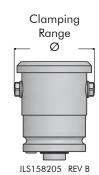
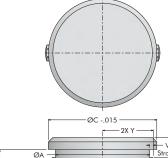
Double Acting

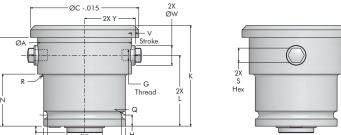
- Often used when trying to locate using 2 bores on the same part. Use the 3 point Centering Clamp for the first bore, the 2 point unit for the second bore often in an engine block. This allows for minimal part variance of the second bore in a third "clocking" axis, while centralizing both. Functioning similar to using round and diamond locators.
- Bore clamp with 2 points used for concentric positioning of a bore, internal clamping expands radially to center the 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.
- Repeatability of $\pm .001$ ".

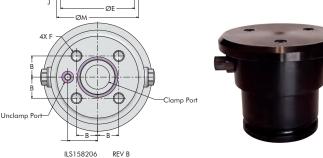
- May be manifold mounted as shown or purchase the optional Mounting Plate for bolt-down or access to porting when mounting.
- Fits bore sizes from 2.13" to 5.12".
- Can be used to center a slot, cavity, or other non-round feature, but normally the 2nd bore in 1 part. Requires the use of fixed stops and or additional clamps to resist direct rotational torque.

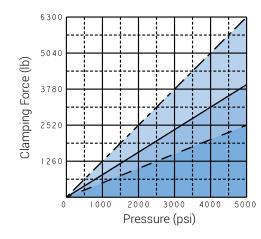


Model	Clamp Force at 5000 psi	Clamping	Clamping Range Ø	Repeatability ±	Oil Co (cu.	Weight							
No.	(lbs.)	Points	(in.)	(in.)	Extend	Retract	(lbs.)						
Double Acting (D/A) Cylinders actuated hydraulically both directions.													
15-8219-00	2520		2.13 - 2.44	.001	.12	.08							
15-8221-00		2	2.40 - 2.72				3.87						
15-8224-00			2.68 - 2.99										
15-8226-00			2.99 - 3.31				3.67						
15-8229-00	3930		3.27 - 3.58		.21								
15-8231-00			3.54 - 3.86										
15-8234-00	6300		3.86- 4.29		.47	.23	7.57						
15-8237-00			4.29 -4.72				7.93						
15-8241-00			4.68 - 5.12				8.29						









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

Model No.	Α	В	С	D	Е	F	G	Н	J	K	L	М	Z	Р	Q	R	S	Т	٧	W	Υ
15-8219-00 15-8221-00 15-8224-00	1.77	.445	2.122 2.398 2.673	.6297 .6293	1.575	M6-1.0 x .47		.315		2.56	1.77	1.77	N/A	2.24	.10	N/A	.39	.661	.16	.47	.90
15-8226-00	2.56		2.988	.9840 .9835	2.126	M8-1.25 x .63	M6	.354	.236	3.03	2.21	2.36	1.61	2.68	.12	.02	.43	.866	.20	.55	1.28
15-8234-00 15-8237-00 15-8241-00	3.35	.752	3.854 4.287 4.681	1.2595 1.2589	2.638	M10-1.5 x .79	M8	.394		3.58	2.52	2.91	1.85	3.15	.14	.1	.51	1.063	.27	.71	1.67

E-5