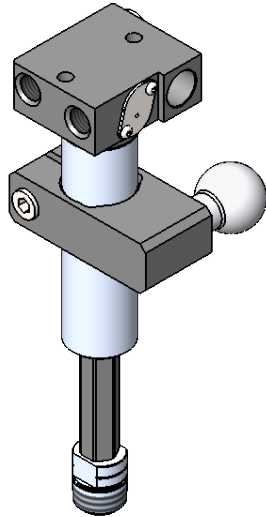
EMAT
LEVEL COMPENSATOR MOUNTED LOW-PROFILE VACUUM CONNECTION W/ BLOW-OFF

STROKE	THREAD SIZE	MOUNT TYPE	THREAD
25	12M	A	
25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
		E = Extrusion Mount	
		S10 = 1.0" Slide-On	

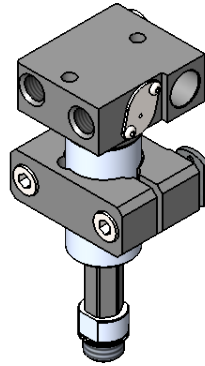
LVBC2538MA



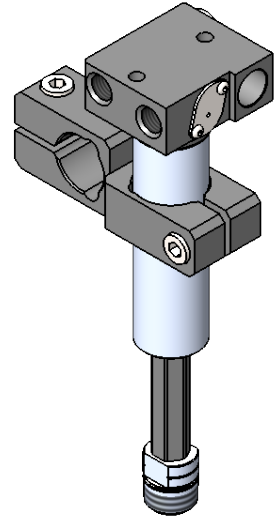
LVBC5012MB



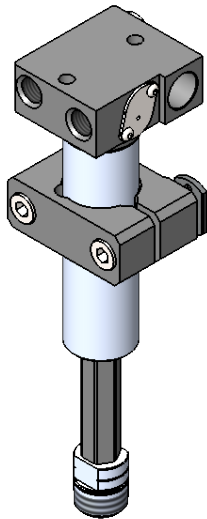
LVBC2538ME



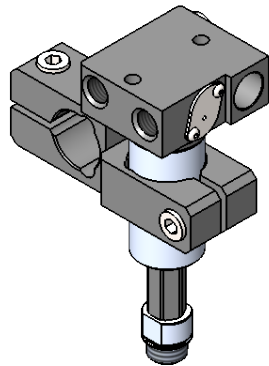
LVBC5012MS10



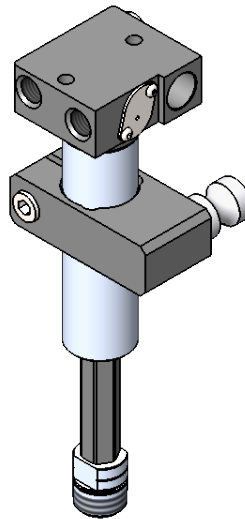
LVBC5012ME



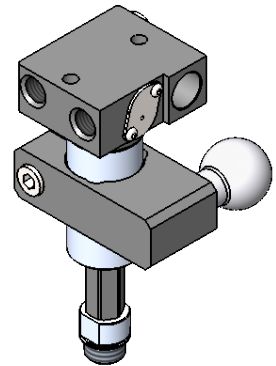
LVBC2538MS10



LVBC5012MA



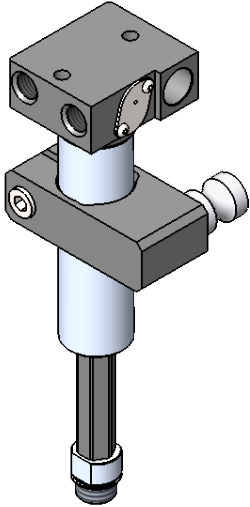
LVBC2538MB



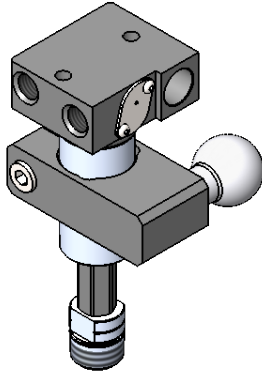
EMAT
LEVEL COMPENSATOR MOUNTED LOW-PROFILE VACUUM PUMP W/ BLOW-OFF

VENTURI SIZE	STROKE	THREAD SIZE	MOUNT TYPE	THREAD
10L	25	12M	A	
07	25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
09	50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
10			E = Extrusion Mount	
08L			S10 = 1.0" Slide-On	
10L				

