



Atlas Workholding Cylinder Integrated Diaphragm Chuck

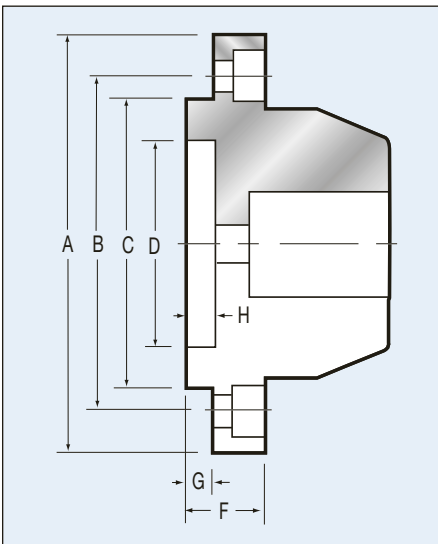
It becomes very easy to set up your precise chucking system by using the Atlas ATL100 series Cylinder-integrated Diaphragm Chuck. ATL100's built-in air cylinder eliminates the needs for installing an additional air cylinder in the back of the spindle, or tailor-making any air tubes. ATL100's front-mounting design, assembling a super precision chucking system has never been easier.

Atlas Precision advanced air cylinder technology that minimizes air leakage by the unique air containing design and by largely decreasing the clearance between the rotary and the stationary parts of the cylinder down to 0.005mm (0.0002"). This technology allows building an open center air cylinder into the diaphragm chuck.

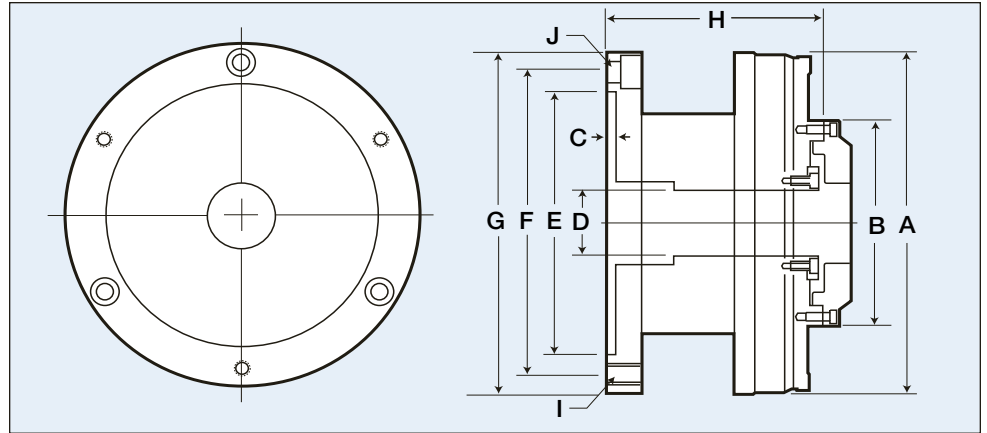
ATL100 uses our patented diaphragm chucking technology. The super precision chucking repeatability is within 0.002mm (0.00008"), plus its gentle clamping force, making this chuck a perfect solution for any accuracy-critical and fragile material machining tasks. Send us your sample and or drawing and we will machine 1 set at no additional charge or buy Soft Blank Jaws and machine in your facility.

- ⊗ A Chucking Repeatability is within 0.002mm (0.00008")
- ⊗ Air Cylinder is integrated into the chuck body: no cylinder or draw tube is needed
- ⊗ Real front-mounted design allows easy installation and operation
- ⊗ Complete through-hole is reserved for bar machining, no limitation caused by a draw tube or an air feeder
- ⊗ Highly-sealed chuck body helps protect cutting chips, dust or coolant fluid from entering
- ⊗ Gentle and precise clamping: suitable for fragile or thin parts machining.
- ⊗ No sliding parts to wear out ensures a longer product life.
- ⊗ Low maintenance is required.
- ⊗ Oil-mist air lubricated, the chuck generates very low heat under long period operation.
- ⊗ Clamping force is proportional to input air pressure, easy adjustment

Blank Jaws for ATL100 Series Air Diaphragm Chucks



Dimensional Data



	Model No.	ATL104	ATL105	ATL106	ATL108
A		mm/in 100/3.94	136.5/5.37	166/6.54	207/8.15
B		mm/in 60/2.36	70/2.76	100/3.94	146/5.75
C		mm/in 4/0.16	4/0.16	5/0.20	4/0.16
D		mm/in 10/0.39	14.5/0.57	28/1.10	60/2.36
E		mm/in 70/2.76	100/3.94	130/5.12	160/6.30
F		mm/in 82/3.23	115/4.53	147/5.79	172/6.77
G		mm/in 97/3.82	136.5/5.37	167/6.57	197/7.76
H		mm/in 73/2.87	88.8/3.50	101.5/4.0	120/4.72
I		mm/in N/A	M8 x 3	M10 x 3	M10 x 3
J		mm/in 7.0x4/.28x4	9.0x3/.35x3	11.5x3/.45x3	11.5x3+M10xP15x3
	Maximum speed	rpm 5500	4750	3350	2500
	Air pressure	kg-cm2/psi 0.5-7/7-100	0.5-7/7-100	0.5-7/7-100	0.5-7/7-100
	*Stroke per jaw	mm/in 0.20/0.008	0.25/0.010	0.20/0.008	0.25/0.010
	Chuck capacity (through hole)	mm/in 10/.039	14.5/0.57	28/1.10	60/2.36
	Chuck capacity (none-through hole)	mm/in 45/1.77	50/1.97	80/3.15	124/4.88
	Weight	kg/lbs 2.8/6.16	6/13.2	9.5/20.9	18/39.7

Suitable Diaphragm Chucks	Soft Jaws	A	B	C	D	F	G	H	Segments
ALT104	JD-60	65mm 2.56"	52mm 2.05"	45mm 1.77"	32mm 1.26"	12mm 0.47"	4.0mm 0.16"	4.5mm 0.18"	6
ALT105	JD-70	75mm 2.95"	60mm 2.36"	50mm 1.97"	37mm 1.46"	14mm 0.55"	5.0mm 0.20"	5.0mm 0.20"	6
ALT105	JD-70	105mm 4.13"	90mm 3.54"	80.2mm 3.16"	65mm 2.56"	14mm 0.55"	5.5mm 0.22"	5.0mm 0.20"	6
ALT105	JD-70	147mm 5.79"	132mm 5.20"	120mm 4.72"	100mm 3.94"	18mm 0.17"	6mm 0.24"	6.5mm 0.26"	6