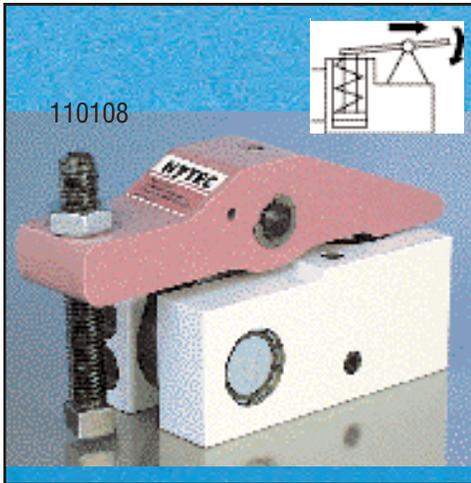


Retract Clamps



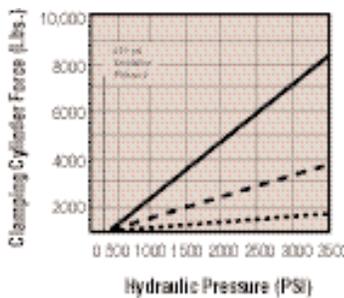
Single screw mounting and the adjustable clamping screw make these clamps easy to reposition on the fixture to adapt to various workpiece sizes, and make set up and adjustment faster than other methods. Plus, it enables you to work several piece sizes without changing the fixture each time. When mounted on a T-slot machine table, the need for fixtures is often eliminated.

Very similar in operation to the swing clamps, with the exception of having the clamping arm move out toward the workpiece in a straight line rather than rotating 90°, making them ideal for applications where the shape of the fixture or part does not allow room for the clamp to swing.

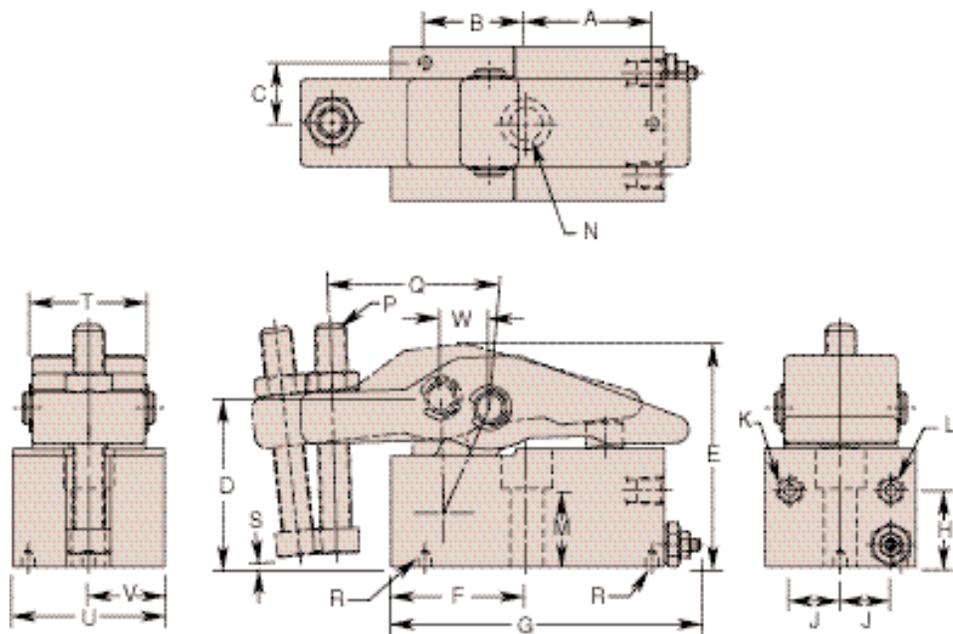
These clamps are available with maximum clamping forces of up to 8,295 lbs.: Minimum operating pressure is 500 psi, maximum is 3,500 psi.

Features:

- Single or double-acting (see page 35)
- Single screw mounting
- Internal sequence valve
- Adjustable clamping screw
- T-slot mountable
- SAE and NPT ported versions



Performance
 Clamp capacity 1610
 - - - - - Clamp capacity 3780
 ———— Clamp capacity 8295