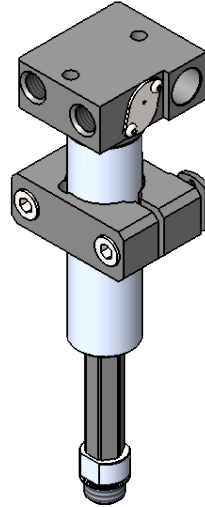
LPB10LC5038MA



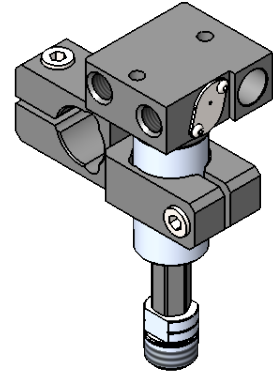
LPB10LC2512MB



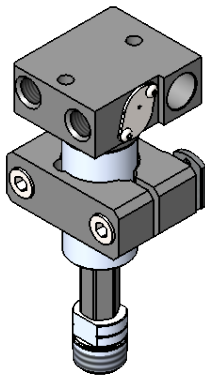
LPB10LC5038ME



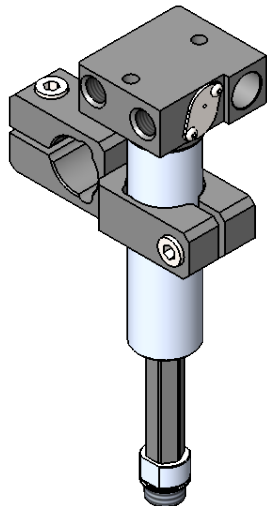
LPB10LC2512MS10



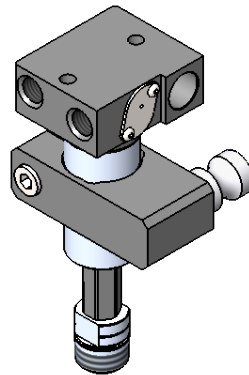
LPB10LC2512ME



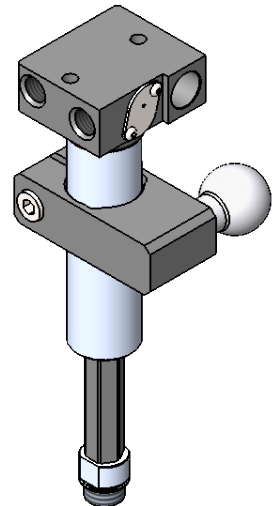
LPB10LC5038MS10



LPB10LC2512MA



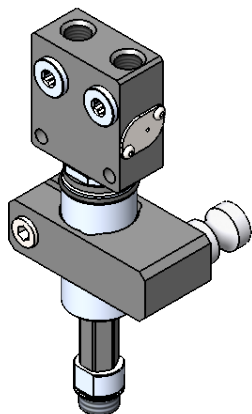
LPB10LC5038MB



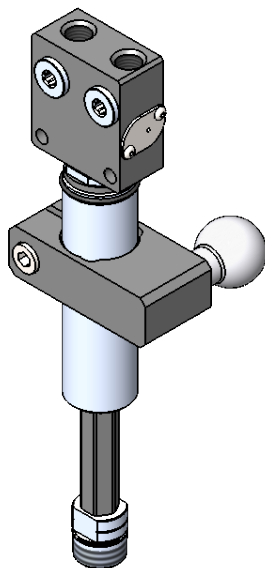
**EMAT
LEVEL COMPENSATOR MOUNTED VACLOC**

	STROKE	THREAD SIZE	MOUNT TYPE	THREAD
VLC	25	12M	A	
	25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
	50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
			E = Extrusion Mount	
		S10 = 1.0" Slide-On		

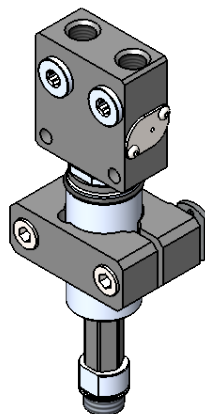
VLC2538MA



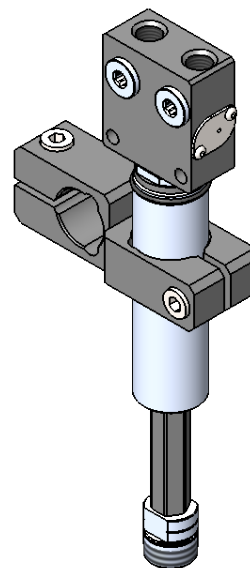
VLC5012MB



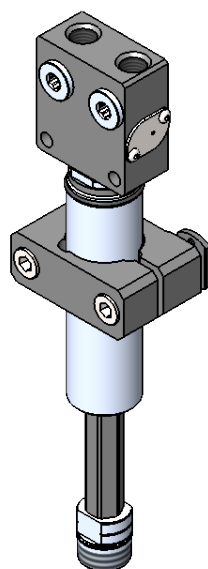
VLC2538ME



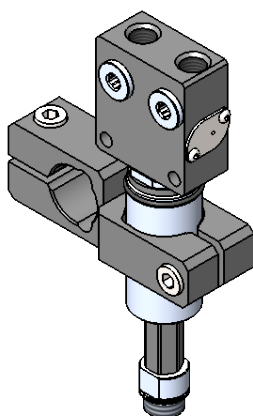
VLC5012MS10



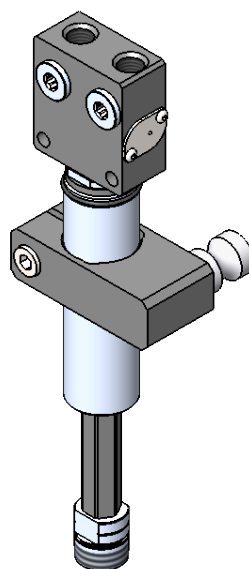
VLC5012ME



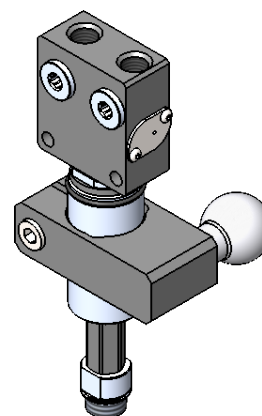
VLC2538MS10



VLC5012MA



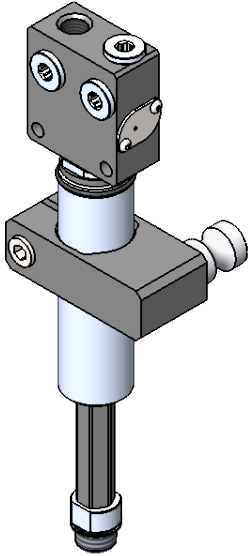
VLC2538MB



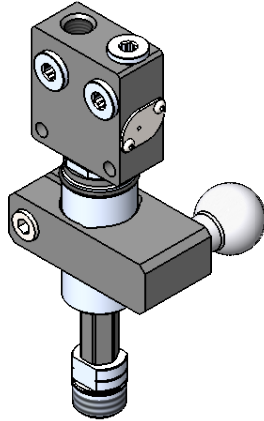
EMAT
LEVEL COMPENSATOR MOUNTED VACLOC W/ CROSS PORT

STROKE	THREAD SIZE	MOUNT TYPE	THREAD
25	12M	A	
25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
		E = Extrusion Mount	
		S10 = 1.0" Slide-On	

