



MAB 32 S [Stroke] N [Rod End]

Available Strokes (mm): 10, 25, 40, 50, 80, 100, 160, 200, 250, 300

Rod End Options: (X) Ball Joint, (V) Plain Thread

Use external stops. Do not bottom out the piston under pressure as it can damage the unit!

Dimensional

Bore Diameter: 32.5 mm

Piston Area: 830 mm²

Supply: Clean, Dry, Unlubricated Air

Pressure Range (Vertical): 0.03 to 0.7 MPa

Pressure Range (Horizontal): 0.15 to 0.7 MPa

The air bearing piston requires the minimum pressures noted above to work properly. Operating below minimum pressures can damage the cylinder!

Filtration: Coalescing filter required with particle filtration of one micron or less

A Particle filter upstream of the coalescing filter is recommended

Mounting Option S: Has two ports, so one can be used to measure the pressure inside the cylinder.

Mounting

Rod End Option X: Misalignment handling is built into the rod design, so no separate misalignment coupling is needed. Rigidly mount the cylinder and then simply attach the rod end to a linearly guided load. Ensure that the rod does not rub against the inside of the rod clearance hole throughout the entire stroke.

Rod End Option V: A customer-supplied ball joint is required to prevent excess friction or binding due to misalignments. Rigidly mount the cylinder and then attach the rod end to a low friction ball joint of your choice, then connect to a linearly guided load. Ensure that the rod does not rub against the inside of the rod clearance hole throughout the entire stroke.

Cylinder Nut Torque: 7 to 11 Nm

Rod Nut Torque

Rod End Option X: 0.56 to 1.7 Nm

Output: Single acting (push only)

Push Force (Vertical) (N) = Supply pressure (MPa) x 830

24.9 N minimum at 0.03 MPa

581 N maximum at 0.7 MPa

Push Force (Horizontal) (N) = Supply pressure (MPa) x 830

124.5 N minimum at 0.15 MPa

581 N maximum at 0.7 MPa

Piston Friction: Zero

Leak

Piston Leak: < 14 standard L/min at 0.2 MPa

10 standard L/min at 0.2 MPa TYPICAL

Environment

Temperature Range: -20 °C to +40 °C

Cycle Life

When the air cleanliness requirements are met and the units are used per specifications, the piston should not wear significantly throughout the life of the machine.

Mass

Total Mass (g) = 602.3 + (3.49 x stroke)

Moving Mass (g) = 164.4 + (0.39 x stroke)

