

Model: 2K S 444 P (stock) & 2K 444 P (custom)

Stock Strokes (in): 0.5, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0

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



Dimensional

Bore Diameter: 1.750 in

Piston Area: 2.405 in²

Supply: Clean, Dry Air

Pressure Range: Full Vacuum to 100 psi
(0.2 psi differential required for actuation)

Filtration: 5-micron particle filter (coalescing filter recommended)

Environment

Temperature Range: -55 °C to +70 °C (standard configuration)
-55 °C to +150 °C (high temp configuration)

Mounting

TX rod configuration: Misalignment handling is built into the rod design, so no separate misalignment coupling is needed. Fix the cylinder in place and then attach the rod to a pivoting or linearly guided load. Ensure that the rod does not rub against the inside of the rod clearance hole throughout the entire stroke.

TV/TW rod configurations: Misalignment handling is not fully built into the rod design, so a separate ball joint needs to be attached to the end of the rod. Do not use a misalignment coupling. Fix the cylinder in place and then attach the rod to a pivoting or 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: 40 to 60 in-lb_f

Rod Nut Torque (TX config): 5 to 15 in-lb_f

Output

Push only with compressed air

Push Force (lb_f) = Supply pressure (psi) x 2.405
240.5 lb_f maximum at 100 psi

Pull only with vacuum

Pull Force (lb_f) = Vacuum supply (psi) x 2.405
35.4 lb_f maximum at 14.7 psi (full vacuum)

Piston Friction: approximately 0.5% to 1.5% of output force

Piston Friction Coefficient: approximately 0.2
(static & dynamic)

Leak

Piston Leak <3.6 standard Liters /minute at 50 psi
<15.0 standard Liters /minute at 100 psi