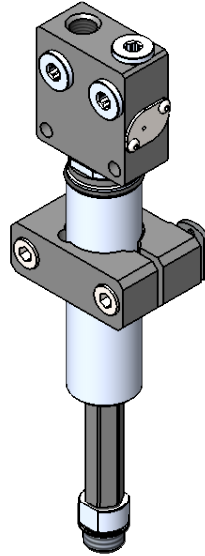
VLCPC5038MA



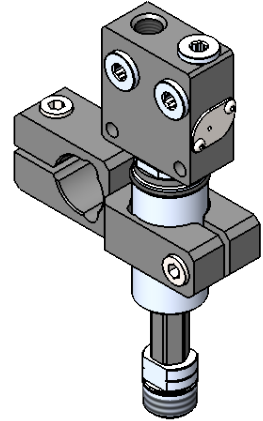
VLCPC2512MB



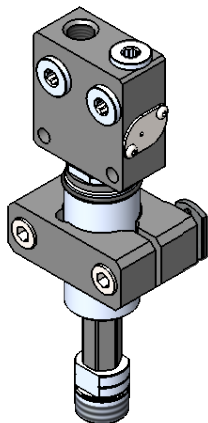
VLCPC5038ME



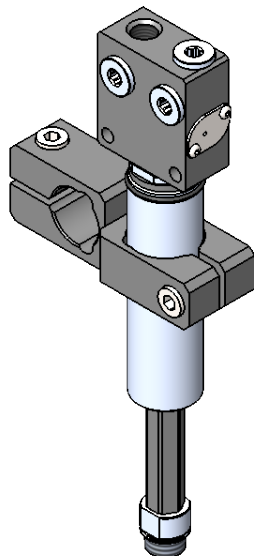
VLCPC2512MS10



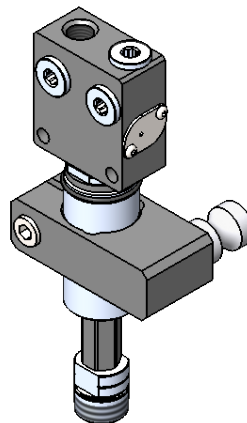
VLCPC2512ME



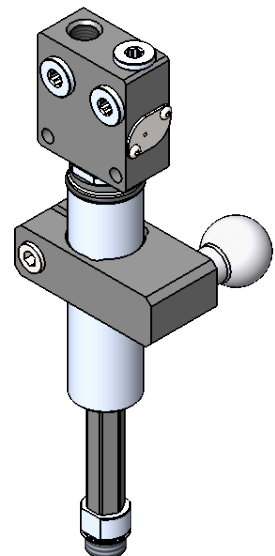
VLCPC5038MS10



VLCPC2512MA



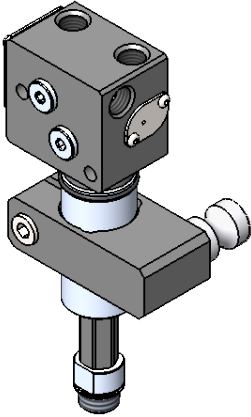
VLCPC5038MB



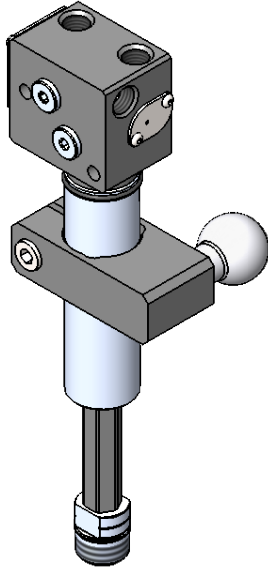
EMAT
LEVEL COMPENSATOR MOUNTED VACLOC W/ INTEGRAL PUMP

VENTURI SIZE		STROKE	THREAD SIZE	MOUNT TYPE	THREAD
VLP	10L	25	12M	A	
	07	25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
	09	50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
	10			E = Extrusion Mount	
	08L			S10 = 1.0" Slide-On	
	10L				

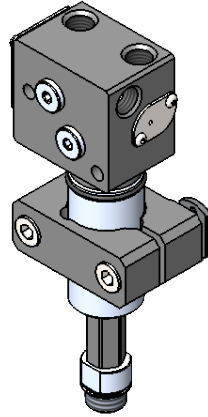
VLP10LC2538MA



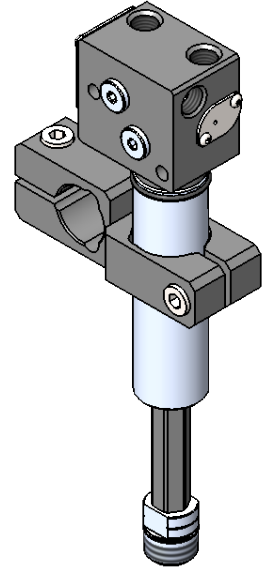
VLP10LC5012MB



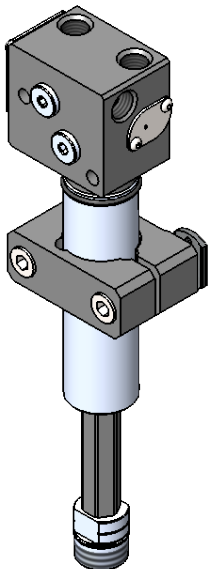
VLP10LC2538ME



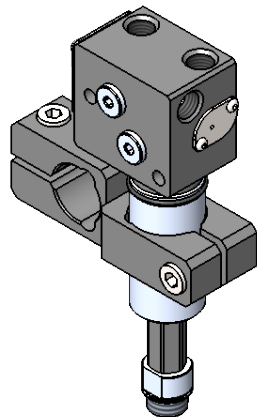
VLP10LC5012MS10



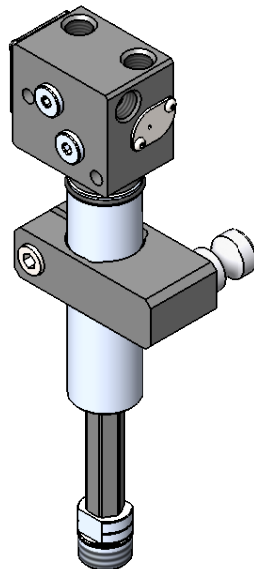
VLP10LC5012ME



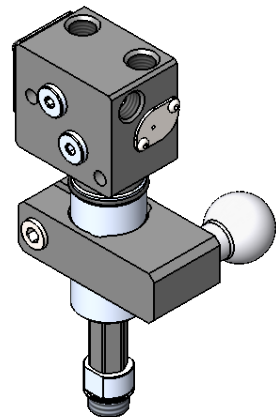
VLP10LC2538MS10



VLP10LC5012MA



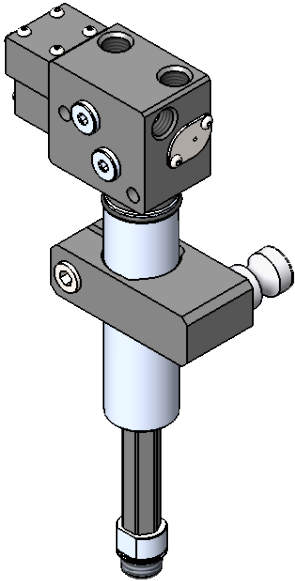
VLP10LC2538MB



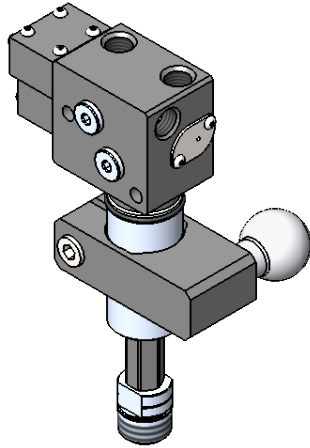
EMAT
LEVEL COMPENSATOR MOUNTED VACLOC W/ INTEGRAL PUMP & ENERGY SAVER OPTION

VENTURI SIZE		STROKE	THREAD SIZE	MOUNT TYPE	THREAD
VLP	10L	25	12M	A	
	07	25 = 25 mm	38M = 3/8	A = Apple Core	(Blank) = NPT
	09	50 = 50 mm	12M = 1/2	B = Ball Swivel	G = G Threads
	08L			E = Extrusion Mount	
	10L			S10 = 1.0" Slide-On	
ESC					

