

VersaCam™ Swing Clamp

Threaded Body, Flow Control

Double Acting

- Available in our very popular 1,100 lb. capacity model.
- Integral flow control needle valve regulates the speed in both directions.
- Created for applications where multiple clamps must be timed to contact the part at similar times.
- Needle valve is built into the clamp head, no need to add external flow controls or give up space on your fixture for additional plumbing.
- Clocking feature (page C-32) uses standard length Vekttek arm.
- Arms sold separately – see section O.

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Special limiting capability prevents the total blockage of the flow path.

NOTE: Do not modify the needle valve or seat; excessive pressures may result.

Hardened V-cam tracks resist damage and give you a built in extra cam (opposite swing direction) or straight-line option should you accidentally damage one. Specify right, left or straight cam, we will preset the swing when you order.

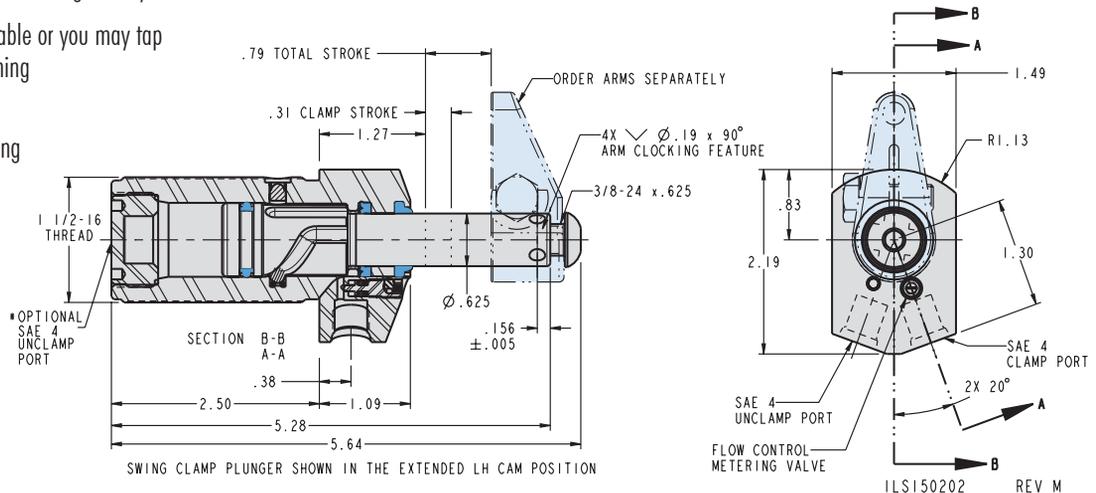
Mounting hardware is available or you may tap your fixture and use a retaining collar to lock in place.

Standard SAE 4 o-ring porting makes plumbing simpler and leak-free.

Available only as a double-acting unit, springs cannot be used in this design.



U.S. Patent Nos.
5,820,118
6,886,820



Model No.*	Swing Direction	Cylinder Capacity (lb.)**	Vertical Clamping Stroke (in.)***	Total Stroke (Swing + Vertical)	Body Thread	Standard Arm Length	Effective Piston Area (sq. in.)			
							Retract	Extend	Retract	
Double Acting (D/A)							Cylinders, actuated hydraulically both directions.			
15-0209-09-L	Left	1100	0.31	0.79	1 1/2-16	1.50	0.295	0.475	0.233	
15-0209-09-R	Right									
15-0209-09-S	Straight									
15-0209-29-L	Left*	1100	0.31	0.79	1 1/2-16	1.50	0.295	0.475	0.233	
15-0209-29-R	Right*									
15-0209-29-S	Straight*									

WARNING! Never allow swing arm to contact workpiece or fixture during arm rotation.

* Includes optional unclamp porting through the bottom of the Swing Clamp, Model number 15-0209-29 (R, L, or S)

** Cylinder capacities are listed at 5,000 psi maximum operating pressure, with a standard length Vekttek® arm installed. Minimum operating pressure is 750 psi for single acting, 500 psi for double acting. The clamping force is adjustable by varying the hydraulic system pressure. To determine the approximate output force for your application divide the cylinder capacity shown above by 5,000, and multiply the resultant number by your system operating pressure to obtain the approximate clamping force for your application. (Actual force will vary slightly due to internal cantilever loading, friction loss and/or return springs.)