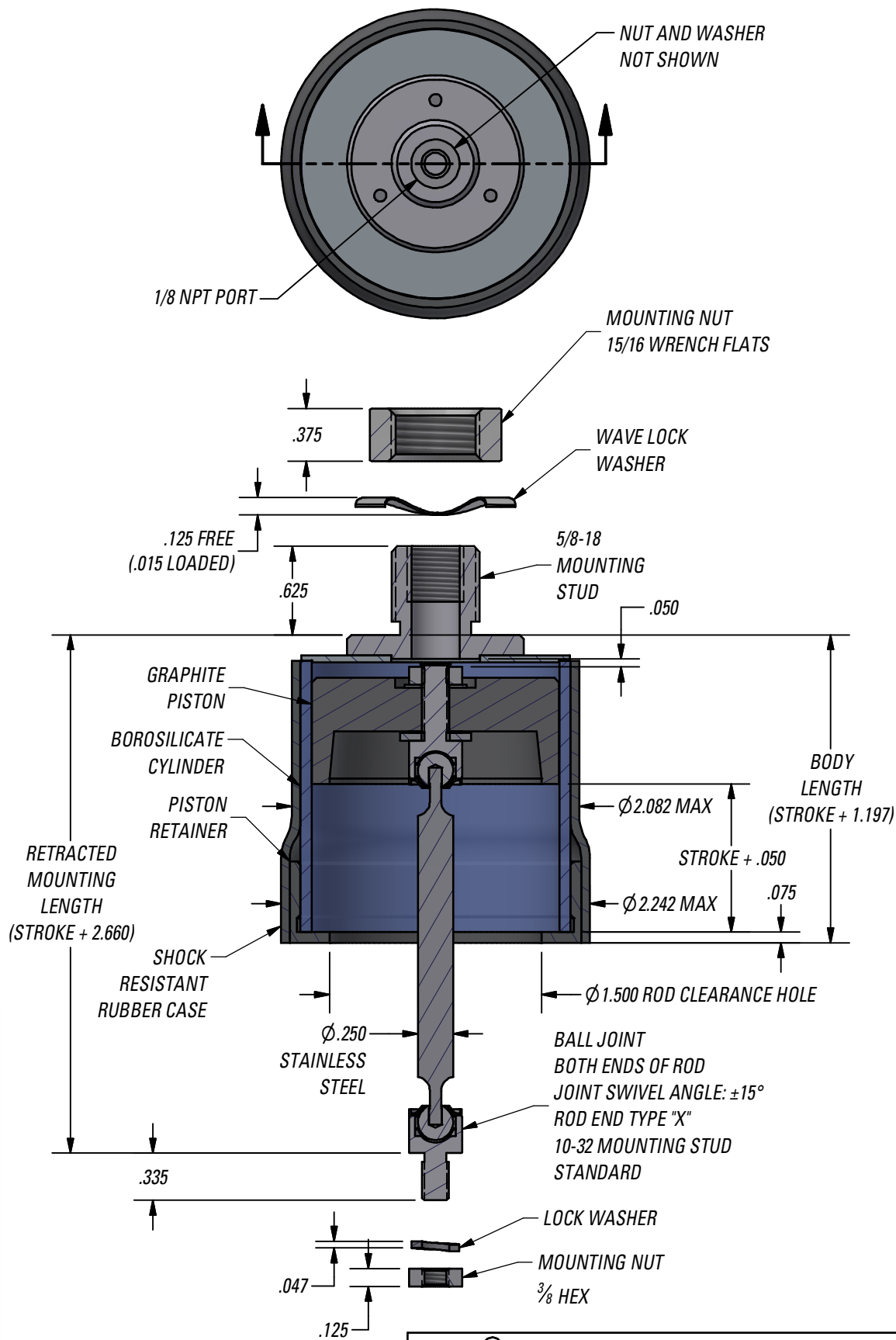
Cycle Life

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 slowly as the piston wears with high number of cycles. High loads and especially high side loads along with cycling can increase friction. Typically, cylinders will last from 1 to 25 million cycles before they are replaced.

Mass (stock units)

Total Mass (g) = 113.7 + (32 x stroke)

Moving Mass (g) = 31.6 + (6.3 x stroke)



Part Number:

2K S 444 P ☐ TX

STROKE LENGTH

Airpot®

35 LOIS ST
NORWALK CT 06851
US

203-846-2021
www.airpot.com

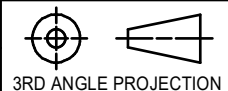
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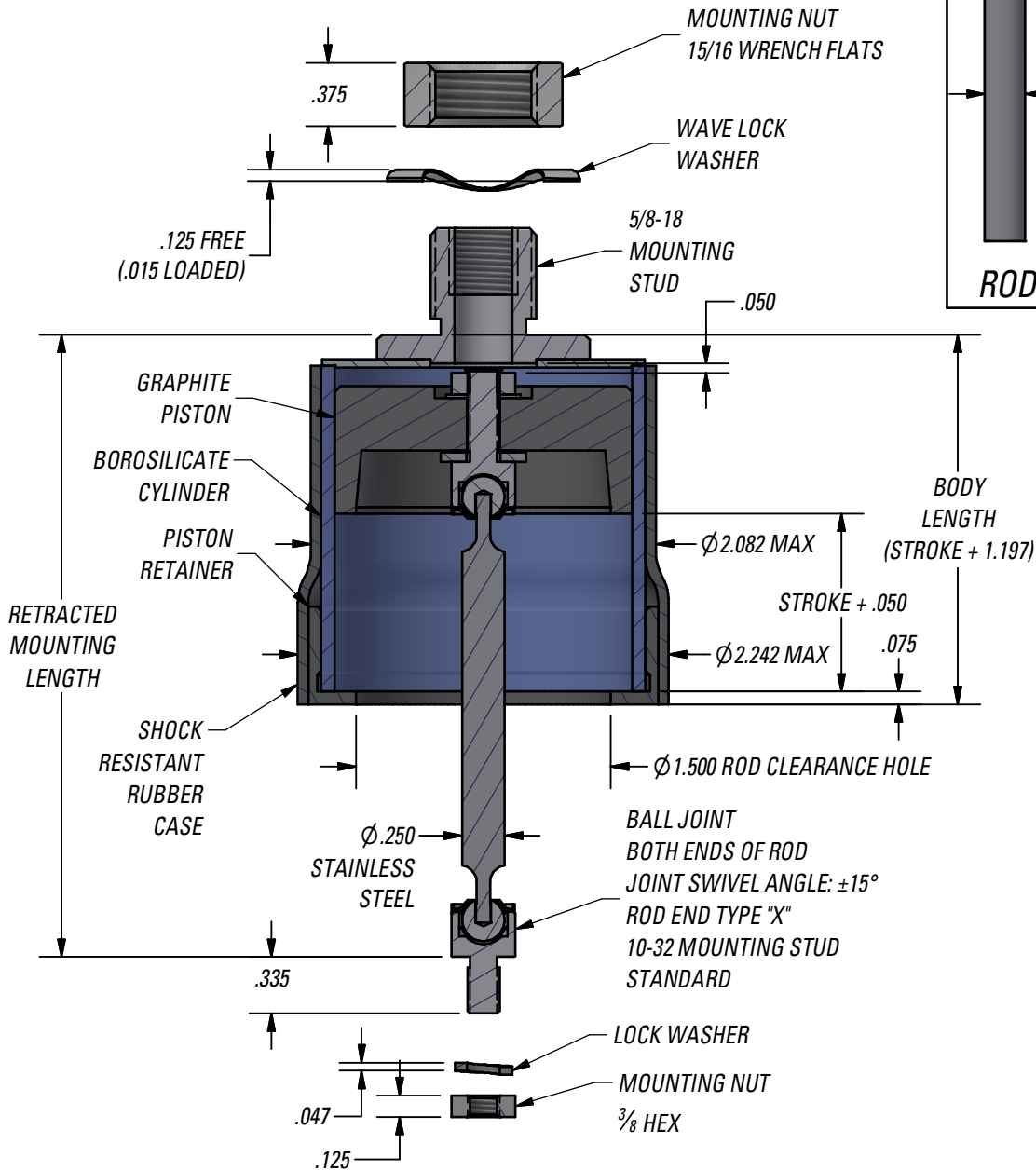
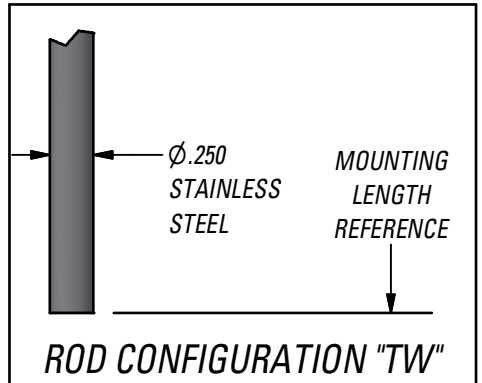
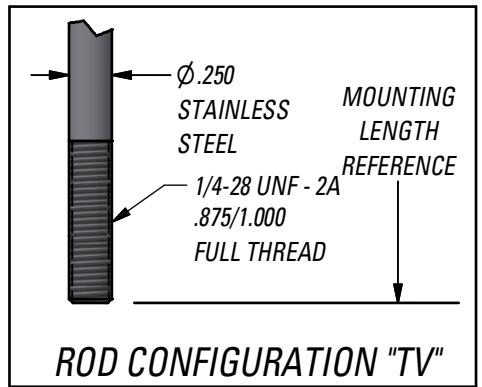
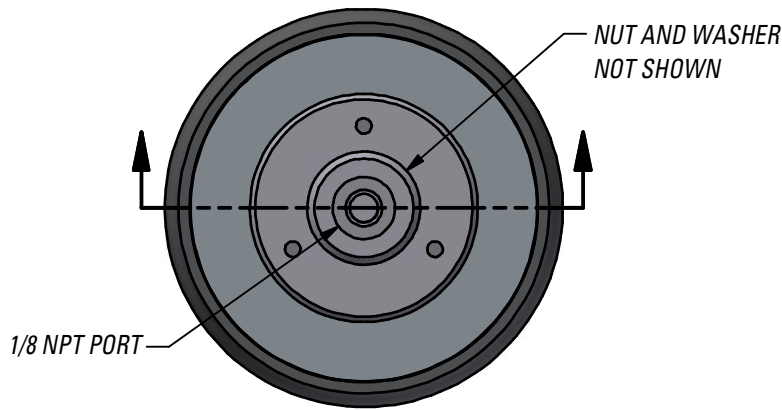
2K S 444 P

REV
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STOCK 2K444 ACTUATOR

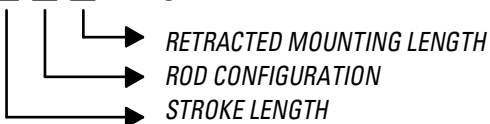
UNITS IN INCHES





Part Description:

2K 444 P ☐ ☐ ☐ L K O



K = Rubber Case
O = Piston Retainer

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PART

2K 444 P

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CUSTOM 2K444 ACTUATOR

UNITS IN INCHES

