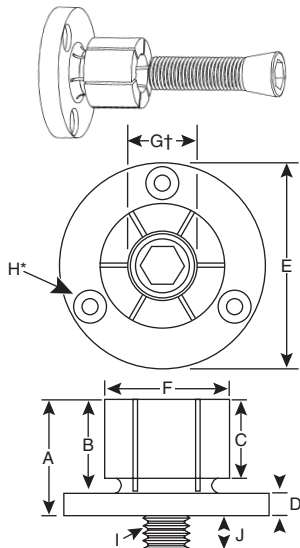


ID Xpansion™ Clamp Instructions



G† - Minimum diameter the "F" dimension can be machined or turned down to.

H* - (3) Mounting Screws included - (4) for model numbers #9 and #10.

****Model #10 Made from 7075-T6 aluminum.**

Model #00 - #6

- ▶ Expand clamp approximately .003" over relaxed diameter and machine to fit workpiece bore, either on lathe or mill.
- ▶ If machining the clamp on a lathe use the nut provided, on the back of the clamp, to tighten the tapered screw. This nut is used only while machining the clamp.
- ▶ Machine a pocket in the fixture. For close tolerance "E" dimension and drill and tap mounting holes per "H" column. Drill and tap a hole from the "I" column in the center of the pocket for the tapered screw.
- ▶ A recessed dowel pin may be installed into the flange for additional rigidity if required.
- ▶ Long length screws available for sizes #00 thru #10. *For blind hole app's, see our Manual Actuators or call for custom screws/other options.*
- ▶ Range of expansion .005 to .025 depending upon size. *See MiteeBite.com for individual clamp expansion range.*

Model #7 - #10

- ▶ Locking rings are provided to ensure segments remain rigid while machining clamps to size (#9 and #10 ID's ship with 2 rings).
- ▶ Insert supplied ring(s) and tighten drive screw to 40 Ft/Lbs and machine clamp diameter to +.003/-.005" over bore size. Remove ring(s) and test fitment with workpiece. If workpiece fitment is tight, repeat machining process and machine to achieve a close fit to workpiece MMC bore size.
- ▶ Aggressive material removal is not recommended when machining clamps to size. Suggested machining practice is to spiral down with a .500" end mill with conventional milling 0.020" off the desired clamp diameter at 400 SFPM and .001" per flute and .02 depth per trip around.
- ▶ Finish final diameter at 700 SFPM using same .001" per flute feed and .250" depth and climb mill.

Part No.	Model No.	+.000										Max. Torque (Ft/Lbs)	Holding Force (Lbs)	Repl. Tapered Screw
		A	B	C	D	E	F	G†	H*	I	J			
31000	#00	.42	.30	.24	.12	.787	.29	.16	2-56 on .540 BHC	2-56 x 1/4	.16	0.5	250	31001
31050	#0	.86	.63	.59	.23	1.170	.49	.28	6-32 on .825 BHC	8-32 x 1	.30	3.6	950	31002
31100	#1	.98	.75	.59	.23	1.240	.56	.48	6-32 on .910 BHC	1/4-20 x 1 1/4	.50	13.3	1,900	31010
31150	#2	.98	.75	.59	.23	1.476	.79	.53	6-32 on 1.140 BHC	5/16-18 x 1 1/4	.56	27.6	2,500	31020
31200	#3	1.13	.88	.69	.25	1.968	1.06	.71	8-32 on 1.550 BHC	3/8-16 x 1 1/2	.71	49.3	4,500	31032
31250	#4	1.25	1.00	.81	.25	2.205	1.39	.90	8-32 on 1.790 BHC	1/2-13 x 1 1/2	.71	120.0	5,900	31042
31300	#5	1.56	1.25	1.06	.31	2.736	1.65	1.15	10-32 on 2.200 BHC	5/8-11 x 1 3/4	.79	224.0	10,000	31052
31350	#6	1.56	1.25	1.06	.31	2.972	2.03	1.15	10-32 on 2.515 BHC	5/8-11 x 1 3/4	.79	224.0	10,000	31052
31400	#7	1.79	1.48	1.27	.31	4.232	3.06	1.15	1/4-20 on 3.646 BHC	5/8-11 x 2	.79	224.0	10,000	31072
31450	#8	1.79	1.48	1.27	.31	5.232	4.06	1.15	1/4-20 on 4.648 BHC	5/8-11 x 2	.79	224.0	10,000	31072
31500	#9	1.79	1.48	1.27	.31	5.232	6.89	1.15	1/4-20 on 4.648 BHC	5/8-11 x 2	.79	224.0	10,000	31072
31550	#10**	1.79	1.48	1.27	.31	6.000	9.85	1.15	1/4-20 on 5.250 BHC	5/8-11 x 2	.79	125.0	6,000	31072