

## ELEVATED VACUUM LOCKING SYSTEM-SMALL

The Elevated Vacuum Locking System - Small (EVLS™-SM) is Prosthetic Design's 55 mm diameter X-SM modular shuttle lock that is conducive for use in High or Elevated Vacuum socket systems. When fit properly into the distal void in the socket, the lock acts as a suspension mechanism, connecting plate and sealing plate that has been designed to hold vacuum levels up to 27 inHg.

The EVLS™-SM is designed specifically for amputees with a distal residual limb circumference of 27 cm or less. The EVLS™-SM allows for the fabrication of a single wall thermoplastic socket or conventional laminated socket with Vivak/PETG liner.



#### Features

- 1. Urethane top cushion and sealing surface
- 2. CNC-machined aluminum Upper Housing, black anodized aluminum Lower Housing
- Manifold/Adapter plate (EV-MAN-SM) allows attachment to most European 4-hole pattern attachment components
- 4. Corrosion-resistant hardware and latching system
- 5. Patented Guide Grooves for donning ease
- 6. Xtension to prolong the life of the locks

Available in two Colors



EVLS-SM-CAUC



EVLS-SM-BRN



Look for the Prosthetic Design logo to ensure that you have the highest quality component available

#### **Benefits**

- 1. Secure positive locking suspension with the fitting benefits of Elevated Vacuum socket systems
- 2. Modular and patient/Prosthetist friendly
- Allows for the fabrication of a single wall thermoplastic socket or conventional laminated socket
- 4. CAD/CAM friendly design and fabrication process
- 5. Can be used as passive vacuum system (No Active Vacuum Pump) with the addition of a Duckbill Valve

### **EVLS Training Class**

Learn how to fabricate single wall vacuum sockets for use with our Elevated Vacuum Locking System.



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# INTRODUCING

The **Elevated Vacuum Locking System** The System (EVLSTM-SM) is Prosthetic Design's 55 mm diameter X-SM modular shuttle lock that is conducive for use in High or Elevated Vacuum socket systems. When fit properly into the distal void in the socket, the lock acts as a suspension mechanism, connecting plate and sealing plate that has been designed to hold vacuum levels up to 27 inHg. The EVLSTM-SM is designed specifically for amputees with a distal residual limb circumference of 27 cm or less. The EVLSTM-SM allows for the fabrication of a single wall thermoplastic socket or conventional laminated socket with Vivak/PETG liner. The EVLSTM-SM Kit comes standard with (1) EVLSTM-SM Lock, (1) Vacuum manifold/4-hole adaptor combination plate (EV-SM-MAN) with air fitting (EV-AFNP), (2) Plunger Pins for SealMate Liner (EV-XSPP.191) (1) Duckbill Valve (EV-DBV), (2) tube retainers (EV-RET), (4) M6x25 and (4) M6x10 attachment bolts. The EVLSTM-SM kit also comes with 2ft of 1/8" ID vacuum tubing. The EVLSTM-SM is compatible with all Prosthetic Design, Inc. tooling, for 55 mm (small) locks, including the CFP55-25, FET-SM-KIT and the SSFT.

*Plunger Pins:* (2) EV-XSPP.191 or (2) EV-XSPP.25 short plunger pins are included based on the choice of locking liner. Prosthetic Design SealMate™ Liners will require the EV-XSPP.191 and off the shelf Evolution liners and other liners without a protruded distal receptacle will use the EV-XSPP.25.

**Accessories:** Prosthetic Design, Inc. offers optional size push buttons and other accessories for the EV connecting components. See Prosthetic Design's Product Catalog for options.

**Bolts:** (4) M6x25 and (4) M6x10 flat head socket cap screws are included with the EVLS™-SM. These screws are zinc plated carbon steel screws. Optional length screws are available from Prosthetic Design, Inc. and are sold in packs of 4 ea. They are: M6x20, M6x30, M6x40, M6x45, M6x50 and M6x70. The overall grip thickness of the screw includes the distal socket thickness and spacer plates. The screws must engage the M6NUT at least 4 full turns.

**NOTE:** There needs to be at least 18 mm and NO MORE than 24 mm of bolt exposed before the bolts go into the socket. Utilizing more than 25 mm of bolt going into the socket can damage the urethane upper housing seal and compromise the distal socket seal.

## **Specifications:**

Weight:	
EV-X-SM:	125g (4.4 oz)
EV-SM-MAN:	48g (1.7 oz)
EV-XSPP.191:	17g (0.6 oz)
Added Profile:	13mm (1/2 in)
Load Rating:	120kg (264 lbs.)
Activity Level:	Moderate (K1-K3)
Load Rating:	100kg (220 lbs.)
Activity Level:	High (K4)
Recommended L Code exists (L5671)	

*Instructions:* Refer to Prosthetic Design Inc.'s fabrication instructions for specifics regarding use of fabrication tooling. NOTE: This product requires the use of either the CFP55-25 or FET-SM-KIT and the SSFT.

**Torque Specifications:** Apply a small amount of Loctite 242 on the (4) M6 screws, tighten and torque to 10Nm (7ft-lb) using a 4 mm hex wrench.

**Attention:** Caution must be taken in securing the plunger pin to the locking liner. Proper attachment in accordance with all manufacturer instructions (i.e., applicable to the liner, too) is required to ensure patient's safety. If excessive movement is detected between the locking liner and the plunger pin or between the plunger pin and the lock at any time, the patient should be instructed to immediately discontinue use of the device and consult his/her Prosthetist.

Limited Warranty: Prosthetic Design Inc. warrants its Locks to purchasers of the prosthetic components only. No warranties are made to consumers. All Prosthetic Design, Inc. Locks are warranted for 12 months from original purchase date. This warranty applies only to normal use and service against defects and/or excessive wear and does not cover: (1) any damage due to misuse, altering of part, improper service or accidents; (2) any product whose serial or batch number has been altered or removed; (3) any secondary costs that might be incurred in the exchange of the part; (4) abnormal wear due to incorrect selection of component.

During the warranty period, at Prosthetic Design, Inc's discretion, defective and/or worn parts will be repaired or replaced at no charge, providing the product is returned to Prosthetic Design Inc. prepaid and accompanied with a Return Merchandise Authorization (RMA). Missing hardware will be replaced at retail prices. This warranty applies only to Prosthetic Design, Inc. parts. This warranty is in lieu of all other warranties, expressed or implied, including any implied warranty or merchantability or fitness of a particular purpose. The remedies provided above are exclusive; in no event shall Prosthetic Design, Inc. be liable for any special, indirect, incidental, or consequential damages.

**Returns:** A stocking fee amounting to 2% of the retail price will be charged to the customer should the customer wish to return any Prosthetic Design Inc. product for credit. The part must be unused, and in its original, unopened packaging. In addition, the return must be initiated within 30 days of its purchase in order to qualify for the credit.



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