

VersaCam™ Swing Clamp

Bottom Flange

Single And Double Acting

- Simply the easiest to use manifold mount design on the market today. No precision installation holes, no precisely located ports, and no special mounting hardware needed.
- Available in three sizes: 450, 1,100 and 2,600 lb. capacity.
- Unique, bolt up, bolt down or standard ported "foot" design allows you the maximum flexibility in fixture design.
- Can be manifold face sealed or fittings may be used in the top and bottom ports (SAE 2).
- Clcking feature (page C-32) uses standard length Vektek arm.

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 left, right or straight cam.

SAE porting from three directions on larger models gives you five alternatives for plumbing. You can use standard fittings in any of the three sets of ports or manifold by bolting up or down.

Easily installed using standard cap screws. The large base and one piece mounting give this clamp excellent rigidity.



Model No. Add -L, -R or -S to indicate desired Swing Direction	Cylinder Capacity (lb.)**	Vertical Clamp Stroke (in)***	Total Stroke (Swing + Vertical)	Standard Arm Length **	Effective Piston Area (sq. in.) Retract	Oil Capacity (cu. in.)****		Optional Flow Control Model No. *****
						Extend	Retract	
Single Acting (S/A)								
Cylinders, actuated hydraulically 1 direction, spring returned.								
15-2105-01	450	0.22	0.57	1.06	0.098	N/A	0.056	70-2037-71
15-2109-01	1100	0.31	0.79	1.50	0.295	N/A	0.233	70-2037-73
15-2113-01	2600	0.50	1.16	2.00	0.626	N/A	0.726	70-2037-73
Double Acting (D/A)								
Cylinders, actuated hydraulically both directions.								
15-2205-01	450	0.22	0.57	1.06	0.098	0.142	0.056	70-2037-71
15-2209-01	1100	0.31	0.79	1.50	0.295	0.475	0.233	70-2037-73
15-2213-01	2600	0.50	1.16	2.00	0.626	1.423	0.726	70-2037-73

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

** Cylinder capacities are listed at 5,000 psi maximum operating pressure, with a standard length VektorFlo® 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.

***** In-port flow control requires the use of manifold mount ports.

Optional in-port flow control is a meter-in device with reverse free flow check valve.



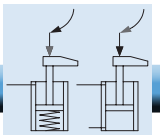
Dimensions

Model No. Left Swing	Model No. Right Swing	Model No. Straight Swing	A	B	C	D	E	F	G	H
Single Acting (S/A)										
15-2105-01-L	15-2105-01-R	15-2105-01-S	1.05	4.32	4.06	2.80	2.99	1.00	0.66	0.438
15-2109-01-L	15-2109-01-R	15-2109-01-S	1.49	5.70	5.33	3.65	3.83	1.25	0.63	0.625
15-2113-01-L	15-2113-01-R	15-2113-01-S	1.79	7.35	6.83	4.43	4.67	1.25	0.63	0.875
Double Acting (D/A)										
15-2205-01-L	15-2205-01-R	15-2205-01-S	1.05	4.32	4.06	2.80	2.99	1.00	0.66	0.438
15-2209-01-L	15-2209-01-R	15-2209-01-S	1.49	5.70	5.33	3.65	3.83	1.25	0.63	0.625
15-2213-01-L	15-2213-01-R	15-2213-01-S	1.79	7.35	6.83	4.43	4.67	1.25	0.63	0.875

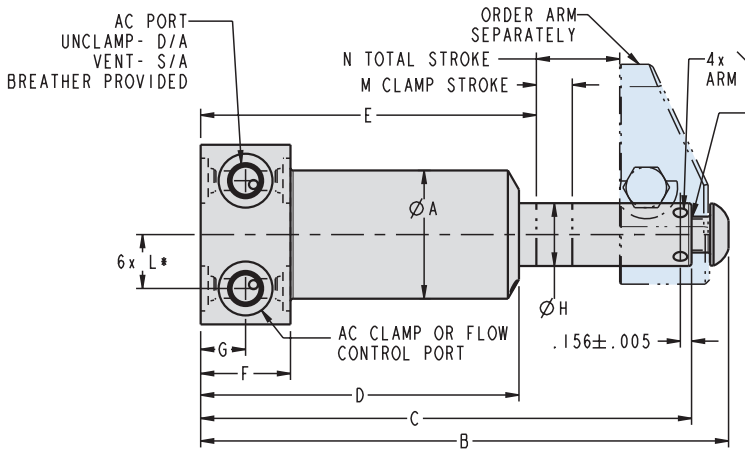
* Models 15-2105-01- (L, R, or S) and 15-2205-01- (L, R, or S) do not include the option for manifold mounting on the top surface, all other models are shipped with the plugs and o-rings necessary for manifold mounting.