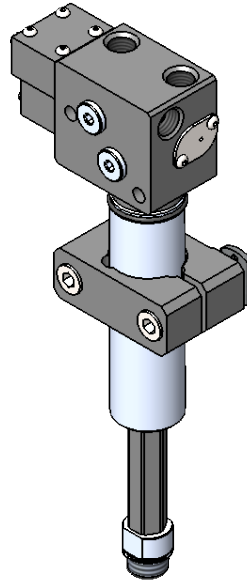
VLP10LESC5038MA



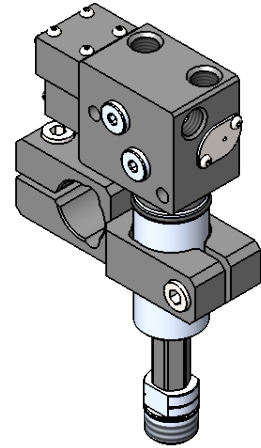
VLP10LESC2512MB



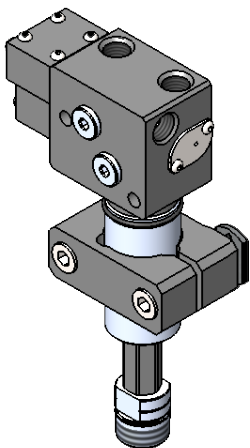
VLP10LESC5038ME



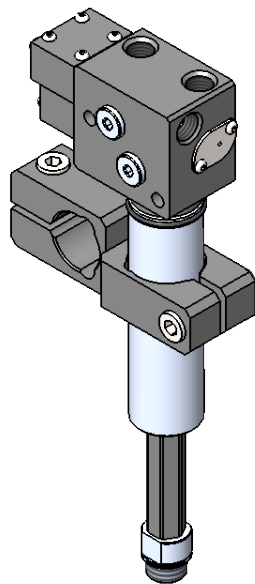
VLP10LESC2512MS10



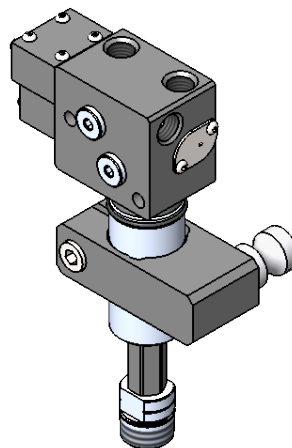
VLP10LESC2512ME



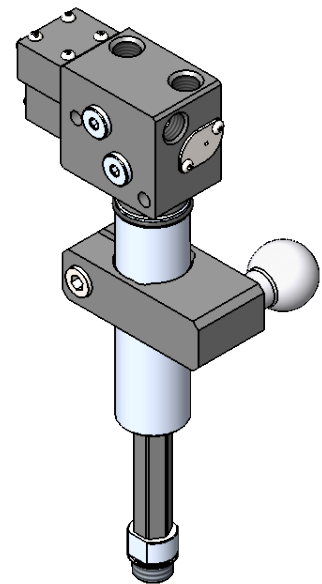
VLP10LESC5038MS10



VLP10LESC2512MA

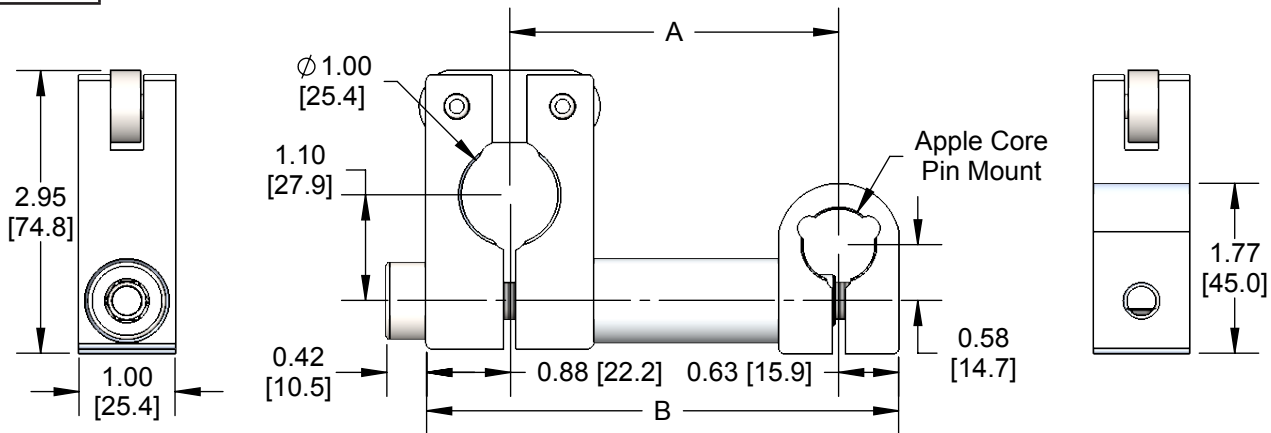


VLP10LESC5038MB



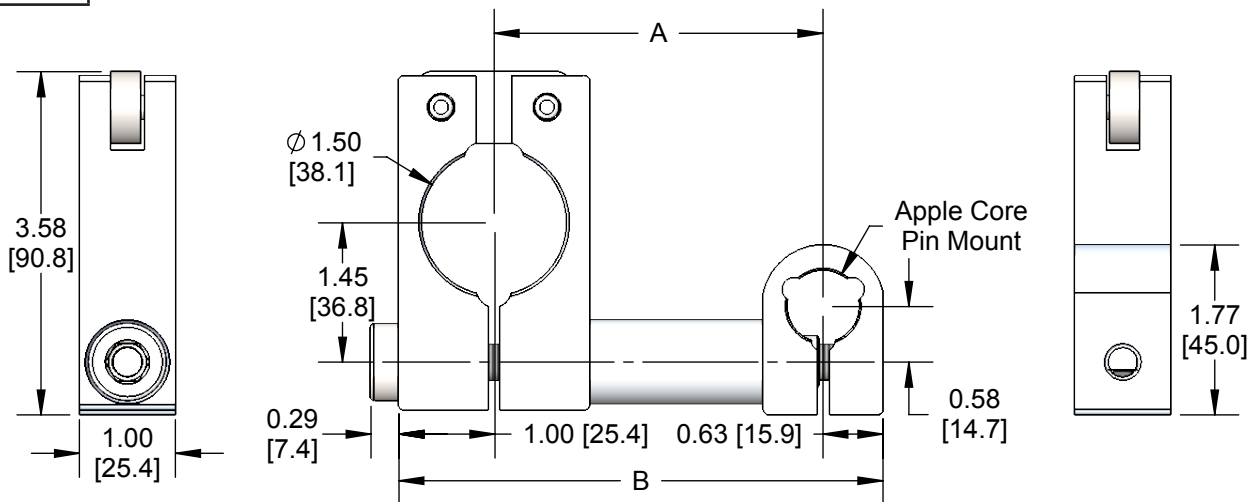
EMAT
CLAMP-ON ARM W/ APPLE CORE PIN RECEIVER