*** To allow for piece part height variations, it is recommended that the vertical travel be set to about 50% of the vertical stroke.

**** To ensure maximum service life and trouble-free operation, restrict fluid flow per table on page C-26.

Order arms separately.

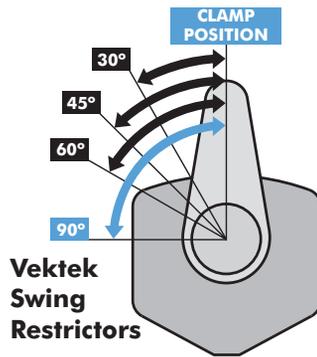


VersaCam™ Swing Clamp

Swing Restrictors and Clocking

Swing Clamp Restrictors

Swing Restrictors add just one more element of flexibility when using Vekttek TuffCam™ and VersaCam™ Swing Clamps. Normally shipped with the swing angle set to 90°, you can have swing restrictors added to your clamps to limit the arm swing to 30°, 45° or 60° of rotation. Restrictors that are factory installed on new clamps will have the clamp specially marked to avoid intermingling clamps with varying swing angles in your shop. Contact your Vekttek Customer Service specialist should you need swing angles greater than 90°.



Swing Clamp Swing Restrictors

Model No.	Clamp Capacity	Swing Restriction
81-5505-30	450	30°
81-5505-45	450	45°
81-5505-60	450	60°
81-5509-30	1100	30°
81-5509-45	1100	45°
81-5509-60	1100	60°
81-5513-30	2600	30°
81-5513-45	2600	45°
81-5513-60	2600	60°
81-5518-30	5000	30°
81-5518-45	5000	45°
81-5518-60	5000	60°
81-5519-30	TC LP SC 5000	30°
81-5519-45	TC LP SC 5000	45°
81-5519-60	TC LP SC 5000	60°
81-5522-30	TC LP SC 7500	30°
81-5522-45	TC LP SC 7500	45°
81-5522-60	TC LP SC 7500	60°

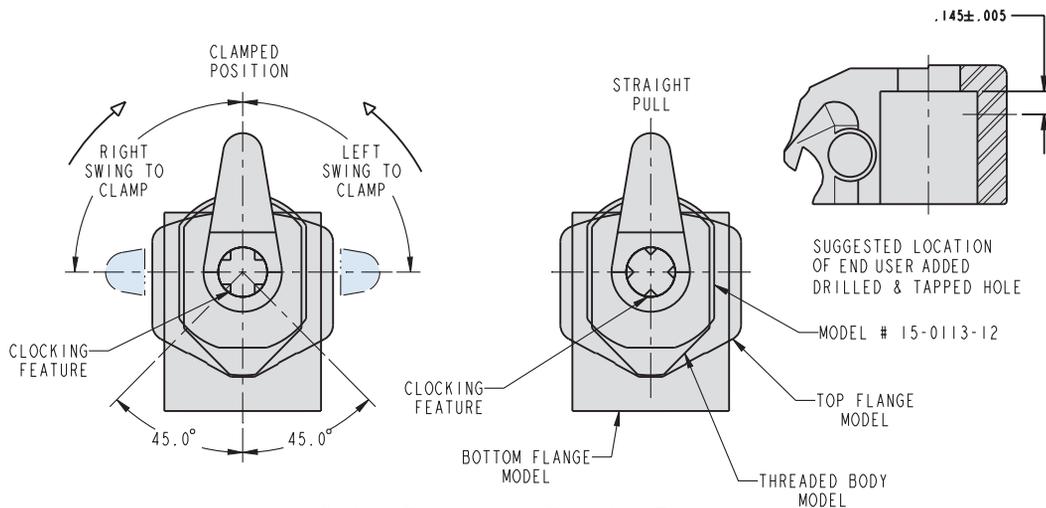
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Clocking

We have added 2 (two) more clocking features to Vekttek's VersaCam™ Swing Clamp line. Customers have requested additional clocking features to help improve and speed-up arm changes.

A drill point on each clamp standardizes arm location at a particular position. An additional 3 (three) orientation drill points reside 90° out from that position and each other. Access to the positioning feature is through the back or side of the arm, making modification a snap for users. Each arm position can have its own specification.



Swing Clamp Arm Clocking Feature

Drill points shown in the clamped position.
Clocking features 4 @ 90°

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