

VersaCam™ Swing Clamps

Manifold/Bottom Flange Mount Dimensions

Single And Double Acting

- Available in sizes from 2 kN, to 11.6 kN at 350 bar (35 MPa) pressure.
- Simply the easiest to use manifold mount design on the market today. No precision installation holes, no precisely located ports, no special mounting hardware, only our special patented design.
- Unique, bolt up, bolt down or standard ported "foot" design allows you the maximum flexibility in fixture design.
- To avoid cylinder damage and preserve warranty use recommended flow rate limits and time calculations on page C-20.
- Standard swing is 90°; swing angles less than 90° require Swing Restrictors (Page C-29). Swing angles greater than 90° are special order products.
- Arm locking feature is compatible with all standard Vekttek arms. Locking drawing is on page C-29.
- Arms sold separately — see section O.

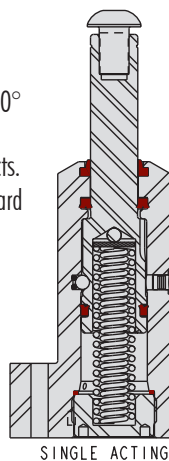
C-27



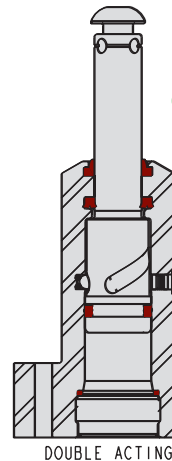
VersaCam™
Swing Clamps

U.S. Patent Nos.
5,192,158
5,820,118
6,886,820 B1

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



SINGLE ACTING



DOUBLE ACTING

SWING CLAMP PLUNGER
SHOWN IN THE EXTENDED
LH CAM POSITION

ILMV152101 REV K

Specifications

Model No.	Swing Direction	Cylinder Capacity* (kN)	Vertical Clamping Stroke** (mm)	Total Stroke (Swing + Vertical) (mm)	Effective Piston Area (cm ²)	Oil Capacity*** (cm ³)		Optional Flow Control Model No.****
						Retract	Extend	
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.								
41-5202-11	Right	2	6	14.5	0.63	N/A	0.92	47-0203-71
41-5202-12	Left							
41-5202-15	Straight	4.9	8	20	1.90	N/A	3.82	47-0203-71
41-5205-11	Right							
41-5205-12	Left	11.6	13	29.5	4.04	N/A	11.9	47-0203-74
41-5205-15	Straight							
41-5211-11	Right	11.6	13	29.5	4.04	N/A	11.9	47-0203-74
41-5211-12	Left							
41-5211-15	Straight							
Double Acting (D/A) Cylinders, actuated hydraulically both directions.								
41-5202-21	Right	2	6	14.5	0.63	2.3	0.92	47-0203-71
41-5202-22	Left							
41-5202-25	Straight	4.9	8	20	1.90	7.8	3.82	47-0203-71
41-5205-21	Right							
41-5205-22	Left	11.6	13	29.5	4.04	23	11.9	47-0203-74
41-5205-25	Straight							
41-5211-21	Right	11.6	13	29.5	4.04	23	11.9	47-0203-74
41-5211-22	Left							
41-5211-25	Straight							

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

* Cylinder capacities are listed at 350 bar (35 MPa) maximum operating pressure, with a standard length VektorFlo® arm installed. Minimum operating pressure is 52 bar (5.2 MPa) for single acting, 35 bar (3.5 MPa) 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 350 (35), 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 workpiece height variations, it is recommended that the vertical travel be set to about 50% of the vertical stroke.

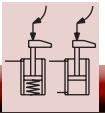
*** To ensure maximum service life and trouble-free operation, restrict fluid flow per table on page C-20.

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

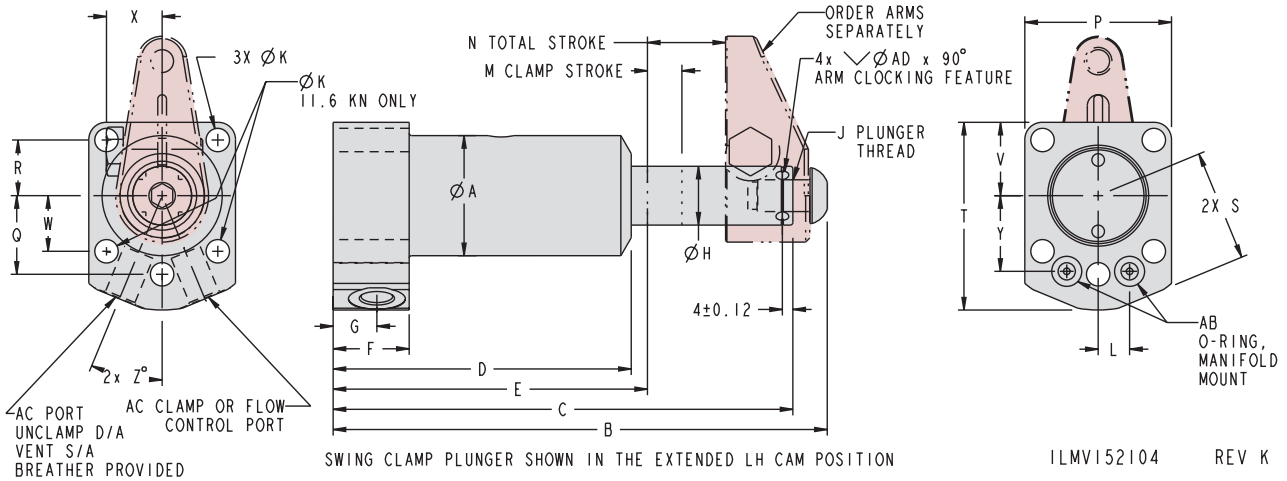
Optional in-port flow control is a meter-in device with reverse free flow check valve.