NOTE 1 - SIDE MOUNTING HOLES

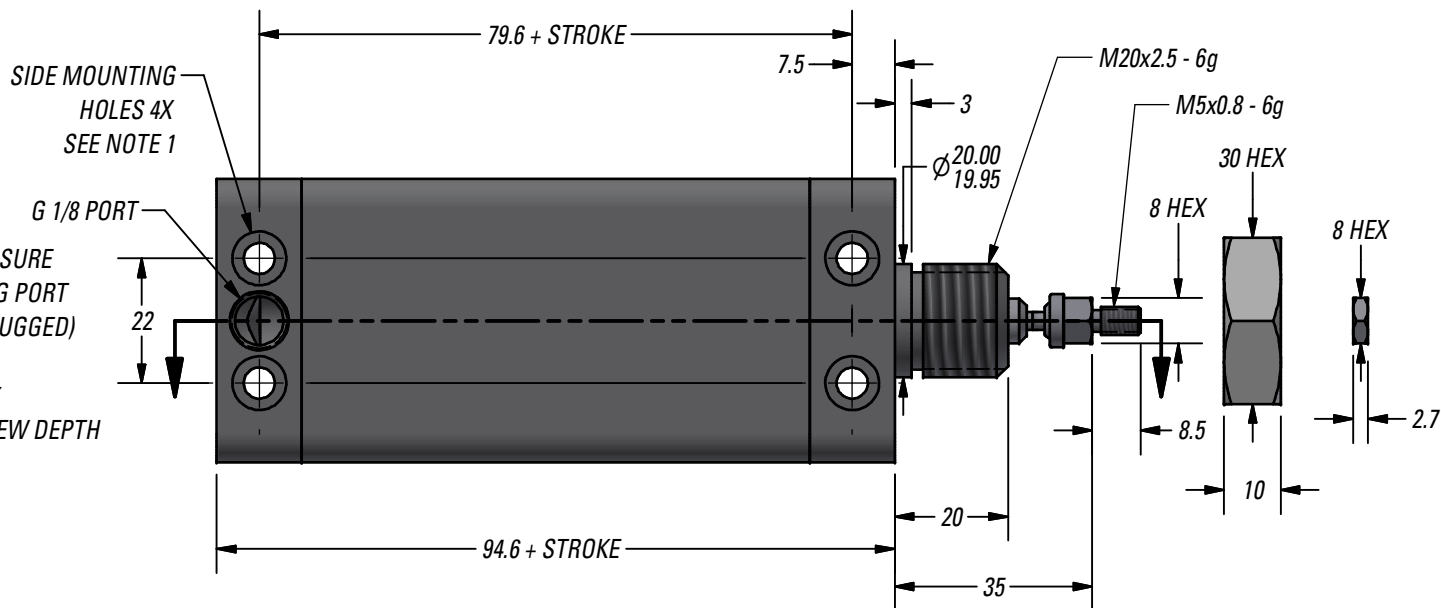
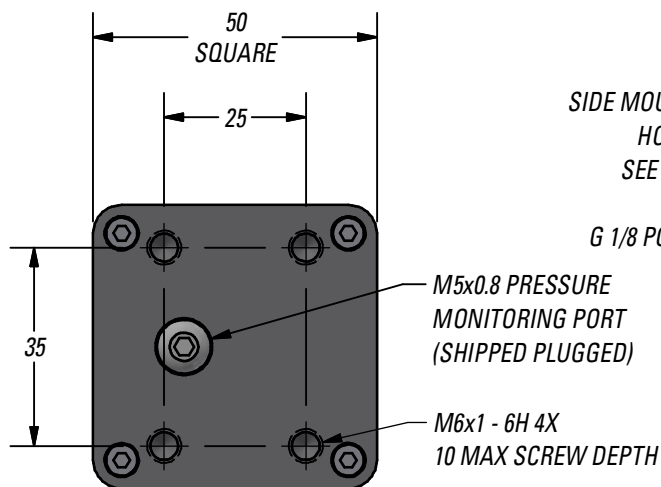
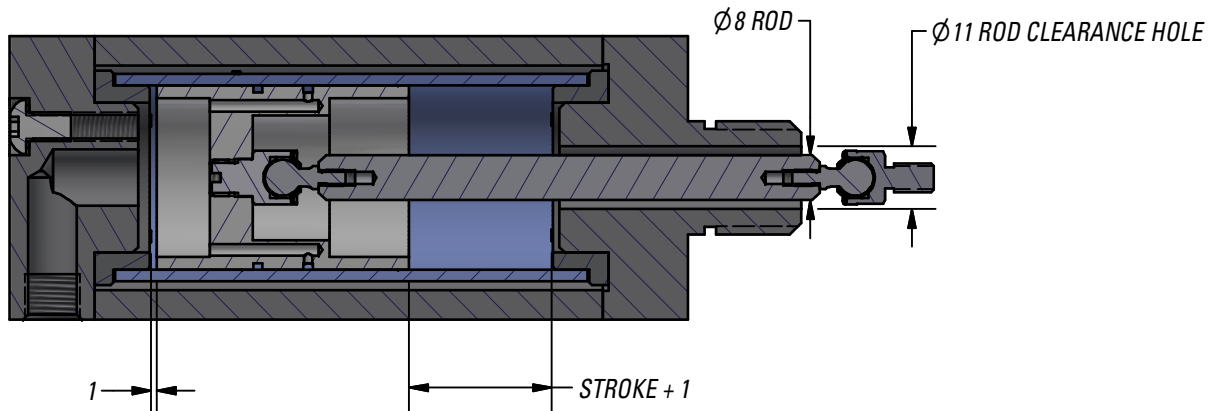
C'BORED ON TOP AND TAPPED ON BOTTOM
CAN BE USED IN 1 OF 2 WAYS

OPTION 1

BOLT THROUGH WITH M5 SHCS

OPTION 2

SCREW INTO M8x1.25 TAPPED HOLES
8 mm MAX SCREW DEPTH



STROKE	PART NUMBER
10.0	MAB 32 S 10.0 NX
25.0	MAB 32 S 25.0 NX
40.0	MAB 32 S 40.0 NX
50.0	MAB 32 S 50.0 NX
80.0	MAB 32 S 80.0 NX
100.0	MAB 32 S 100.0 NX
160.0	MAB 32 S 160.0 NX
200.0	MAB 32 S 200.0 NX
250.0	MAB 32 S 250.0 NX
300.0	MAB 32 S 300.0 NX

Airpot® 35 LOIS ST NORWALK CT 06851 US		203-846-2021 www.airpot.com
PART MAB 32 S - NX		REV 1114AF
AIRPEL-AB, MODEL 32	UNITS IN mm	 3RD ANGLE PROJECTION