

HYDRAULIC CYLINDER STYLE NUT CLAMPS



Use Nut Clamps with dies having slotted die plates or U-Slot brackets.

WHEN TO USE NUT CLAMPS:

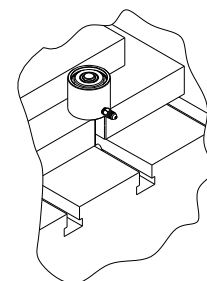
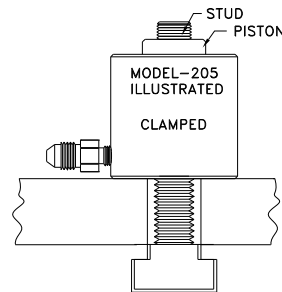
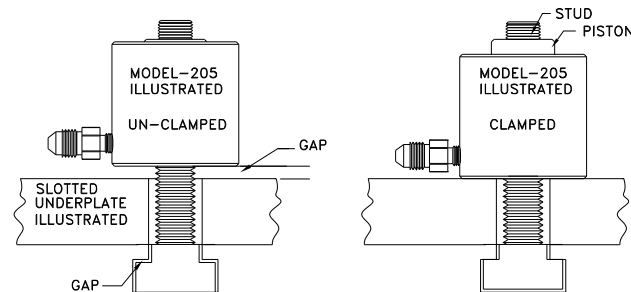
Use Nut Clamps with dies having slotted die plates and enough clearance for the Nut Clamp body (see chart). U-Slot brackets or ears may also be added to dies in some applications.

If systems are setup to have hydraulics removed during stamping, Hydra Mechanical (L style) clamps (with a mechanical lock) should be selected. If a dedicated hydraulic system is considered, the Fully Hydraulic clamps (with either multiple upper zone control or check valves) may be the preferred choice.

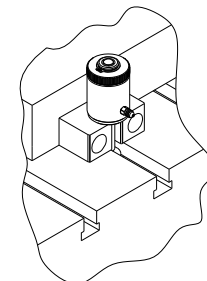
Clamp model and quantity should be selected to provide a total clamping force greater than the total (static and dynamic) force applied to the system during use.

HOW THEY WORK:

Nut Clamps are moved into position in a slot in the die plate (gaps between clamp and die/slot allow movement). When hydraulic pressure is applied, the clamp pulls upward on the T-bolt and the clamp body moves downward to clamp the plate. Hydraulic pressure is maintained during operation, or the Locking Nut (L style) is engaged to allow removal of clamp hydraulic pressure during stamping. To unclamp, hydraulic pressure is removed and clamps open under internal spring force. (Note: Reapplication of hydraulics is required to unlock the Locking Clamps (L) prior to releasing pressure and unclamping). For information on PFA's Hydraulic Control Units, see page 15.

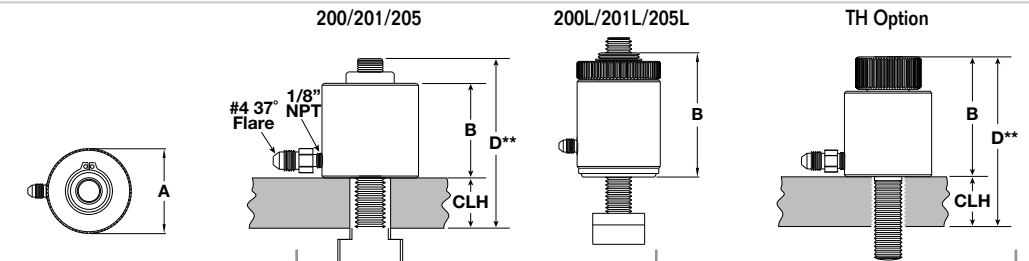


Series 200:
Full Hydraulic with
slotted clamp plate.



Series 200L:
Hydra Mechanical (L) with
added U-Slot bracket.

STANDARD PFA CONFIGURATIONS



Bolster/Ram Interface	Model 200/200L		Model 201/201L		Model 205/205L						
	T-Slot 3/4" or 1"	Threaded Hole (TH)	T-Slot 1" only	T-Slot 5/8", 3/4" or 1"	Threaded Hole (TH)						
Clamping Force at 5,000 PSI	10,000 lbs.		15,000 lbs.		8,000 lbs.						
Clamping Stroke	.29"		.60"		.25"						
Standard Thread Size	3/4" - 10	Hole Size*** 5/8" - 11x1.85 minimum	1" - 8	5/8" - 11	Hole Size*** 1/2" - 13x1.85 minimum						
A	2.50"		3.12"		2.00"						
B	Full Hydraulic (without lock)	2.20"	3.00"	3.50"	2.00"	2.65"					
	Hydra Mechanical (L) (with lock)	3.20"	4.00"	4.90"	3.00"	3.65"					
D**	CLH*	NO LOCK	LOCK (L)	NO LOCK	LOCK (L)	NO LOCK	LOCK (L)	NO LOCK	LOCK (L)	NO LOCK	LOCK (L)
	.50"	3.50"	4.00"	3.50"	4.50"	4.00"	6.00"	3.25"	3.75"	3.15"	4.15"
	.75"	3.50"	4.25"	3.75"	4.75"	4.25"	6.25"	3.25"	4.00"	3.40"	4.40"
	1.00"	4.00"	4.50"	4.00"	5.00"	4.50"	6.50"	3.75"	4.25"	3.65"	4.65"
	1.25"	4.00"	4.75"	4.25"	5.25"	4.75"	6.75"	3.75"	4.50"	3.90"	4.90"
	1.50"	4.50"	5.00"	4.50"	5.50"	5.00"	7.00"	4.25"	4.75"	4.15"	5.15"
	1.75"	4.50"	5.25"	4.75"	5.75"	5.25"	7.25"	4.25"	5.00"	4.40"	5.40"
	2.00"	5.00"	5.50"	5.00"	6.00"	5.45"	7.50"	4.75"	5.25"	4.65"	5.65"
2.50"	5.50"	6.00"	5.50"	6.50"	5.95"	8.00"	5.25"	5.75"	5.15"	6.15"	
**	**	**	**	**	**	**	**	**	**	**	**
Weight	3.0 lbs.		5.0 lbs.		8.5 lbs.		2.0 lbs.		3.0 lbs.		

Example: 13,000 lb. die typically uses a 15,000 lb. clamp such as Model 201. Clamp plate thickness (CLH) is 1.0". 1" T-Slot.

Clamp Style	Model Number	Clamp Height*	Slot Type
NC	See chart above	Clamp Plate Thickness (CLH)	5/8" slot = 5/8 3/4" slot = 3/4 1" slot = 1 Threaded Hole = TH***
NC	201	1.0	1

Part No: **NC-200-1.0-3/4**

*Clamp Height (CLH) based on standard JIC T-Slot dimensions. T-Slot dimensions are typically: (Neck height is .750" for 5/8" slot, .875" for 3/4" slot, 1.000" for 1" slot).
 **D=Product height installed is related to clamp height needed for clamp plate thickness. Stock sizes listed, but others are easily available. Dimension is worst case based on the smallest slot neck height and includes 1/4" clearance for slot variation.
 ***For TH models, threaded rod will engage bolster 1.3" minimum and range from 1.35" to 1.75" typical. If application is unique, call PFA for assistance.