** All five mounting screws must be used when manifold mounting to assure a leak free o-ring seal.

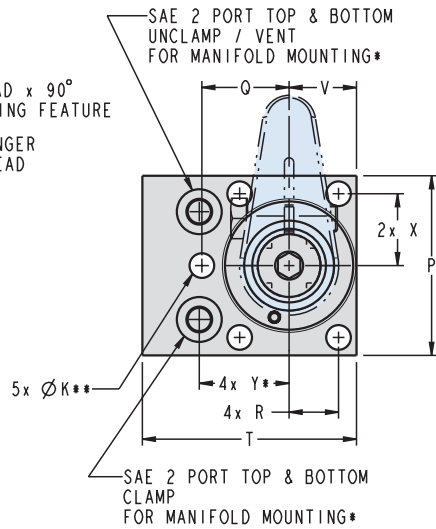
VersaCam™ Swing Clamp



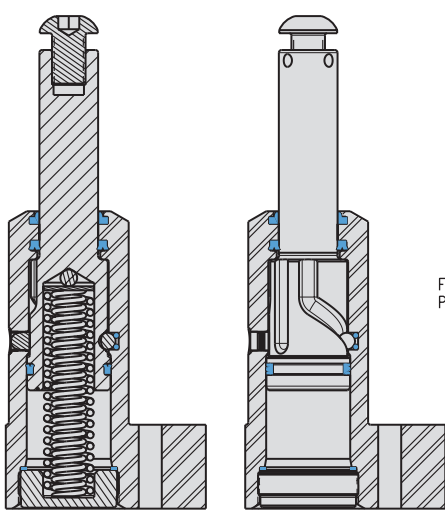
Bottom Flange



SWING CLAMP PLUNGER SHOWN IN THE EXTENDED LH CAM POSITION



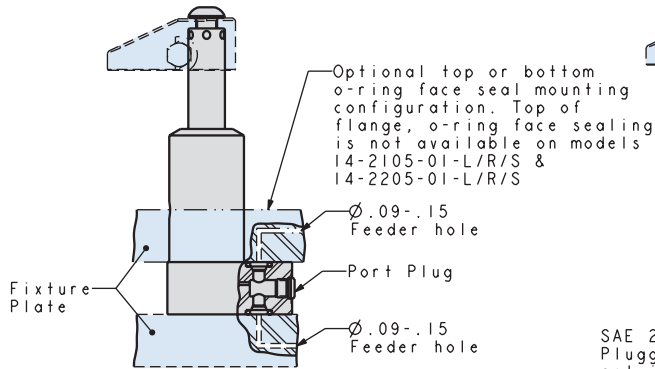
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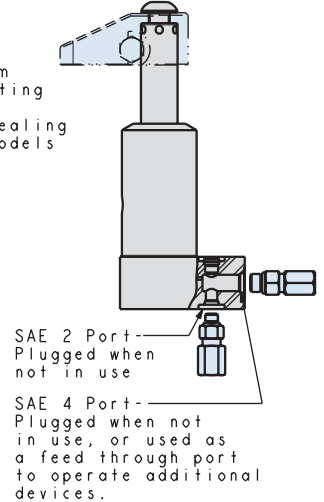
SINGLE ACTING

DOUBLE ACTING
ILS152100 REV H

Swing Clamp plunger shown in the Extended Left Cam Position



ILS142005 REV B



For proper sealing, mating surface must be flat within 0.003 in. with a maximum 63 μ in. R_a surface finish.

J	K	L	M	N	P	Q	R	T	V	X	Y	AC	AD
Cylinders, actuated hydraulically 1 direction, spring returned.													
1/4-28 X 0.375	0.22	0.38	0.22	0.57	1.50	1.06	0.38	1.75	0.53	0.59	0.78	SAE 4	0.13
3/8-24 X 0.625	0.28	0.56	0.31	0.79	2.00	0.99	0.56	2.50	0.75	0.81	1.13	SAE 4	0.19
1/2-20 X 0.750	0.34	0.75	0.50	1.16	2.50	1.21	0.69	3.00	0.94	1.00	1.25	SAE 4	0.19
Cylinders, actuated hydraulically both directions.													
1/4-28 X 0.375	0.22	0.38	0.22	0.57	1.50	1.06	0.38	1.75	0.53	0.59	0.78	SAE 4	0.13
3/8-24 X 0.625	0.28	0.56	0.31	0.79	2.00	0.99	0.56	2.50	0.75	0.81	1.13	SAE 4	0.19
1/2-20 X 0.750	0.34	0.75	0.50	1.16	2.50	1.21	0.69	3.00	0.94	1.00	1.25	SAE 4	0.19

Order arms separately.

