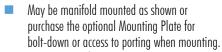
Special Use Clamps

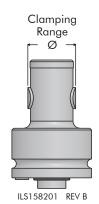
Centering Clamp, Small Bore - 2 Point Contact

Double Acting

- Often used when trying to locate using 2 bores on the same part. Use the 3 point Centering Clamp for the first bore, the 2 point unit for the second bore. This allows for minimal part variance of the second bore in a third "clocking" axis, while centralizing both. Functioning similar to using round and diamond locators.
- Bore clamp with 2 point used for concentric positioning of a bore.
- Capable of moving a part approximately 0.100" after the part is placed over the center mandrel.
- The clamping points retract for easy loading, then expand hydraulically to center the bore.
- Positional repeatability of $\pm .001$ ".
- Compact design keeps the cylinder out of the way and below the part.

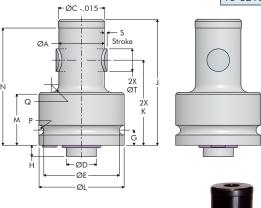


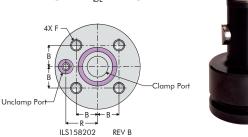
- Fits bore sizes from 1" to 2.17".
- Can be used to center a slot, keyway or other non-round feature. Requires the use of fixed stops and or additional clamps to resist movement.

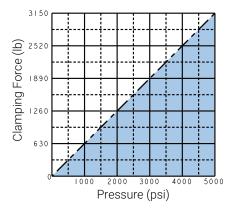


Model No.	Clamp Force at 5000 psi (lbs.)	Clamping Points	Clamping Report Range Ø (in.)		Oil Co (cu. Extend	Weight (lbs.)							
Double Acting (D/A) Cylinders actuated hydraulically both directions.													
15-8210-00	3150	2	.98 - 1.14	.001	.10	.08	.97						
15-8211-00			1.10 - 1.26				.99						
15-8212-00			1.26 - 1.42				1.01						
15-8213-00			1.42 - 1.57				1.27						
15-8214-00			1.54 - 1.69		.10	.06	1.30						
15-8215-00			1.65 - 1.81				1.33						
15-8216-00			1.77 - 1.93				1.37						
15-8217-00			1.89 - 2.05				1.40						
15-8218-00			2.01 - 2.17				1.44						









*Clamp force is the specified force divided by the number of clamping points ½ force per point.

Model No.	Α	В	С	D	E	F	G	Н	J	K	L	М	Ν	Р	Q	R	S	Т
15-8210-00			.965			5 M6-1.0 x .47	.315	.236	2.62	1.77	1.772	1.06	2.46	.10) .16	.661	.12	.47
15-8211-00	.95		1.083															
15-8212-00			1.240															
15-8213-00			1.398	.6297 .6293 1.575	1.575				2.56									
15-8214-00		.445	1.516															
15-8215-00	1.38	8	1.634															
15-8216-00			1.752										2.24					
15-8217-00			1.870															
15-8218-00			1.988															