LENGTH	
C10X	2 A
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	C10X1A	C10X2A	C10X4A	C10X6A
A: in [mm]	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]
Weight: lb [g]	0.74 [336.0]	0.82 [370.0]	1.02 [463.0]	1.22 [555.0]

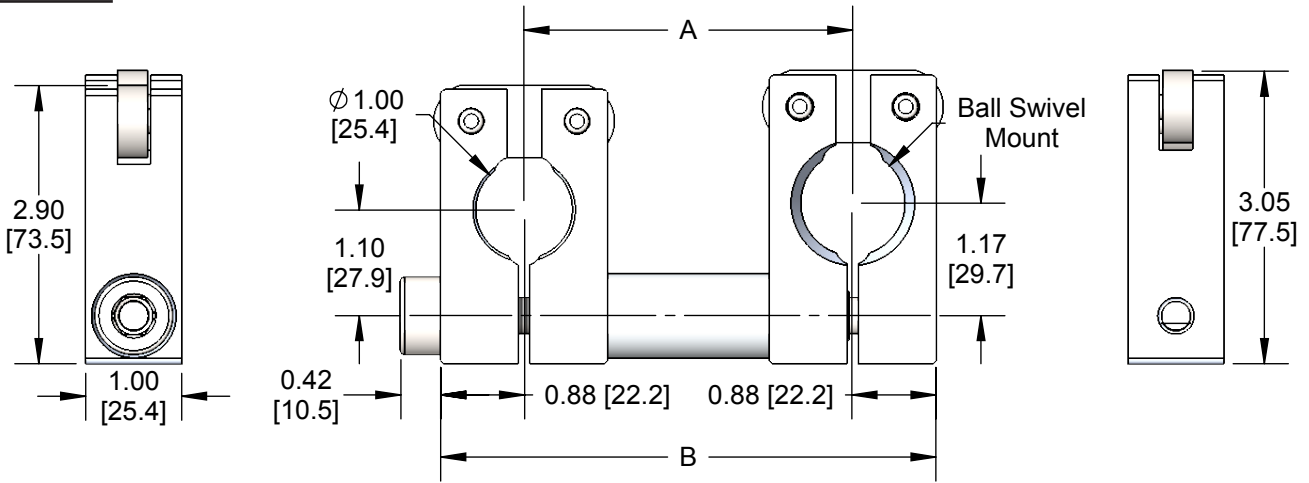
LENGTH	
C15X	2 A
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	C15X1A	C15X2A	C15X4A	C15X6A
A: in [mm]	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]
Weight: lb [g]	0.78 [354.0]	0.85 [387.0]	1.06 [480.0]	1.26 [572.0]

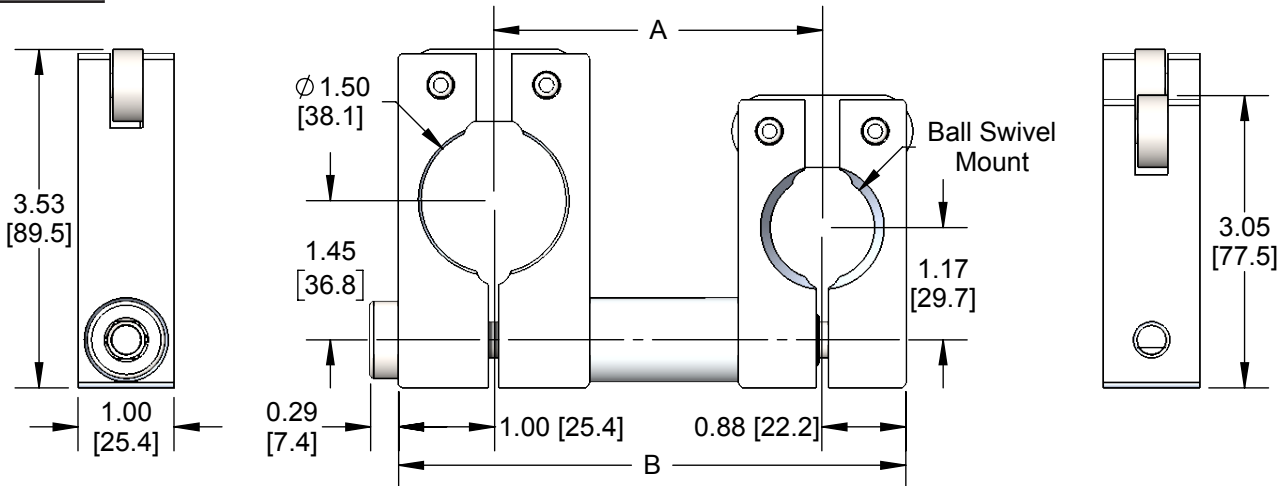
EMAT
CLAMP-ON ARM W/ BALL SWIVEL RECEIVER

LENGTH	
C10X	2
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	C10X1B	C10X2B	C10X4B	C10X6B
A: in [mm]	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]
Weight: lb [g]	1.03 [469.0]	1.11 [503.0]	1.31 [595.0]	1.52 [687.0]

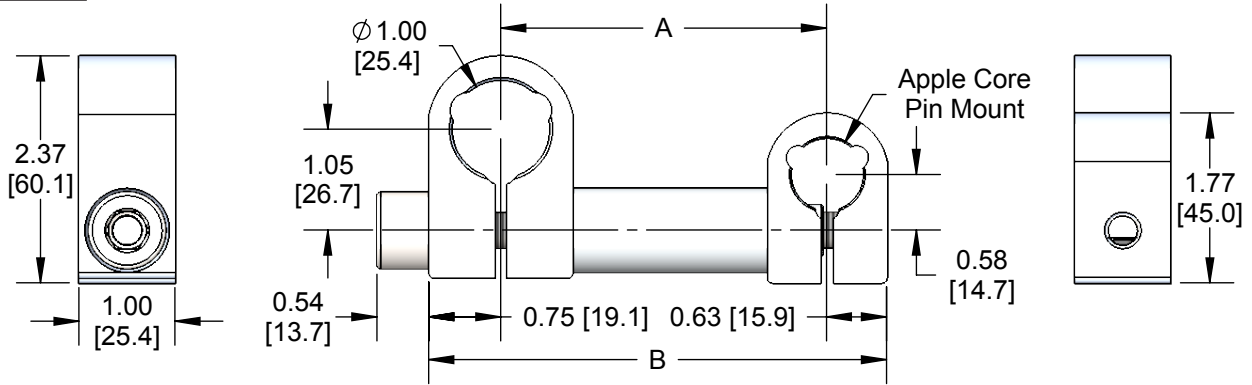
LENGTH	
C15X	2
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	C15X1B	C15X2B	C15X4B	C15X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	4.21 [107.0]	5.21 [132.0]	7.21 [183.0]	9.21 [234.0]
Weight: lb [g]	1.07 [487.0]	1.15 [522.0]	1.35 [613.0]	1.56 [705.0]

