

MP 5 S [Stroke] [Mounting] F

Available Strokes (mm): 10, 25, 40, 50, 80

Mounting Options: (N) Nose Mount, (S) Front & Rear Stud Mount

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



Dimensional

Bore Diameter: 5.6 mm

Piston Area: 24.5 mm²

Supply: Clean, Dry, Unlubricated Air

Pressure Range: 0.0015 to 0.7 MPa

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

A Particle filter upstream of the coalescing filter is recommended

Mounting

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.

Cylinder Nut Torque: 2.3 to 3.4 Nm

Rod Nut Torque: 0.34 to 0.68 Nm

Note: Apply tightening/support wrench to the end being mounted only.

Output: Single acting (push only)

Push Force (N) = Supply pressure (MPa) x 24.5

0.04 N minimum at 0.0015 MPa

17.1 N maximum at 0.7 MPa

Piston Friction: <0.5% of Output Force with
supply pressure above 0.2 MPa

Leak:

Piston Leak: <1.6 standard L/min at 0.34 MPa

Environment

Temperature Range: -20 °C to +85 °C

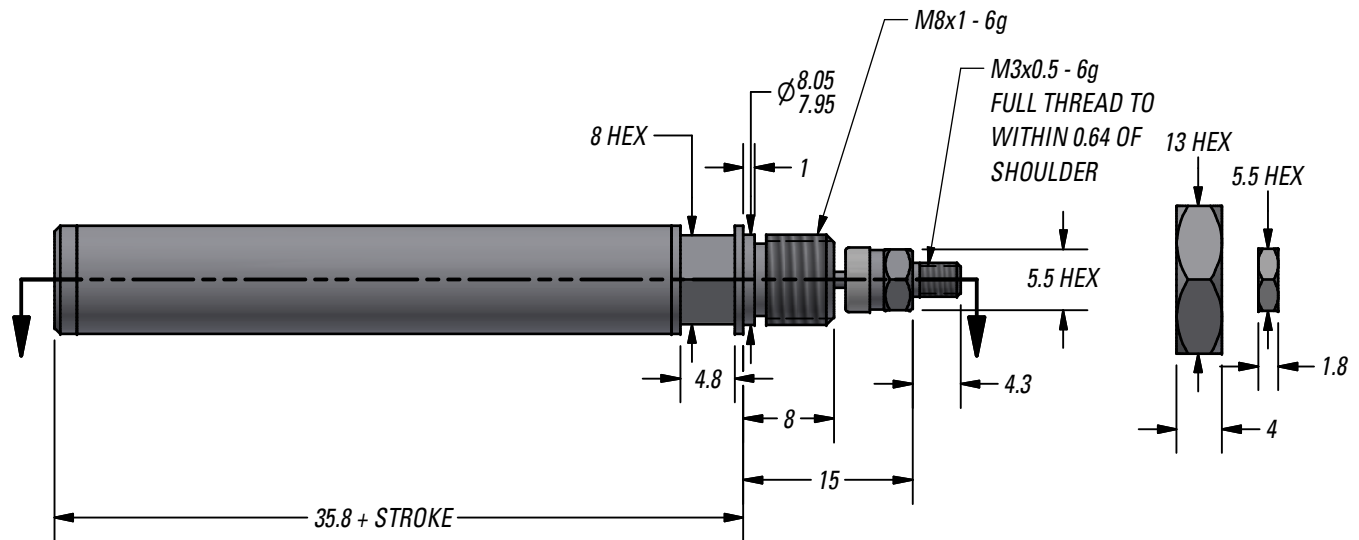
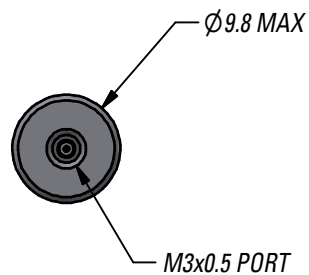
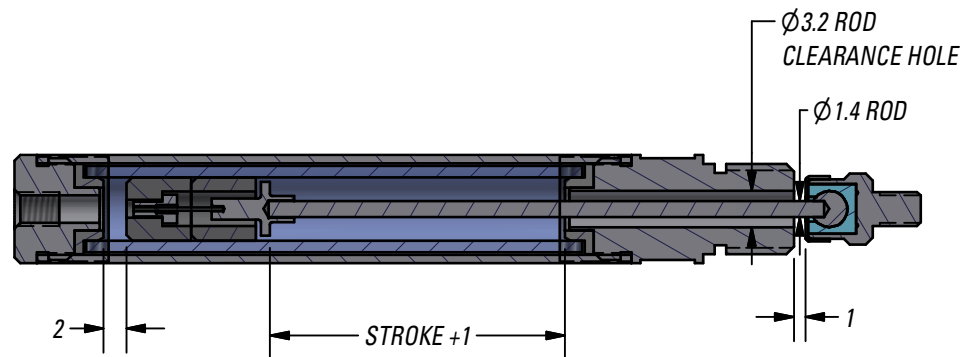
Cycle Life

The very long cycle life of this product depends on how the cylinder is used as well as the requirements of your application. Leak will increase as the piston slowly wears with a high number of cycles. Typically, cylinders will last from 10 to 40 million cycles before they are replaced.

Mass

Total Mass (g) = 17 + (0.22 x stroke)

Moving Mass (g) = 2.8 + (0.012 x stroke)



STROKE	PART NUMBER
10.0	MP 5 S 10.0 NF
25.0	MP 5 S 25.0 NF
40.0	MP 5 S 40.0 NF
50.0	MP 5 S 50.0 NF
80.0	MP 5 S 80.0 NF

Airpot® 35 LOIS ST NORWALK CT 06851 US		203-846-2021 www.airpot.com
PART MP 5 S - NF		REV 0314AE
AIRPEL PLUS, MODEL 5	UNITS IN mm	 3RD ANGLE PROJECTION