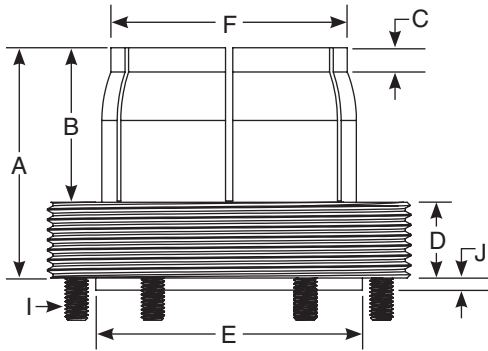


Concentric OD Clamp Instructions

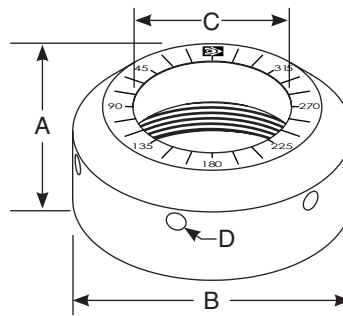
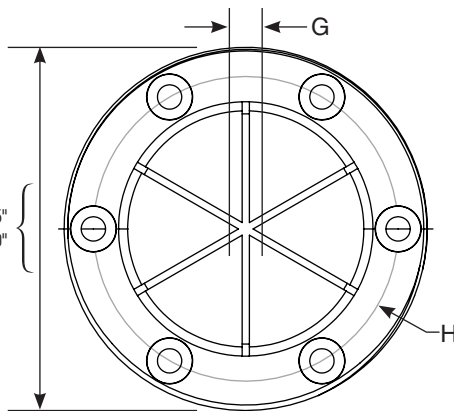


Torque = 0° Rotation = Force

Torque ft/Lbs	Model #1 (PN 37100) Degree of Rotation*	Force lbf	Model #2 (PN 37200) Degree of Rotation*	Force lbf
10	43°	650	20°	400
20	66°	1,300	31°	800
30	88°	1,950	37°	1,200
40	111°	2,600	44°	1,600
50	133°	3,250	49°	2,000
60	165°	3,900	53°	2,400
70	-	-	56°	2,800
80	-	-	60°	3,200
90	-	-	65°	3,600
100	-	-	67°	4,000

*Beginning with clamp touching part. Every 15° of rotation compresses large clamp .002" (small clamp .001") without workpiece installed.

Model #1 - 1.5"
 Model #2 - 3.0"



Cap

Model #	A	B	C	D
#1	1.000	2.000	.790	.250
#2	1.425	3.500	1.990	.250

1. Mount the clamp

- Mill a pocket in the fixture "E" by "J" for precise location of the clamp.
- Drill and tap 6 holes according to "H".
- Mount the clamp with the supplied bolts. Torque bolts to 2ft-lbs (2.7 Nm) for 37100 and 5.5ft-lbs (7.5 Nm) for 37200.
- A recessed dowel pin may be installed into the flange for added rigidity if required.

2. Machining clamp (Unique feature is ability to machine completely through clamp and fixture if necessary for those tricky applications)

- Preload the clamp by tightening the cap 15-45° from first contact with body.
- Machine clamp to nominal size of your workpiece.
- Use standard machining practices for mild steel with conservative feed rate.
- Aggressive material removal is not recommended.

3. Secure your part

- After machining loosen the cap and insert your part. If the part fit is too snug consider machining again with slightly more preload.
- Tighten the clamp with an appropriately sized spanner wrench. A Pin type spanner wrench is preferred with a 1/4" (6mm) pin diameter.
- If a torque wrench cannot be used, tighten using the corresponding degrees as found in the chart above. 0° is when your part first resist movement. Use one hand to rotate or lift your part and the other to tighten the nut. Stop tightening and make this as your 0 position when resistance is felt.
- For normal operation, insert part, tighten clamp an appropriate amount of degrees or torque and machine your part.

Part No.	Model No.	A	B	C	D	E ^{+0.000} _{-.002}	F	G†	H	I*	J	Max. Holding Diameter
37100	#1	1.400	.900	.183	.500	.940	.750	.100	6-32 (M3) on 1.140" (28.95mm) BHC	.275" (7mm) Deep	.100	.625
37200	#2	1.900	1.275	.200	.625	2.200	1.95	.200	10-32 (M5) on 2.515" (63.88mm) BHC	.475" (12mm) Deep	.100	1.800

NOTE: (12) Mounting Screws included (inch and metric) † - Minimum holding diameter I* - Minimum tap depth