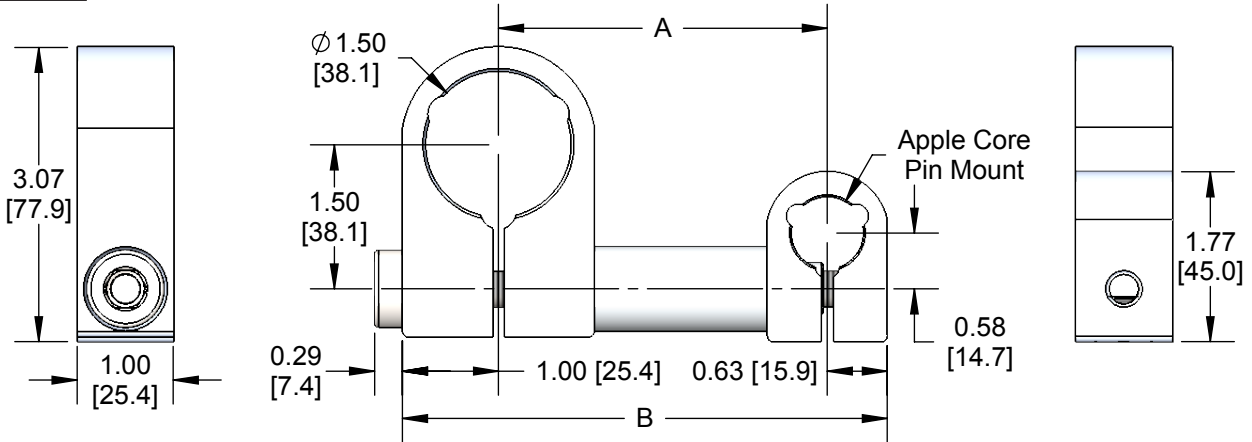
EMAT
SLIDE-ON ARM W/ APPLE CORE PIN RECEIVER

LENGTH	
S10X	2 A
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	S10X1A	S10X2A	S10X4A	S10X6A
A: in [mm]	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]
Weight: lb [g]	0.52 [235.0]	0.60 [270.0]	0.80 [362.0]	1.00 [454.0]

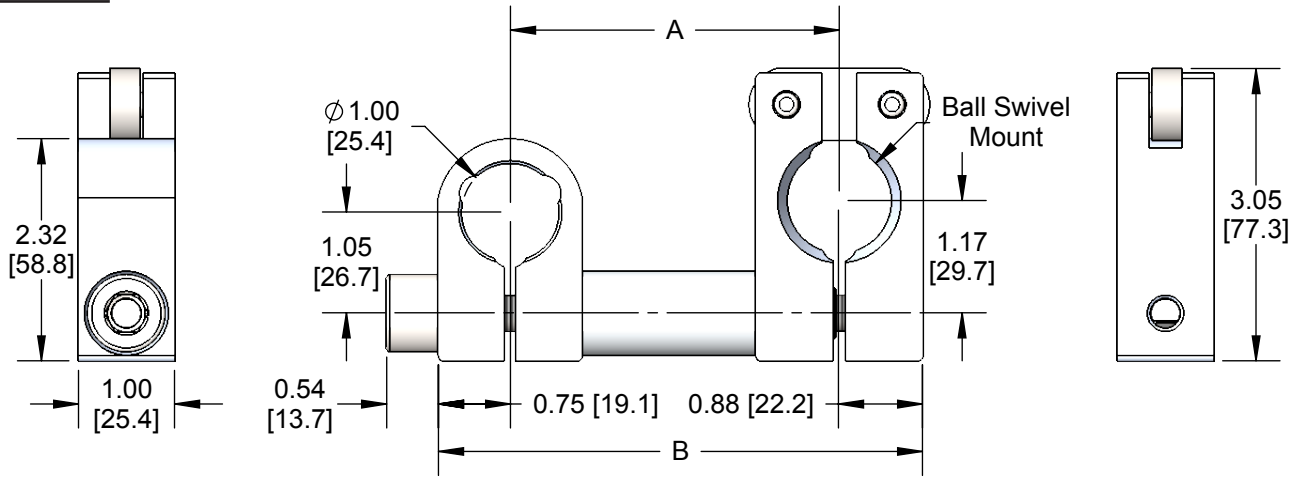
LENGTH	
S15X	2 A
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



	S15X1A	S15X2A	S15X4A	S15X6A
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	3.98 [101.0]	4.98 [126.0]	6.98 [177.0]	8.98 [228.0]
Weight: lb [g]	0.62 [281.0]	0.70 [317.0]	0.90 [408.0]	1.10 [499.0]

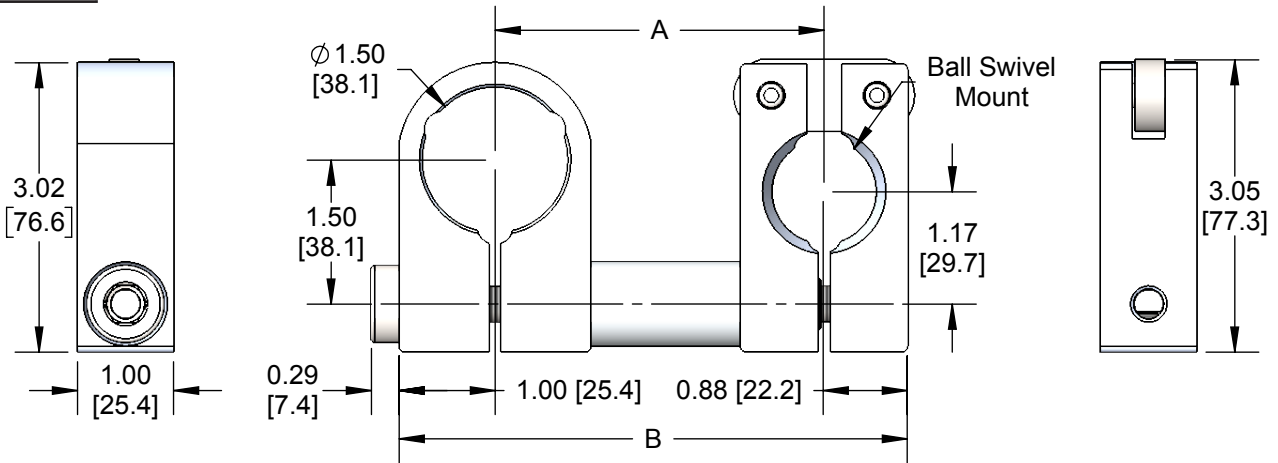
EMAT
SLIDE-ON ARM W/ BALL SWIVEL RECEIVER