VersaCam™ Swing Clamps



Manifold/Bottom Flange Mount Dimensions



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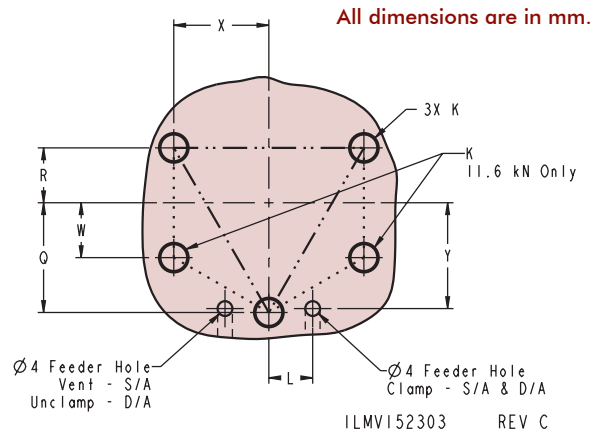
For proper sealing, the mating surface must be flat within 0.08 mm with a maximum surface roughness of 1.6 $\mu\text{m} R_a$

NOTE: Follow arm length limitations on page O-3

Dimensions

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.																		
41-5202-11									M6 x 1 x 7	6	10.5	5.5	14	45	20	10	31	47
41-5202-12	26.5	109.5	103	71	76	26.5	13.5	11.13										
41-5202-15																		
41-5205-11									M10 x 1.5 x 12	7	20.5	8	20	57	25	12.5	33.5	54
41-5205-12	38	145	135	92.5	97.5	25	15	15.88										
41-5205-15																		
41-5211-11									M12 x 1.75 x 13	9	11.9	13	29.5	55.5	29.7	21	42	71
41-5211-12	45.5	186.5	173	112.5	118.5	28.5	16.5	22.23										
41-5211-15																		
Double Acting (D/A) Cylinders, actuated hydraulically both directions.																		
41-5202-21									M6 x 1 x 7	6	10.5	5.5	14	45	20	10	31	47
41-5202-22	26.5	109.5	103	71	76	26.5	13.5	11.13										
41-5202-25																		
41-5205-21									M10 x 1.5 x 12	7	20.5	8	20	57	25	12.5	33.5	54
41-5205-22	38	145	135	92.5	97.5	25	15	15.88										
41-5205-25																		
41-5211-21									M12 x 1.75 x 13	9	11.9	13	29.5	55.5	29.7	21	42	71
41-5211-22	45.5	186.5	173	112.5	118.5	28.5	16.5	22.23										
41-5211-25																		

Model No.	V	W	X	Y	Z	AB (O-ring)	AC	AD
Single Acting (S/A) Cylinders, actuated hydraulically 1 direction, spring returned.								
41-5202-11								
41-5202-12	15.5	N/A	17.3	18.2	30		G 1/8	3.2
41-5202-15								
41-5205-11						∅7.65 x 1.78	G 1/8	4.8
41-5205-12	19	N/A	21.7	14.3	30			
41-5205-15								
41-5211-11							G 1/4	4.8
41-5211-12	27.5	21	21	28.6	22.5			
41-5211-15								
Double Acting (D/A) Cylinders, actuated hydraulically both directions.								
41-5202-21								
41-5202-22	15.5	N/A	17.3	18.2	30		G 1/8	3.2
41-5202-25								
41-5205-21						∅7.65 x 1.78	G 1/8	4.8
41-5205-22	19	N/A	21.7	14.3	30			
41-5205-25								
41-5211-21							G 1/4	4.8
41-5211-22	27.5	21	21	28.6	22.5			
41-5211-25								



Mounting Specifications

Model No.	K	L	Q	R	W	X	Y
41-5202-XX	M5	10.5	20	10	N/A	17.3	18.2
41-5205-XX	M6	20.5	25	12.5	N/A	21.7	14.3
41-5211-XX	M8	11.9	29.7	21	21	21	28.6