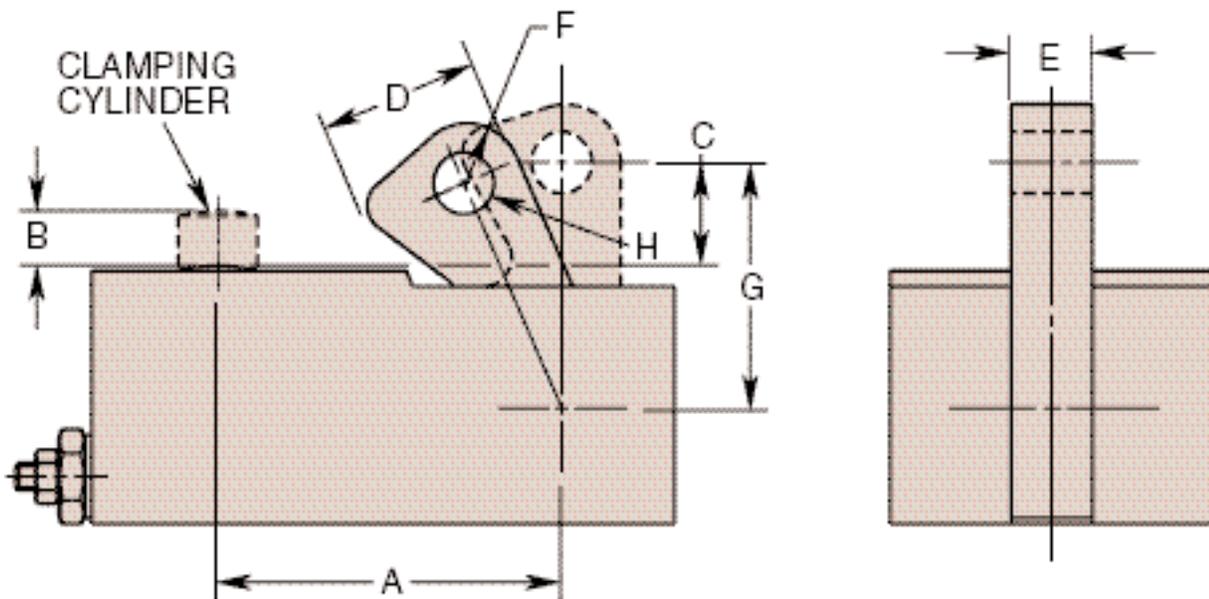
Cat. No.	Specifications							Dimensions (In Inches)									
	*Max. Clamping Force (Lbs.)	Oil Cap. (Cu. In.)		Min. Operating Pressure (PSI)	Max. Operating Pressure (PSI)	Clamping Stroke (In.)	Max. Flow Rate (Cu. In./Min.)	Max. Advance Speed (Secs.)	A	B	C	D	E	F	G	H	J
110107	1610	.230				.310			2.060	1.940	.938	2.843	3.852	2.456	5.563	1.250	.875
110108	3780	.670	.060	500	3,500	.487	15	.500	2.500	2.000	1.200	3.312	4.312	2.670	6.112	1.500	1.000
110109	8295	1.420				.446			3.062	2.438	1.378	3.875	5.157	3.033	7.052	1.937	1.218

Cat. No.	Dimensions (In Inches)													
	*K Retract Port	*L Advance Port	M	N Dia.	P Clamping Screw	Q	R		S Adjustment Range		T	U	V	W Reach
							Dia.	Depth	Min.	Max.				
110107	1/8-20 UNF SAE-4	1/8-20 UNF SAE-4	1.250	.531	1/2-13 UNC	2.250			.250	2.125	1.219	2.750	1.375	.625
110108	1/8-20 UNF SAE-4	1/8-20 UNF SAE-4	1.500	.656	5/8-11 UNC	3.125	.257	.250	.062		1.719	3.000	1.500	.986
110109	1/8-20 UNF SAE-4	1/8-20 UNF SAE-4	1.750	.781	3/4-9 UNC	3.250			.438		2.219	3.500	1.750	1.100

NOTE: * At 3,500 psi max. operating pressure.

- Standard arm may be customized for use in specific applications.
- Standard clamping arm is 1045 steel heat treated to 38 Rc max.
- Modified/custom-designed clamping arms must be spring biased or counterweighted so that the arm pivots away from the workpiece.

NOTE: Modified arms may not have the same workpiece clamping force as standard clamps. Clamping force may be calculated by using the dimensions and cylinder force data below. Any clamp using a modified or custom arm that is heavier than the standard arm, must have its flow restricted to prevent internal damage.



Cat. No.	Specifications *Clamping Cyl. Effective Area (Sq. In.)	Dimensions (In Inches)							
		A	B	C	D Max.	E Max.	F Max. Radius	G	H Dia.
110107	.440	2.794	.375	.798	1.425	.489	.525	1.906	.439
110108	1.230	3.250	.500	.930	1.612	.736	.587	2.250	.564
110109	2.400	3.750	.545	1.055	1.893	.869	.775	2.625	.627

NOTE: * Sequence Pressure 450 psi must be subtracted from System Operating Pressure when calculating Clamping Cylinder Force. [System Operating Pressure (PSI)-450 psi] X Effective Area (Sq. In.) = Clamping Cylinder Force (Lbs.).