LENGTH	
S10X	2 B
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



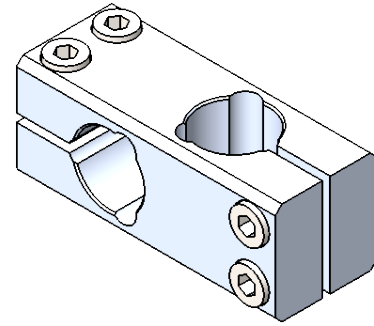
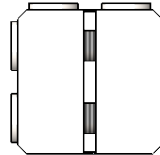
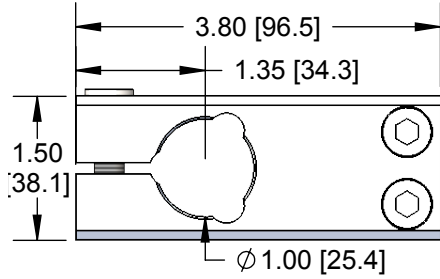
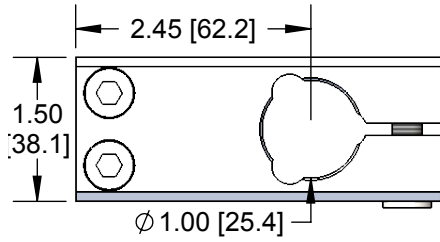
	S10X1B	S10X2B	S10X4B	S10X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	3.97 [101.0]	4.97 [126.0]	6.97 [177.0]	8.97 [228.0]
Weight: lb [g]	0.81 [368.0]	0.89 [403.0]	1.09 [495.0]	1.29 [587.0]

LENGTH	
S15X	2 B
	1 = 1"
	2 = 2"
	4 = 4"
	6 = 6"



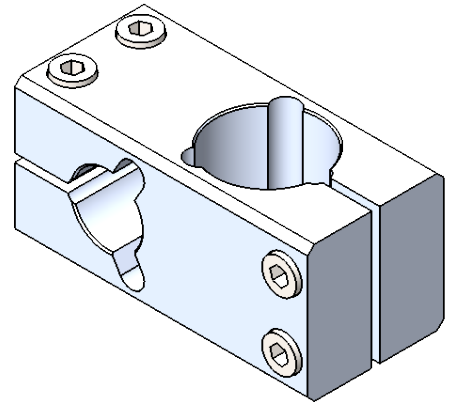
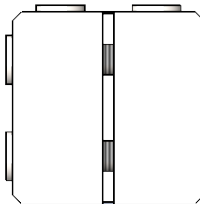
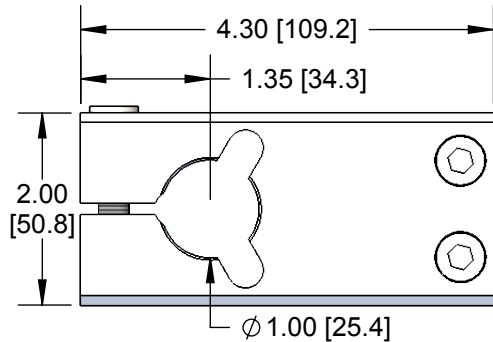
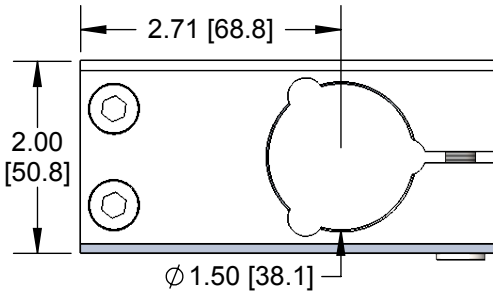
	S15X1B	S15X2B	S15X4B	S15X6B
A: in [mm]	2.35 [59.7]	3.35 [85.1]	5.35 [136.0]	7.35 [187.0]
B: in [mm]	4.22 [107.0]	5.22 [133.0]	7.22 [183.0]	9.22 [234.0]
Weight: lb [g]	0.84 [379.0]	0.91 [414.0]	1.12 [506.0]	1.32 [599.0]

EMAT
CB1010 : CLAMP BLOCK



Weight: 0.64 lb [291.0 g]

CB1015 : CLAMP BLOCK

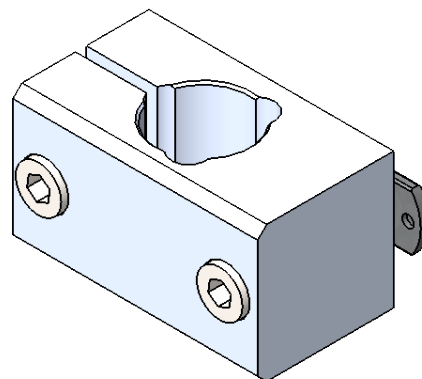
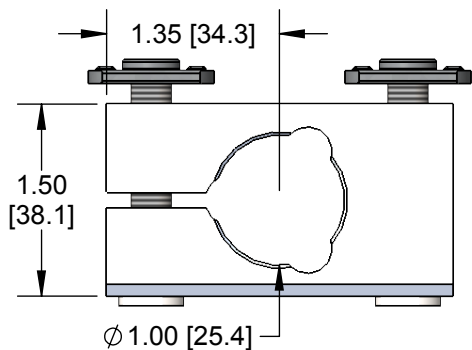


Weight: 1.12 lb [508.0 g]

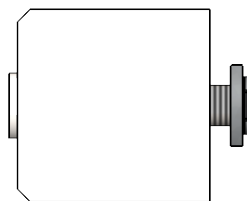
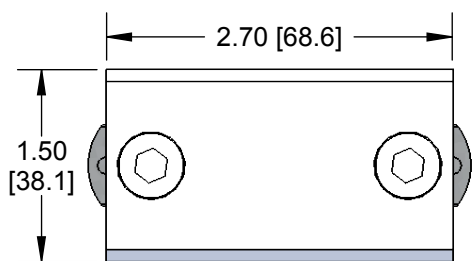
EMAT
E10 : EXTRUSION MOUNT CLAMP BLOCK

Two M8X45 screws and two M8 t-nuts included.

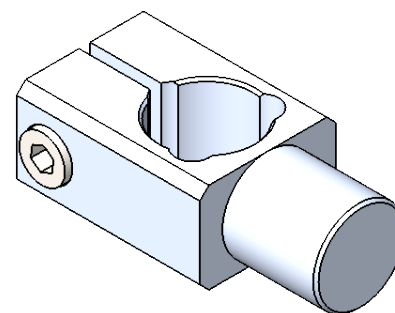
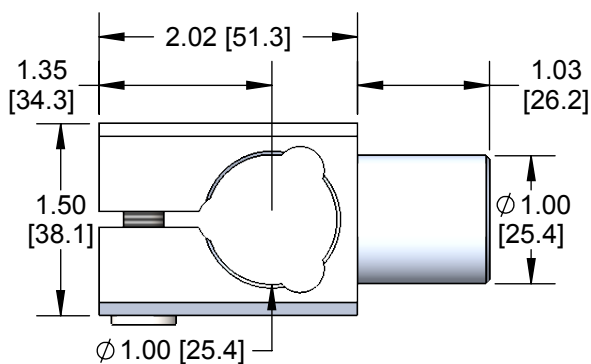
Fits 1-1/2 in or 40 mm extrusions.



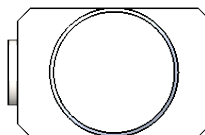
Weight: 0.54 lb [246.0 g]



M3A : 3RD AXIS LEVEL COMPENSATOR MOUNT

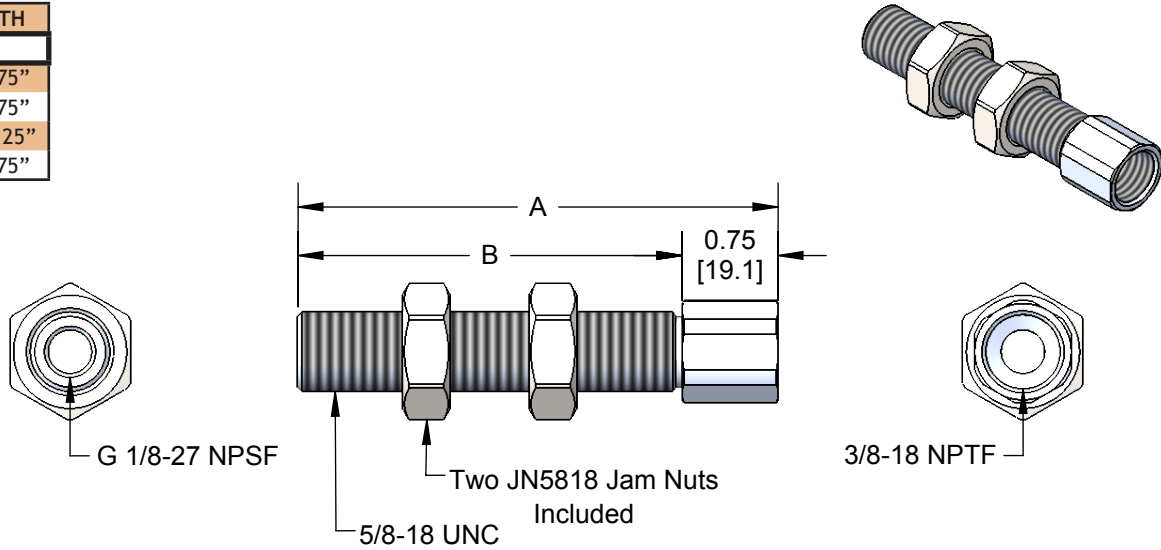


Weight: 0.30 lb (137.0 g)



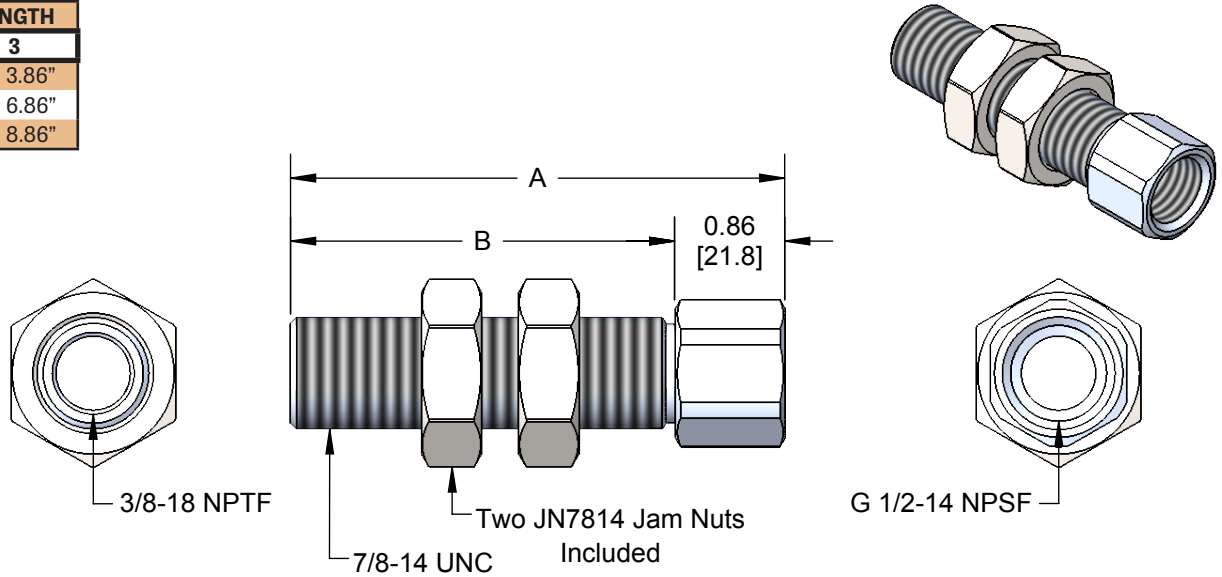
**EMAT
HEIGHT ADJUSTERS**

	LENGTH
AM38F-	3
	2 = 2.75"
	3 = 3.75"
	45 = 5.25"
	8 = 8.75"



DIMENSION	-2	-3	-45	-8
A: in [mm]	2.75 [69.9]	3.75 [95.3]	5.25 [133.0]	8.75 [222.0]
B: in [mm]	2.0 [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]

	LENGTH
AM12F-	3
	3 = 3.86"
	6 = 6.86"
	8 = 8.86"



DIMENSION	-3	-6	-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]